3.18 Transportation

3.18.1 Introduction

This section describes the regulatory setting and affected environment for transportation. This section addresses the regional and local transportation system, including rail, transit, roadway, bicycle, and pedestrian facilities within the transportation RSA and describes the potential impacts on those facilities during construction and operation of the proposed Project. This section also identifies the potential for cumulative impacts of the proposed Project on transportation when considered in combination with other relevant projects.

3.18.2 Regulatory Setting

This section identifies the federal, state, regional and local laws, regulations, and orders that are relevant to the analysis of transportation. This section also addresses the proposed Project's consistency with the regulations described herein.

3.18.2.1 Federal

Federal Passenger Rail Investment and Improvement Act of 2008

The federal Passenger Rail Investment and Improvement Act requires the State of California to prepare a federal statewide transportation improvement program covering a period of at least four years. This program compiles all transportation projects that have been programmed throughout the state using federal funds. In accordance with the Federal Passenger Rail Investment and Improvement Act of 2008 (Title 49 United States Code [USC] Section 20101), the State of California adopted the 2018 California State Rail Plan in September 2018 (California Department of Transportation (Caltrans), 2018).

Railroad Revitalization and Regulatory Reform Act of 1976

The Railroad Revitalization and Regulatory Reform Act (Title 45 USC) often called the "4R Act," provides the means to rehabilitate and maintain the physical facilities, improve the operations and structure, and restore the financial stability of the nation's railway systems and to promote its revitalization.

Federal Transit Law

The Federal Transit Law Chapter 53 of Title 49 USC states that "it is in the interest of the United States, including its economic interest, to foster the development and revitalization of public transportation systems that (1) maximize the safe, secure, and efficient mobility of individuals; (2) minimize environmental impacts; and (3) minimize transportation-related fuel consumption and reliance on foreign oil."

Highways, Statewide Planning

Title 23 of the USC for highways and statewide and non-metropolitan transportation planning provides the general requirements for statewide planning to encourage and promote the safe and efficient management, operation, and development of the surface transportation system.

Passenger Equipment Safety Standards

In 2018, the Federal Rail Administration (FRA) updated the train safety requirements for passenger trains. The 2018 final rule, which was codified at Title 49 of the Code of Federal Regulations (CFR) Part 238, added standards for alternative compliance with crashworthiness and occupant protection performance requirements for Tier I passenger trainsets, which removed regulatory barriers and enabled use of new technological designs, allowing a more open U.S. rail market.

3.18.2.2 State

California Department of Transportation – 2018 California State Rail Plan

The *2018 California State Rail Plan* (Caltrans, 2018) is a plan to strategize the state's operational and capital investments toward its statewide travel system. The plan is considered an important element in the comprehensive planning and analysis of statewide transportation investment strategies illustrated in the *California Transportation Plan 2040* (Caltrans, 2016). Specifically, the State Rail Plan calls for re-routing passenger rail service from the Niles Subdivision to the Coast Subdivision and re-routing freight operations from the Coast Subdivision to the Niles Subdivision to facilitate faster travel times.

California Department of Transportation – California Transportation Plan 2050

The *California Transportation Plan 2050* (Caltrans, 2021a) is a plan that outlines the goals and recommendations to achieve a vision for a safe, sustainable, universally assessable, and globally competitive transportation system to provide reliable and efficient mobility for people, goods, and services. The plan will also concurrently help the state to meet its greenhouse gas (GHG) emission reduction goals and preserve the unique character of communities within the state.

Global Warming Solutions Act of 2006 (Assembly Bill 32, Chapter 728)

The Global Warming Solutions Act of 2006, or Assembly Bill (AB) 32, required California to reduce its GHG emissions to 1990 levels by 2020—a reduction of approximately 15 percent below emissions expected under a "business as usual" scenario. The full implementation of AB 32 will help mitigate risks associated with climate change, which will improve energy efficiency, expand the use of renewable energy resources, provide for cleaner transportation, and reduce waste.

California Sustainable Communities and Climate Protection Act of 2008 (Senate Bill 375, Chapter 728)

The California Sustainable Communities and Climate Project Act, or Senate Bill (SB) 375, requires regional planning agencies to develop sustainable community strategies and/or relevant regional land use plans to meet the GHG emissions reduction goals set by the California Global Warming Solutions Act, or AB 32. These strategies address the reduction of vehicle miles traveled (VMT) by the development of shortened and more efficient travel.

Senate Bill 743

SB 743 changed the way transportation impacts are analyzed under the California Environmental Quality Act (CEQA) from levels of service (LOS) to VMT. State guidelines require all lead agencies to update their transportation impact analysis metrics to VMT before July 1, 2020. CEQA generally defers to the lead agencies on the choice of methodology to analyze VMT impacts. Pursuant to Section 15064.3(b)(2) of State CEQA Guidelines, transportation projects that reduce, or have no impact on, VMT should be presumed to cause a less-than-significant transportation impact.

Assembly Bill 1358

The Complete Streets Act requires cities and counties to include complete streets policies as part of their general plans so that roadways are designed to safely accommodate all users, including motorists, bicyclists, pedestrians, transit riders, children, older people, and disabled people. Beginning in January 2011, any substantive revision of the circulation element in the general plan of a California local government would include complete streets provisions.

Governor's Office of Planning and Research Technical Advisory Evaluating Transportation Impacts in CEQA

Pursuant to Public Records Code (PRC) Section 21099 (b)(1), the criteria for determining the significance of transportation impacts must "promote the reduction of GHG emissions, the development of multimodal transportation networks, and a diversity of land uses." To that end, in developing the criteria, the Governor's Office of Planning and Research (OPR) has proposed, and the California Natural Resources Agency has certified and adopted, changes to the CEQA Guidelines that identify VMT as the most appropriate metric to evaluate a project's transportation impacts. With the California Natural Resources Agency's certification and adoption of the changes to the CEQA Guidelines, automobile delay, as measured by LOS and other similar metrics, generally no longer constitutes a significant environmental effect under CEQA (PRC Section 21099[b][3]). The advisory contains technical recommendations regarding assessment of VMT, thresholds of significance, and mitigation measures (OPR, 2018). OPR issued the Technical Advisory as a resource for agencies and other entities to use at their discretion.

Caltrans' 2020 Transportation Analysis Framework and Transportation Analysis under CEQA

Caltrans's Transportation Analysis Framework (2020a) and Transportation Analysis under CEQA (2020b) provide guidance for assessing induced travel impacts from prospective projects on the State Highway System.

3.18.2.3 Regional

At the regional level, the Metropolitan Transportation Commission (MTC) is the transportation planning, coordinating, and financing agency for the San Francisco Bay Area (Bay Area). MTC screens state and federal grant requests from local agencies to ensure their consistency with the Regional Transportation Plan. At the countywide level, the Alameda County Transportation Commission (Alameda CTC) manages the County's transportation information and funding stream. Alameda CTC was created in 2010 through the merger of the Alameda County Congestion Management Agency and the Alameda County Transportation Improvement Authority. The

combined agency manages Alameda County's half-cent transportation sales tax (Measure B), which is used to support capital projects and operations. It also distributes pass-through funds to cities and other agencies for streets, transit, special needs transportation, bicycle and pedestrian safety projects, and transit-oriented development. The agency also performs countywide traffic modeling to help coordinate development across jurisdictional lines, direct transportation funding, and plan for future regional transportation improvements.

Metropolitan Transportation Commission and Association of Bay Area Governments – Plan Bay Area 2050 Transportation Element

The *Plan Bay Area 2050* (MTC and Association of Bay Area Governments [ABAG], 2021) identifies a roadmap for the Bay Area's future. It is a long-range plan for the future of nine counties in the Bay Area. The plan focuses on four key elements – housing, economy, transportation, and environment and identifies a path to make the Bay Area more equitable for all residents and more resilient in the face of unexpected challenges. Building on the work of the Horizon Initiative, this plan outlines regional strategies for growth and investment through the year 2050. The following three key transportation strategies are included under the Transportation Element of the plan:

- **Maintain and Optimize the Existing System**: First and foremost, the plan identifies funding to operate and maintain our existing system of transit routes, roads, and bridges, laying a strong foundation for further investments and policies. Strategies include reversing pandemic-related cuts to total transit service hours, creating a seamless transit experience with reformed fare payments, addressing near-term highway bottlenecks, implementing road pricing on select corridors for long-term congestion relief, funding community-led transportation investments in Equity Priority Communities, and supporting ongoing regional programs and local priorities.
- **Create Healthy and Safe Streets:** On top of this optimized system, roads would be made safer for all users—including drivers, cyclists, rollers (for example, people that use a wheelchair or scooter), and pedestrians—through context-specific speed limit reductions and a network of protected bike lanes and trails designed for people of all ages.
- **Build a Next Generation Transit Network:** Finally, a slate of investments in transit steers the Bay Area toward a 21st century system that meets the needs of a growing population and delivers fast, frequent, and reliable service throughout the region. Strategies invest in improving the frequency and reliability of local transit, selectively extend regional rail and increase frequencies to address crowding, and build out the express lanes network with coordinated express bus service.

San Mateo County Transit District – Dumbarton Transportation Corridor Study

The *Dumbarton Transportation Corridor Study* (San Mateo County Transit District, 2017) identifies alternatives to improve transit connectivity between the East Bay and the Peninsula and connects alternatives with existing Capitol Corridor routes. The study proposes developing a rail station at Ardenwood with a 1,200-space parking structure.

Capitol Corridor Joint Powers Authority – 2016 Vision Implementation Plan

The 2016 Capitol Corridor Vision Implementation Plan is a plan for the implementation of capital improvements that are needed to accommodate for future trends such as population increase, business demands, and climate change trends along the Capitol Corridor. Key elements of the Capitol

Corridor Vision Plan include improvements related to speed, frequency, reliability, connectivity, electrification, level boarding and clockface headways. For passenger train travel between Oakland and Diridon Station in Downtown San Jose, several possible rights-of-way already exist. Each is a freight corridor, and the Capitol Corridor currently uses segments of two of them. If the Capitol Corridor had exclusive use of any of the alignments—with existing freight relocated to another right-of-way (ROW)—then service could be greatly expanded prior to electrification and other improvements to speed up service.

Alameda County – Community Climate Action Plan

The *Alameda County Community Climate Action Plan* (Alameda County, 2014) addresses the reduction of GHG in unincorporated areas of Alameda County through a series of 37 local programs and policies. The climate action area for transportation is to identify ways to reduce auto emissions, including improving pedestrian and bicycle infrastructure, enhancing public transit service, and supporting reductions in single-occupancy vehicle use.

Alameda County Transportation Commission – Goods Movement Plan

Alameda CTC sets the following vision and goals for the goods movement system, prioritizing quality of life, safety and reliability, innovation, interconnectedness and multimodal operations, and economic prosperity (Alameda CTC, 2016a). The plan identifies and prioritizes short-and long-term strategies to address goods movement needs in Alameda County and the Bay Area.

Alameda County Transportation Commission – Alameda Countywide Transit Plan

In 2016, Alameda CTC coordinated with local transit providers and local jurisdictions to better align transit, land use, and economic development goals, and objectives throughout the county. The *Alameda Countywide Transit Plan* (Alameda CTC, 2016b) identifies near- and long-term transit capital and operating priorities aimed to create a transit system that is dependable, easy to use, safe, affordable, and competitive with travel by other modes. Relevant policy strategies include the following:

- **All Tiers Strategy 1:** Maintain all assets in their optimal condition.
- **Inter-Regional Strategy:** Separate goods movement and passenger rail service.
- **Local Frequency Tier Strategy 1:** improve access for persons with disabilities in conjunction with fixed route service improvements.

Alameda County – Eden Area General Plan

The Alameda County General Plan consists of several documents. Three area plans contain land use and circulation elements for their respective geographic areas, as well as area-specific goals, policies, and actions for circulation, open space, conservation, safety, and noise. The *Eden Area General Plan* circulation element (Alameda County, 2010) comprises the communities of Ashland, Cherryland, Hayward Acres, San Lorenzo, and Fairview and contains the following goals and policy:

- **Goal 6.1-1:** Provide a safe, efficient, multimodal transportation system to meet the diverse needs of residents, workers, businesses, and visitors.
- **Policy 6.1-1:** Comprehensive Circulation System. Provide a comprehensive system of transportation facilities that include streets and highways for regional access; transit

facilities; a continuous network of pedestrian sidewalks and bicycle routes; and transportation and parking management programs and measures to encourage the efficient use of these facilities and services.

- **Goal 6.5-1:** Expand and improve local bikeway connections and provide a safe environment for bicycle travel throughout the community.
- **Goal 6.6-1:** Provide a safe and attractive walking environment accessible for all users, particularly disabled users, seniors, transit users, and children.

Alameda County – County Neighborhood Traffic Calming Program

The Alameda County Neighborhood Traffic Calming Program (Alameda County, 2001) provides a process for neighborhoods to request the installation of traffic calming devices on local and minor collector streets to the Alameda County Public Works. These measures include striping, streetscape improvements such as street trees or enhanced pedestrian crossings, bulb-outs, speed humps, roundabouts, and partial or full roadway closures.

3.18.2.4 Local

Within the transportation RSA, the cities of Oakland, Fremont, and Hayward have updated their CEQA thresholds of significance guidelines (an increase in VMT is considered a potentially significant impact) to comply with state law SB 743 and have adopted traffic impact guidelines with screening criteria, impact criteria, and a method for determining if a transportation project would induce additional VMT. Currently, the cities of San Leandro and Newark have not updated their CEQA thresholds of significance to VMT for transportation impact analysis.

City of Oakland General Plan

The City of Oakland adopted the Land Use and Transportation Element in 1998 (City of Oakland, 1998). This element focuses on how land in Oakland is used for various uses, such as housing, jobs, and public facilities. This element includes the following relevant objectives and strategies, as they relate to transportation:

- **Objective T4:** Increase use of alternative modes of transportation.
- **Transit and Transportation Improvement Strategies Objectives:** To enhance existing transit system to encourage alternatives to automobiles.

City of Oakland Bicycle Plan

In July 2019, the Oakland City Council unanimously adopted *Let's Bike Oakland* (City of Oakland, 2019). Objectives of *Let's Bike Oakland* include the following:

- **Objective A:** Increase access to jobs, education, retail, parks, libraries, schools, recreation, transit, and other neighborhood destinations.
- **Objective C:** Support public transit service.
- **Objective F:** Serve people with disabilities.

City of San Leandro General Plan

The City of San Leandro updated its *City of San Leandro 2035 General Plan* (City of San Leandro, 2016) in September 2016. The General Plan establishes the vision for the city's future and guides its future developments. The General Plan includes the following pertinent goals and policy related to transportation:

- **Policy T-1.1:** Decision Making: Ensure that future land use and development decisions are in balance with the capacity of the city's transportation system and consistent with the city's goal of reducing GHG gas emissions.
- **Goal T-2:** Design and operate streets to be safe, attractive, and accessible for all transportation users whether they are pedestrians, bicyclist, transit riders, or motorists, regardless of age or ability.
- **Goal T-3:** Promote and accommodate alternative, environmentally friendly methods of transportation, such as walking and bicycling.
- **Goal T-4:** Ensure that public transportation is safe, convenient, and affordable and provides a viable alternative to driving.

City of San Leandro Bicycle and Pedestrian Master Plan

The City of San Leandro's 2018 Bicycle and Pedestrian Master Plan (BPMP) (City of San Leandro, 2018) contains goals and policies for developing and implementing a bikeway system and pedestrian improvements that can meet the city's vision for: "A city where walking and bicycling are fully integrated into daily life, providing environmentally friendly and healthy transportation alternatives that are safe, convenient, and practical for people of all ages and abilities." The BPMP includes the following relevant goals related to transportation:

- **Goal 1**: A Comprehensive System: Support the development of a comprehensive bicycle and pedestrian transportation system that links residential communities with local and regional destinations and transit hubs to reduce motor vehicle trips.
- **Goal 5**: Maximize bicycle and pedestrian access to transit.

City of Hayward 2040 General Plan

The City of Hayward adopted the *Hayward 2040 General Plan* (City of Hayward, 2014). The General Plan establishes a community-based vision for the future of the city and establishes goals, policies, and programs to help the city and its community achieve the vision. The General Plan includes the following pertinent land use and planning-related goals:

- **Goal M-1:** Provide a comprehensive, integrated, and connected network of transportation facilities and services for all modes of travel.
- **Goal M-2:** Connect Hayward to regional and adjacent communities' transportation networks and reduce the impacts of regional through traffic in Hayward.
- **Goal M-5:** Provide a universally accessible, safe, convenient, and integrated pedestrian system that promotes walking.
- **Goal M-6**: Create and maintain a safe, comprehensive, and integrated bicycle system and support facilities throughout the city that encourage bicycling that is accessible to all.

- **Goal M-7:** Improve coordination among public agencies and transit providers to meet public transit needs and provide greater mobility.

City of Hayward Transportation Impact Analysis Guidelines

On June 16, 2020, the Hayward City Council amended the City of Hayward General Plan (2014) to replace LOS with VMT as the measurement to be used when conducting Transportation Impact Analysis under CEQA. The guidelines assist in evaluating CEQA transportation analysis, which requires an evaluation of a project's potential impacts related to VMT (City of Hayward, 2020).

City of Union City General Plan

The City of Union City adopted the *Union City 2040 General Plan* (City of Union City, 2019) in December 2019. The General Plan provides the long-term vision for the physical, economic, and social evolution in Union City and outlines the policies, standards, and programs to guide city development decisions. The General Plan includes the following mobility goals and policies as they relate to transportation:

- **M-1.1 Complete Streets for All Users:** The city shall strive to create a comprehensive, integrated network of roadways that includes green infrastructure (including streets, roads, highways, bridges, and other portions of the transportation system) and provides safe, comfortable, and convenient travel for all users, including pedestrians, bicyclists, persons with disabilities, motorists, movers of commercial goods, users and operators of public transportation, emergency responders, seniors, children, youth, and families.
- **M-1.7 ADA Accessibility:** The city shall strive to ensure that all streets are safe and accessible to people with limited mobility and other disabilities. New and reconstructed facilities shall meet the requirements of the Americans with Disabilities Act of 1990 (ADA).
- **M-2.4 Bicycle Connections to Transit:** The city shall work with Bay Area Rapid Transit District (BART), Alameda-Contra Costa Transit District (AC) Transit, and Union City Transit to ensure the bicycle route network provides direct and convenient access to local and regional transit lines and that bicyclists are provided access to transit vehicles whenever feasible.
- **M-2.10 Pedestrian Connections:** The city shall require new development projects, projects that propose substantial redevelopment, or major expansions to install sidewalks along the project frontage to improve pedestrian connectivity if none currently exist, add pedestrian connections between new and existing development, and add walkways that link to adjacent transit service.
- **M-4.4 Use VMT Threshold to Evaluate Project Impacts:** The city shall use VMT to evaluate the transportation impacts of new development proposals under CEQA.
- **M-7.5 Support Freight Rail Activity on Northern Corridors:** The city shall support freight rail activity from the Port of Oakland to the Central Valley to use northern corridors, which are the shortest freight routes and may allow for more passenger rail activity in southern Alameda County.

City of Union City Bicycle and Pedestrian Master Plan

The purpose of the *Union City Bicycle and Pedestrian Master Plan* (City of Union City, 2021) is to build upon the potential for walking and bicycling in Union City by defining a community-driven

vision for Union City's active transportation network and developing a framework for the implementation of projects, programs, and policies to turn the vision into a reality. The Bicycle and Pedestrian Master Plan includes the following relevant goals:

- **Goal 2 Connectivity:** A well-connected bicycle and pedestrian network with increased access to transit, schools, trails, and other key destinations.
- **Goal 4 Accessibility:** A transportation network where all streets are safe and accessible to people walking, bicycling, and rolling (e.g., people using a wheelchair or scooter), regardless of age or ability.

City of Fremont General Plan 2030 Mobility Element

On June 9, 2020, the Fremont City Council adopted Policy 3-4.2: Transportation Analysis to replace Policy 3-4.2: Variable LOS Standards, establishing VMT as the measure to be used in determining transportation impacts under CEQA. The new policy was effective beginning July 1, 2020, and is in compliance with SB 743 and the CEQA Guidelines. LOS may no longer be used to determine a project's impacts under CEQA but may be used for local transportation analysis, as outlined in Implementation 3-4.2. B: Local Transportation Analysis.

The *City of Fremont General Plan 2030 Mobility Element* (City of Fremont 2011) addresses the movement of people and goods in and around Fremont. The element establishes policies for expanding transportation choices, reducing dependence on single passenger automobiles, and making it easier to walk, bicycle, and use public transportation in the city. The General Plan includes the following relevant goals:

- **Policy 3-1.1: Complete Streets.** Design major streets to balance the needs of automobiles with the needs of pedestrians, bicyclists, and transit users. Over time, all Fremont's corridors should evolve into multimodal streets that offer safe and attractive choices among different travel modes.
- **Policy 3-1.5: Improving Pedestrian and Bicycle Circulation.** Incorporate provisions for pedestrians and bicycles on city streets to facilitate and encourage safe walking and cycling throughout the city.
- **Policy 3-1.7: Sidewalks.** Require the provision of sidewalks in all new development, including infill development and redevelopment, to eventually complete the city's sidewalk network. Sidewalks shall be required on both sides of all public streets, except in hillside areas where a single sidewalk may be adequate. Sidewalks and direct pedestrian connections between uses should also be provided in parking lots.
- **Policy 3-2.4: Improving Bicycle Circulation.** Enhance bicycle circulation, access, and safety throughout Fremont, particularly in the City Center, the Town Centers, around existing and planned BART stations, and near schools and other public facilities. Barriers and impediments to bicycle travel should be reduced.
- **Policy 3-3.3: Grade Separations.** Consider grade-separated crossings where major streets bisect railroads or where such crossings are necessary to meet a regional transportation need.
- **Policy 3-5.4: Passenger Rail Service.** Support the provision of convenient and affordable commuter rail service to Fremont residents, visitors, workers, and businesses.

City of Fremont Bicycle Master Plan

The City of Fremont Bicycle Master Plan (City of Fremont, 2018) identifies projects and programs to make Fremont a city in which bicycling is safe, comfortable, and convenient for people of all ages and abilities. The Master Bicycle Plan includes the following relevant goals:

- **Goal 1:** Implement a safe, convenient, connected, and comfortable citywide bicycling network for people of all ages and abilities who live, work, and visit Fremont.
- **Goal 2:** Prioritize bicycle safety to support the city's Vision Zero Policy to significantly reduce fatalities and severe injuries by 2020.

City of Fremont Pedestrian Master Plan

The *City of Fremont Pedestrian Master Plan* (City of Fremont, 2016) envisions Fremont as a community that inspires people of all ages and abilities to walk for everyday transportation, recreation, and health. The plan identifies goals in the areas of activity, safety, infrastructure and design, connectivity and accessibility, and land development. The plan contains capital projects including sidewalk gap closures, intersection improvements, streetscapes, roadway projects, pathway, and trail projects. The Pedestrian Master Plan includes the following relevant goals:

- **Goals:** increase activity, enhance safety, and reduce conflicts; provide a walkable environment; and ensure safe, continuous, and convenient pedestrian access to essential pedestrian destinations for all residents, workers, and visitors.

City of Fremont Transportation Impact Analysis Handbook

In June 2020, the Fremont City Council amended the General Plan Mobility Element to replace LOS with VMT as the measurement to be used when conducting Transportation Impact Analysis under CEQA. The handbook assists in evaluating CEQA transportation analysis, which requires an evaluation of a project's potential impacts related to VMT (City of Fremont, 2020). The handbook also states that the city aims to maintain vehicle levels of service (LOS) goals without negatively impacting nonmotorized street users.

City of Newark General Plan

The City of Newark adopted the *Newark General Plan* (City of Newark 2013) in December 2013. The General Plan provides the goals, policies, and actions that will guide future growth and conservation in Newark. The plan establishes a 20- to-25-year vision for the city and provides the vision for the city's future. The General Plan includes the following pertinent transportation-related goals and policies:

- **Goal T-1:** Plan, fund, design, construct, operate, and maintain all transportation improvements to provide mobility for all users, appropriate to the function and context of each facility.
- **Goal T-2:** Create a citywide pedestrian and bicycle network that provides safe access to destinations within the city, connects to an integrated regional network, and is accessible to users of all ages, abilities, and means.
- **Goal T-3:** Support safe, affordable public transportation, which provides an alternative means of travel through Newark and convenient access to destinations throughout the Bay Area.

- **Goal T-4:** Reduce VMT and dependency on motor vehicles through land use and transportation strategies.

City of Newark Pedestrian and Bicycle Master Plan

The *City of Newark Pedestrian and Bicycle Master Plan* (City of Newark, 2017) was approved by Newark City Council on February 23, 2017, and it is a comprehensive planning document that provides a vision for Newark's future biking and walking environment. The goal is to prioritize and implement infrastructure improvements and educational/enforcement programs that will improve the biking and walking environment in Newark. This will result in reduced traffic congestion and improve the overall health of the community. The Pedestrian and Bicycle Master Plan includes the following pertinent goals and policies:

- **Goal 1:** Create a citywide pedestrian and bicycle network that provides safe access to destinations within the city, connects to an integrated regional network, and is accessible to users of all ages, abilities, and means (General Plan Goal T-2).
- **Goal 2:** Increase the number of people of all ages, abilities, and means who bicycle and walk for transportation, recreation, and health.
- **Goal 3:** Develop a safe system for walking and bicycling.
- **Policy T-2.1:** Work to close gaps in the pedestrian network and improve sidewalk connectivity between residential and commercial area.
- **Policy T-2.2:** Maintain and expand an interconnected network of bicycle routes, paths, and trails. The existing bicycle network should be expanded to provide connections to developing areas.
- **Policy 1-4:** Develop facilities that are continuous across city boundaries and integrate with the regional system, particularly Fremont's on-street bicycle network and the regional trails network.
- **Policy 1-5:** Provide bicycle and pedestrian connections to public transportation systems in the city and region.

3.18.2.5 Consistency with Plans, Policies, and Regulations

The purpose and objectives of the proposed Project as detailed in the following information address needs and goals that are consistent with federal, state, regional, and local transportation plans, policies, and regulations.

The purpose of the proposed Project is to create a more direct passenger rail route; significantly reduce rail travel time between Oakland and San Jose, facilitating more auto competitive travel times for intercity passenger rail trips throughout the Northern California area; and promote environmental sustainability by reducing regional VMT and associated GHG emissions. The proposed Project would create new connections to Transbay Transit services and destinations on the San Francisco Peninsula.

The proposed Project would reduce regional VMT and associated GHG emissions, provide more efficient passenger rail service and improve accessibility by providing ADA access to the station with a pedestrian bridge, underpass, and bicycle connections to the new Ardenwood Station. The proposed Project would also provide ADA sidewalks and bicycle striping and safety enhancements

(upgraded signals and gates) for at-grade crossings where needed. The proposed Project also includes a new rail station at Ardenwood that would connect to the bicycle and pedestrian network and connect to transit, which would be consistent with federal, state, regional, and city plans. The proposed Project would also comply with all federal, state, and local policies and regulations related to transportation, access, and circulation. The proposed Project would ensure that all transportation-related regulations are followed, which includes compliance with all applicable goals and policies set forth by the local general plans.

3.18.3 Methods for Evaluating Environmental Impacts

This section defines the transportation RSA and describes the methods used to analyze impacts on transportation within the RSA.

3.18.3.1 Resource Study Area

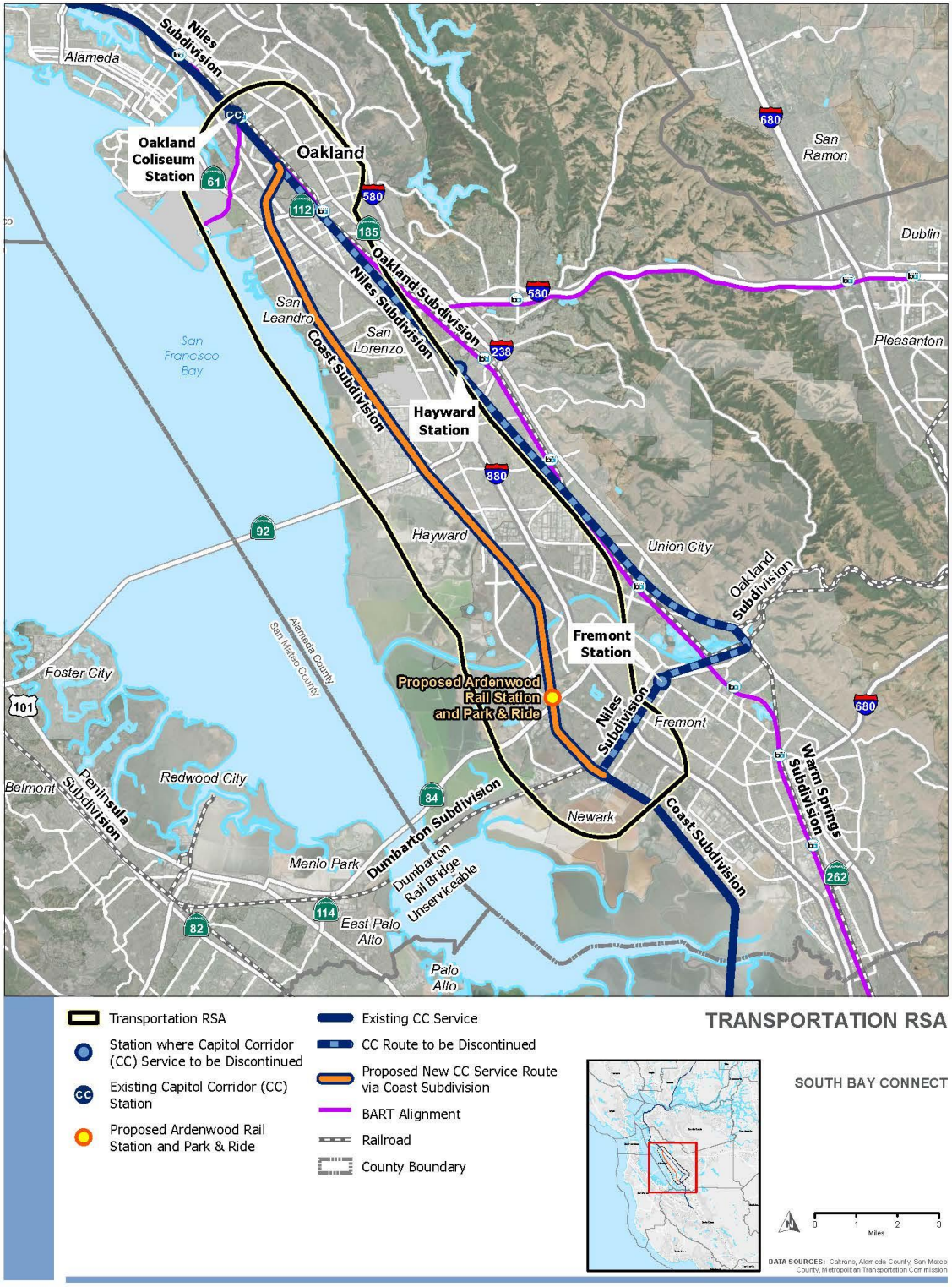
RSAs are the geographic boundaries within which the environmental investigations specific to each resource topic were conducted. The transportation RSA encompasses the transportation network that could be directly and indirectly affected by the construction and/or operation of the proposed Project. The following RSAs are for the transportation analysis:

1. The transportation RSA is defined as the Project footprint, and a 2-mile buffer around the footprint is used to analyze potential transportation related impacts as depicted in Figure 3.18-1.

2. The regional RSA is used to evaluate daily regional VMT. This RSA includes Capitol Corridor services from Sacramento to San Jose and the associated vehicle trips in these areas.

3. The emergency vehicle access RSA is used to analyze the emergency vehicle response analysis and considers areas served by grade crossings on the Coast and Niles subdivisions where the proposed Project could result in changes in train volumes. A list of at-grade crossings that will be affected during construction by the proposed Project is included in Table 2-2.1. Proposed Improvements to At-Grade Crossings along the Coast Subdivision. Grade separated crossings that will be affected are listed in Section 2.2.3.3, Grade Separated Crossing Improvements. The Centerville portion of the Niles Subdivision is included in the quantitative analysis even though it is anticipated to see a substantial reduction in the number of grade crossing events as a result of the proposed Project. The locations of fire, police, and hospital facilities (with emergency room facilities) are also considered in the analysis.

Figure 3.18-1: Transportation Resource Study Area



3.18.3.2 Data Sources

A comprehensive review of relevant state, regional, county, and city websites was conducted regarding applicable federal, state, and local regulations and planning documents within the specified RSAs.

Ridership Forecasts Regional and VMT Analysis

To evaluate regional impacts using VMT, a 2025 and 2040 model was developed (Fehr and Peers, 2023) to estimate the increase in ridership associated with the Project improvements. The model estimated future passenger rail ridership within the regional RSA through a forecasting analysis that used data from the following three travel demand models (TDM):

1. A composite City/County Associations of Governments of San Mateo county-Santa Clara Valley Transportation Authority TDM (C/CAG-VTA Model)
2. The Mode Choice Amtrak California Ridership Model (Amtrak Model)
3. A Direct Ridership Model (DRM) built specifically for the Capitol Corridor System

The C/CAG-VTA Model provides information about the travel time competitiveness of Capitol Corridor service versus the automobile mode; this information is a key input into the DRM developed for the proposed Project (discussed below). The C/CAG-VTA TDM also provides a structure for the analysis of land uses around stations. The C/CAG-VTA Model also considers the effects of planned regional transportation improvements.

The Mode Choice version of the Amtrak Model has historically been used to estimate ridership for the Capitol Corridor System. Ridership estimates from the model were previously used to determine ridership potential for planning purposes. For the environmental analysis, however, the Amtrak Model lacks specific details for land uses that can be reached by new Transbay transfers (such as those provided at the proposed Ardenwood Station). Thus, outputs from the Amtrak Model were used to provide guidance as to the reasonability of the DRM forecasts especially for long distance trips (e.g., from Sacramento to San Jose).

The DRM is a set of statistical equations that estimate ridership based on several land use, travel time, station design, and Capitol Corridor schedule and frequency variables. The DRM addresses the limitations of the C/CAG-VTA model to forecast Capitol Corridor ridership but preserves the relationship to the C/CAG-VMT model by relying on travel time competitiveness and land use inputs from the C/CAG-VTA model to inform the ridership estimation process. The DRM forecasts ridership along the entire Capitol Corridor route, including in the Sacramento region, for the following periods: AM peak, PM peak and Off-Peak (the summation of which equals total daily ridership). The DRM is a statistical model that was calibrated to average weekday ridership data from April 2019.

Two models were estimated and used in tandem to provide a bracketed analysis of ridership, VMT, and other model-produced metrics. The “Pre-COVID Basis” model assumes that future travel behavior returns to a state that mimics pre-COVID conditions (model based on April 2019 ridership data), and the “Post-COVID Basis” model assumes that post-pandemic effects carry forward into the future (model based on April 2023 ridership data). It is noted that recent 2023 CCJPA ridership data indicates a higher level of ridership above the April 2023 data used for the Post-COVID Basis model (i.e. the Post-COVID Basis model conservatively represents the lower end of the modeling bracket approach).

Land Use Forecasts/Transportation Network Assumptions

Land use forecasts were determined within the regional RSA using published data from regional and local transportation agencies. For the Sacramento region, land use forecasts are based on the latest projections from the Sacramento Area Council of Governments as provided in the SACMET (Sacramento Regional) TDM. For the nine-county San Francisco Bay Area, land use forecasts are based on published information in *Plan Bay Area 2050* (MTC and ABAG, 2021). For Alameda, Contra Costa, and Solano counties, the C/CAG-VTA Model land use was adjusted for more refined land use assumptions as documented in the Alameda CTC, Contra Costa Transportation Authority (CCTA), and Solano Transportation Authority TDMs, respectively. Several regional transportation network improvements were assumed to be in place by Opening Year 2025 and Horizon Year 2040 based on recently published information and other regional planning documents.

Traffic Volume Assumptions

Existing and future traffic volume assumptions within the transportation RSA were used to evaluate potential changes in traffic and circulation around the proposed Ardenwood Station.

- Existing Year 2019 traffic volumes reflect Year 2019 conditions based on available traffic counts and retrospective traffic volume data from the StreetLight Data intersection turning movement count database.
- Opening Year 2025 traffic volumes represents the year the proposed Project would be open to the public.
- Horizon Year 2040 traffic volumes represents the design year that is 15 years after the opening year.

Opening Year 2025 and Horizon Year 2040 No Project scenario traffic forecasts were developed using outputs from the C/CAG-VTA Model. The C/CAG-VTA Model considers changes in regional land use patterns and planned modifications to the regional transportation system.

Opening Year 2025 and Horizon Year 2040 Plus Project scenario traffic volume forecasts were estimated by adding the number of new automobile trips generated through the new ridership at Ardenwood Station to the No Project forecasts. The ridership forecasting process includes a mode-of-access model that estimates the amount of travel demand by mode (e.g., automobile, bicycle, transit, etc.) generated by ridership at each Capitol Corridor station. Thus, projected ridership at Ardenwood Station was converted into automobile demand.

Operations and Queuing Analysis Methods

The operations of roadway facilities are described with the term LOS. LOS is a qualitative description of traffic flow from a vehicle driver's perspective based on factors such as speed, travel time, delay, and freedom to maneuver. Six categories of LOS have been defined ranging from LOS A (free-flow conditions) to LOS F (over capacity conditions). LOS E corresponds to operations "at capacity." When volumes exceed capacity, stop-and-go conditions result, and operations are designated LOS F. While LOS impacts alone are not considered significant for CEQA purposes under CEQA Guidelines Section 15064.3, the LOS analysis can reveal if the proposed Project would substantially increase travel times or queues at key intersections in the RSA.

General plan circulation/mobility elements for cities within the transportation RSA were reviewed and revealed a variety of LOS-based intersection operations standards. Based on this review, an LOS

E standard was identified as an appropriate metric to determine whether an intersection is operating at an acceptable or unacceptable level. As previously noted, LOS E represents "at capacity" operations, and thus intersections operating at LOS A, B, C, D or E during the peak hours of travel retain capacity to serve demand. A project would have a substantial effect on intersection operations if it were to result in new LOS deficiencies or increase delays at the intersection by five or more seconds; this principle was used to assess informational, non-CEQA intersection effects in the Bay Area.

Intersection Analysis Methodology (Signalized and Unsignalized)

The method described in Chapter 18 of the Transportation Research Board's *Highway Capacity Manual, 6th Edition* (HCM 6th Edition) (Transportation Research Board, 2016) was used to conduct the LOS calculations within the transportation RSA for 10 intersections around the proposed Ardenwood Station. The signalized study intersections and Chapter 19 of the HCM 6th Edition was used to conduct the LOS for the all-way stop-controlled intersections. The average control delay for unsignalized intersections was also calculated using a variety of traffic analysis software packages described in the following subsection. For side-street stop-controlled intersections, the worst movement (for multi-lane approaches) or worst approach (for single-lane approaches) delay was used to determine the LOS for the intersection. For all-way stop-controlled intersections and roundabouts, the whole-intersection average delay was used to determine the LOS for the intersection.

Operations and Queuing Analysis Software

Multiple software packages were used to analyze intersection operations within the transportation RSA near at-grade rail crossings and near the proposed Ardenwood Station.

- The Synchro software analysis package was used to evaluate queues at isolated, at-grade rail crossings where vehicle operations are not affected by nearby intersections. Similarly, the Synchro software package was used to evaluate intersections near the Ardenwood Station, where intersection operations are not substantially affected by congestion at downstream or upstream intersections. The Synchro software package applies the HCM 6th Edition methodologies to evaluate operations and produce queuing, delay, and LOS metrics.
- The SimTraffic microsimulation software analysis package was used to evaluate operations at intersections near at-grade crossings where intersection operations are influenced by at-grade crossings and Railroad traffic signal preemption was coded into the SimTraffic models when traffic signal timing sheets for the intersections noted that preemption was present. The SimTraffic microsimulation software package provides delay and other metrics that are compared to the HCM 6th Edition delay and LOS definitions.
- The VISSIM microsimulation software analysis package was used to evaluate operations at particularly congested or closely spaced intersections (1) near the Ardenwood Station and (2) near at-grade crossings where intersection operations are influenced by at-grade crossings, and Railroad traffic signal preemption was coded into the VISSIM models when traffic signal timing sheets for the intersections noted that preemption was present. The VISSIM microsimulation software package provides delay and other metrics that are compared to the HCM 6th Edition delay and LOS definitions.

Emergency Vehicle Access Analysis

The emergency vehicle access analysis uses a geographic information system (GIS)-based analysis approach to estimate the change in emergency vehicle access times within the emergency vehicle assess RSA for locations along the Coast and Niles Subdivisions. The change in average emergency vehicle response times throughout the course of a typical day was estimated for fire, police, and hospitals (with Emergency Rooms) services in the areas alongside the following portions of the study area rail lines:

- Coast Subdivision: From the junction of Coast and Niles subdivisions at Elmhurst in the north where Coast Subdivision starts, to Newark Junction in the south where Coast and Niles subdivisions meet again and the Niles Subdivision ends (Figure 3.18-1).
- Niles Subdivision: Junction of Coast and Niles subdivisions at Elmhurst in north to Newark Junction in south (same as above; Figure 3.18-1). The Niles Subdivision was included in the quantitative analysis even though it is expected to see a reduction in passenger rail services after completion of the proposed Project.

The GIS analysis assumes that the grade crossings are open to vehicular traffic (i.e., no train is present) for a portion of the day and closed to all vehicular traffic for a portion of the day when a train is present. When grade crossings are closed, emergency vehicles must take a longer diversion route to either provide service or access fire, police, and hospital services. The portion of the day that the crossings are open or closed is based on passenger and freight train movement data developed from at-grade crossing counts taken from the public ROW taken during a two-week period in summer 2021.

Intersection and At-Grade Crossing Analysis

The following assumptions were used in the evaluation of operations at intersections and at-grade crossings within the transportation RSA for the at-grade crossing analysis. These assumptions apply to Opening Year 2025 and Horizon Year 2040 analysis scenarios. The assumptions below represent maximum number of trains during peak hour of commute travel.

At-Grade Crossing Analysis Scenarios

The analysis was performed for the morning peak hour of commute travel (the highest vehicle volume in a 60-minute period between 7:00 AM and 9:00 AM) and the evening peak hour of commute travel (the highest vehicle volume in a 60-minute period between 4:00 PM and 6:00 PM) within the transportation RSA.

- **No Project Scenario** – Coast Subdivision: 1 freight train in the AM and PM peak hour (each) with an average gate down time of 240 seconds
- **Plus Project Scenario** – Coast Subdivision: 2 passenger trains in the AM and PM peak hour (each) with an average gate down time of 60 seconds and 1 freight train in the AM and PM peak hour (each) with an average gate down time of 240 seconds
- **No Project Scenario** – Niles Subdivision1: 2 passenger trains in the AM and PM peak hour (each) with an average gate down time of 60 seconds

[1] These assumptions are applicable to the portion of the Niles Subdivision between Elmhurst Junction and Niles Junction only.

- **Plus Project Scenario** – Niles Subdivision1: Removal of Capitol Corridor service from Niles Subdivision (i.e. substantially fewer peak hour trains than No Project scenario)
- **No Project Scenario** – Oakland Subdivision: No passenger or freight service
- **Plus Project Scenario** – Oakland Subdivision: Same as No Project Scenario

The gate down time assumptions were based on published information regarding train lengths and operating speeds. Field observations of train movements taken in late summer 2021 indicate that the assumptions above are generally conservative.

The Plus Project Scenario analysis assumes that gate down times remain the same as in the No Project Scenario and includes a 13,000-foot train length assumption.

3.18.3.3 CEQA Thresholds

To satisfy CEQA requirements, transportation impacts were analyzed in accordance with Appendix G of the CEQA Guidelines. According to the CEQA Guidelines, CCR, Title 14, Section 15002(g), "a significant effect on the environment is defined as a substantial adverse change in the physical conditions which exist in the area affected by the proposed project." As stated in CEQA Guidelines Section 15064(b)(1), the significance of an activity may vary with the setting. The impact analysis identifies and analyzes construction (short-term) and operation (long-term) impacts, as well as direct and indirect impacts (see PRC Section 21065). The proposed Project would have significant transportation impacts under CEQA if it would:

a. Conflict with a program, plan, ordinance, or policy addressing the circulation system, including transit, roadway, bicycle, and pedestrian facilities;

b. Conflict or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b);

c. Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment); or

d. Result in inadequate emergency access.

VMT Analysis

Section 15064.3 of the CEQA Guidelines provides for the application of VMT, instead of LOS and other measures of traffic flow, to evaluate the transportation impacts associated with rail and transit projects. VMT provides a metric for determining vehicle trip changes across the regional roadway network and is the amount and distance of automobile travel attributable to a project. Reductions to VMT are beneficial because fewer cumulative vehicle miles are being generated daily for a particular alternative. Based on guidance contained in Section 15064.3 of the CEQA Guidelines, if a transportation project is presumed to have a less-than-significant impact then a detailed VMT analysis is not required for transit projects.

The Governor's OPR (2018) issued a *Technical Advisory on Evaluating Transportation Impacts in CEQA*, which includes a specific directive that transit and active transportation projects generally reduce VMT and therefore are presumed to cause a less-than-significant impact on transportation. This presumption may apply to all passenger rail projects, bus and bus rapid transit projects, and bicycle and pedestrian infrastructure projects. Streamlining transit and active transportation projects aligns with each of the three state goals contained in SB 743 by reducing GHGs, increasing multimodal transportation networks, and facilitating mixed use development.

Lead agencies have discretion to choose a threshold of significance for transportation projects. PRC Section 21099(b)(1) provides criteria for determining the significance for transportation impacts stating, "Those criteria shall promote the reduction of [GHGs], the development of multimodal transportation networks, and a diversity of land uses."

Hazards due to Geometric Design Feature or Incompatible Uses

The CEQA Guidelines do not describe specific significance thresholds for geometric design features or incompatible uses; therefore, the evaluation is made based upon conformity of the proposed Project to applicable local, state, and local design standards and allowable uses. Examples of hazards in geometric design would include misaligned lanes across intersections, lane drops with inadequate distance for merging, or sight distance limitations due to curves or grades ahead of conflict points. Examples of incompatible use would include improper mixing of modes, such as routing heavy truck traffic on local roadways.

Emergency Access

CEQA Guidelines do not provide quantitative thresholds for emergency access. A qualitative evaluation was made based on the potential of the proposed Project to substantially degrade emergency access. For example, requiring emergency vehicles to re-route or perform out-of-direction maneuvers or adding travel time that would be considered significant because of changes to the roadway configuration or project. While no established state or federal standards for response times have been established for the purposes of identifying CEQA thresholds of significance, the *California High Speed Rail Authority San Jose to Merced Project Section Draft Environmental Impact Report/Environmental Impact Statement* (California High Speed Rail Authority, 2020) indicated that a conservative CEQA threshold of significance for change in emergency vehicle access times would be 30 seconds (i.e., 10 percent of 300 seconds [or 5 minutes] standard emergency response time for fire, police, or medical emergencies). This threshold was used for this analysis and is consistent with the Alameda County Fire Department (ACFD), which serves as the Fire Department for Union City, Newark, San Leandro, and unincorporated Alameda County and maintains a 5-minute standard response time for fire and medical emergencies. It is assumed that other fire agencies in the transportation RSA maintain similar standard response times; standard response times for other fire agencies and responders in the transportation RSA were not readily available on these other agencies' websites.

Emergency vehicle access analysis considers areas served by grade crossings on the Coast and Niles Subdivisions where the proposed Project would result in changes in train volumes. The analysis considered 20 intersections and eight additional isolated at-grade crossings along the following rail lines between the RSA:

- Coast Subdivision: From the junction of Coast and Niles subdivisions at Elmhurst in the north where Coast Subdivision starts, to Newark Junction in the south where Coast and Niles subdivisions meet again and the Niles Subdivision ends (Figure 3.18-1).
- Niles Subdivision: Junction of Coast and Niles subdivisions at Elmhurst in north to Newark Junction in south (same as above; Figure 3.18-1). The Niles Subdivision was included in the quantitative analysis even though it is expected to see a reduction in passenger rail services after completion of the proposed Project.

3.18.4 Affected Environment

3.18.4.1 Environmental Setting

Regional Setting

The Capitol Corridor is an intercity passenger train system that provides a convenient alternative to traveling along the congested Interstate (I) 80, I-680 and I-880 freeways by operating fast, reliable, and affordable intercity rail service to 18 stations in Placer, Sacramento, Yolo, Solano, Contra Costa, Alameda, San Francisco, and Santa Clara counties, along a 170-mile rail corridor. An extensive, dedicated motorcoach network provides bus connections to serve the second-largest urban service area in the western United States. The Capitol Corridor serves more than 1.7 million annual riders and offered 15 daily roundtrips between Sacramento and the Bay Area, seven of which continued south through Oakland to San Jose. Capitol Corridor Joint Powers Authority (CCJPA) is the managing agency for the Capitol Corridor service.

Local Setting

The proposed Project is in Alameda County between the Capitol Corridor Oakland Coliseum Station in the City of Oakland to the north and Newark Junction in the City of Newark to the south. The proposed Project passes through the Cities of Oakland, San Leandro, Hayward, Fremont, Newark, and Union City. The following section describes the existing transportation network within the transportation RSA.

Passenger Rail Service

Within the transportation RSA, passenger rail service is provided by Capitol Corridor, Altamont Corridor Express (ACE), Amtrak, and BART. Union Pacific Railroad (UPRR) owns and manages the rail corridors within the RSA, and passenger trains operate on UPRR's tracks. UPRR's primary business is goods movements, and UPRR's freight train operations reflect market demands. The following passenger rail services operate within the RSA:

- **Amtrak.** Amtrak operates intercity and interstate passenger rail service on the Capitol Corridor and Coast Starlight. The Capitol Corridor route connects San Jose to the Sacramento area and uses the Niles Subdivision of the UPRR track. Capitol Corridor (up to 11 trains daily each way), Amtrak's Coast Starlight (9 trains daily) each way (Amtrak, 2022).
- **ACE.** ACE is a commuter rail service in California, connecting Stockton and San Jose (8 trains weekdays). The majority of the route runs on UPRR freight lines. From Santa Clara to Stockton ACE uses the Coast Subdivision and the Niles subdivision from Newark to Niles (ACE, 2022).
- **BART.** BART is a heavy-rail public transit system that connects the San Francisco Peninsula with communities in the East Bay and South Bay. BART service currently extends as far as Millbrae, Richmond, Antioch, Dublin/Pleasanton, and Berryessa/North San José. BART operates in five counties (San Francisco, San Mateo, Alameda, Contra Costa, and Santa Clara) with 131 miles of exclusive BART track and 50 stations, carrying approximately 414,131 trips on an average annual weekday according to the BART 18523-Quarterly Report, Fourth Quarter Fiscal Year 2019 – Service Performance Review Presentation (BART, 2019).

Freight Service

UPRR provides freight service on the Coast, Niles, and Oakland Subdivisions. The north/south stem of the Niles Subdivision is a main route for UPRR freight trains heading south from Oakland to Milpitas and further beyond. The east/west section of the Niles Subdivision is a main route for freight trains heading to or from Niles Canyon to key destinations within the Central Valley. UPRR freight trains also use the Coast Subdivision for north/south freight movement. UPRR's LOS and freight train volume is market driven and varies based on the reliability and availability of the transportation network. Typically, up to 6 freight trains per day use the portion of the Niles Subdivision between Niles Junction and Newark Junction, which is the most heavily travelled portion of the lines in the transportation RSA based on published data from the Congressional Budget Office (2021).

Number of Passenger and Freight Trains by Segment in a Typical Day

The following information represents the number of passenger and freight trains by segment in a typical day:

- Coast Subdivision (Junction at Elmhurst to Newark Junction) approximately 2 freight and 2 passenger trains.
- Niles Subdivision and Oakland Subdivision (Junction at Elmhurst to junction at Niles where Oakland and Warm Springs subdivisions meet) approximately 3 freight and 14 passenger trains.
- Niles Subdivision (Centerville Line: Niles Junction to Newark Junction) approximately 6 freight and 22 passenger trains.

The Freeway Network

The existing Interstates in the transportation RSA are described as follows.

- **I-880.** I-880 is a six- to eight-lane freeway running north and south between the San Francisco-Oakland Bay Bridge and San Jose. The freeway passes through Oakland, San Leandro, Hayward, Fremont, Newark, and Union City. I-880 serves as the major truck route in western Alameda County.

Bus Transit

The AC Transit is the third-largest public bus system in California, serving 13 cities and adjacent unincorporated areas in Alameda and Contra Costa counties. AC Transit operates a network of bus lines that provide connections within these counties, to and from the BART stations, and to adjacent cities. AC Transit has 58 local lines, 47 school lines that operate on school days only and are suspended during summer. There are three early bird, six all-nighter, and 15 Transbay lines that serve Alameda County and the Cities of Oakland, San Leandro, Hayward, Fremont, Newark, and Union City. The following bus transit services are within the transportation RSA by city:

- **Oakland** – AC Transit, East Bay Paratransit
- **San Leandro** – AC Transit, Links Free Shuttle, Flex Shuttle – East Bay Paratransit Service
- **Hayward** – AC Transit, Greyhound, East Bay Paratransit
- **Fremont** – AC Transit, Santa Clara Valley Transportation, City of Fremont Paratransit, East Bay Paratransit

- **Newark** – AC Transit, Dumbarton Express, East Bay Paratransit
- **Union City** – AC Transit, Union City Transit, Union City Paratransit, Dumbarton Express, East Bay Paratransit

Local Roadway System

The local roadway system within the transportation RSA is classified based on their function and generally consist of principal arterials, minor arterials, collector roads, and local streets defined in the Federal Highway Administration's (FHWA) *Highway Functional Classification Concepts, Criteria and Procedures* (FHWA, 2017) and described in the following information:

Principal Arterial. These roadways serve major centers of metropolitan areas, provide a high degree of mobility, and can also provide mobility through rural areas. Unlike their access-controlled counterparts, abutting land uses can be served directly. Forms of access for Other Principal Arterial roadways include driveways to specific parcels and at-grade intersections with other roadways.

Principal Arterials within the RSA are described in Table 3.18-1.

Table 3.18-1: Principal Arterials Within the RSA

City	Principal and Major Arterials
Oakland	Doolittle Drive (State Route (SR) 61) International Boulevard (SR 185)
San Leandro	Davis Street (SR 112) E. 14th Street (SR 185) San Leandro Boulevard Hesperian Boulevard Lewelling Boulevard
Hayward	Hesperian Boulevard W. Jackson Street (SR92) A Street B Street W. Tennyson Road Dyer Street
Fremont	Mowry Avenue (SR 84)

City	Principal and Major Arterials
Newark	Thornton Avenue
	Newark Boulevard
	Cherry Street
	Mowry Avenue
Union City	Union city Boulevard
	Alvarado Boulevard
	Dyer Street
	Alvarado-Niles Road
	Paseo Padre Parkway
	Fremont Boulevard
	Decoto Road (SR84)

Source: *Caltrans, 2022*

Minor arterials. Minor arterials provide service for trips of moderate length, serve geographic areas that are smaller than their higher arterial counterparts and offer connectivity to the higher Arterial system. In an urban context, they interconnect and augment the higher Arterial system, provide intra-community continuity and may carry local bus routes.

Collector roads*.* Collectors serve a critical role in the roadway network by gathering traffic from Local Roads and funneling them to the Arterial network. Within the context of functional classification, Collectors are broken down into two categories: Major Collectors and Minor Collectors. Until recently, this division was considered only in the rural environment. Currently, all Collectors, regardless of whether they are within a rural area or an urban area, may be sub-stratified into major and minor categories. The determination of whether a given Collector is a Major or a Minor Collector is frequently one of the biggest challenges in functionally classifying a roadway network.

Local streets. Locally classified roads account for the largest percentage of all roadways in terms of mileage. They are not intended for use in long distance travel, except at the origin or destination end of the trip, due to their provision of direct access to abutting land. Bus routes generally do not run on Local Roads. They are often designed to discourage through traffic. As public roads, they should be accessible for public use throughout the year.

Bicycle Facilities

Bicycle facilities in the transportation RSA are illustrated in Figure 3.18-2 through Figure 3.18-4. In accordance with Article 3, Section 890.4 Streets and Highway Code (September 2012), bikeways were categorized as follows:

a) Bike paths or shared use paths, also referred to as “Class I bikeways,” which provide a completely separated ROW designated for the exclusive use of bicycles and pedestrians with crossflows by motorists minimized.

b) Bike lanes, also referred to as "Class II bikeways," which provide a restricted ROW designated for the exclusive or semi-exclusive use of bicycles with through travel by motor vehicles or pedestrians prohibited, but with vehicle parking and crossflows by pedestrians and motorists permitted. Currently, there are Class II bikeways that link to the Hayward and Fremont stations in the Niles Subdivision. The passenger service to these stations would be discontinued as part of the proposed Project.

c) Bike Routes, also referred to as "Class III bikeways," which provide a ROW on Street or off-street, designated by signs or permanent markings and shared with pedestrians and motorists.

d) Cycle tracks or separated bikeways, also referred to as "Class IV bikeways," which promote active transportation and provide a ROW designated exclusively for bicycle travel adjacent to a roadway and which are separated form vehicular traffic. Types of separation include, but are not limited to, grade separation, flexible posts, inflexible physical barriers, or on-street parking (a) Class I bikeways, such as a "bike path" which provide a completely separated ROW designated for the exclusive use of bicycles and pedestrians with crossflows by motorists minimized.

Pedestrian Facilities

The existing pedestrian network varies across the transportation RSA, depending on the roadway ROW, lane configurations, and density of adjacent land uses. In general, most of the public roadway network is considered open to pedestrians, either with sidewalks or road shoulders, except for locations where no shoulder exists. The existing pedestrian network is generally fully built with ADA-compliant sidewalks; curb ramps are provided with pedestrian crossings and are generally provided at major intersections with some mid-block crossings at select locations where there are pedestrian-oriented land uses such as schools. However, in some areas non-ADA-compliant sidewalk conditions may exist (i.e., sidewalks that lack ADA curb ramps or crossing; no sidewalks, connectivity gaps in the network, or long crossings on wide arterials where pedestrians may be required to traverse). Other than sidewalk facilities, there are multi-use trails built for recreational purposes.

The San Francisco Bay Trail runs within the transportation RSA, extending from the northern to the southern parts of the Coast Subdivision. Similarly, the Alameda Creek Regional Trail is within the RSA, following the banks of Alameda Creek in southern Alameda County from the mouth of Niles Canyon. The trail crosses under the Niles Subdivision (in the Niles District of Fremont) westward to San Francisco Bay a distance of about 12 miles (East Bay Regional Park District, 2022).

Fire, Police, and Hospitals

The existing fire, police, and hospital facilities (with Emergency Room facilities) considered in the analysis are shown on Figure 3.18-5. The analysis considers all land uses within the transportation RSA and their access to fire, police, and hospital facilities.

Figure 3.18-2: Bicycle Facilities within the Transportation Resource Study Area (north extent)

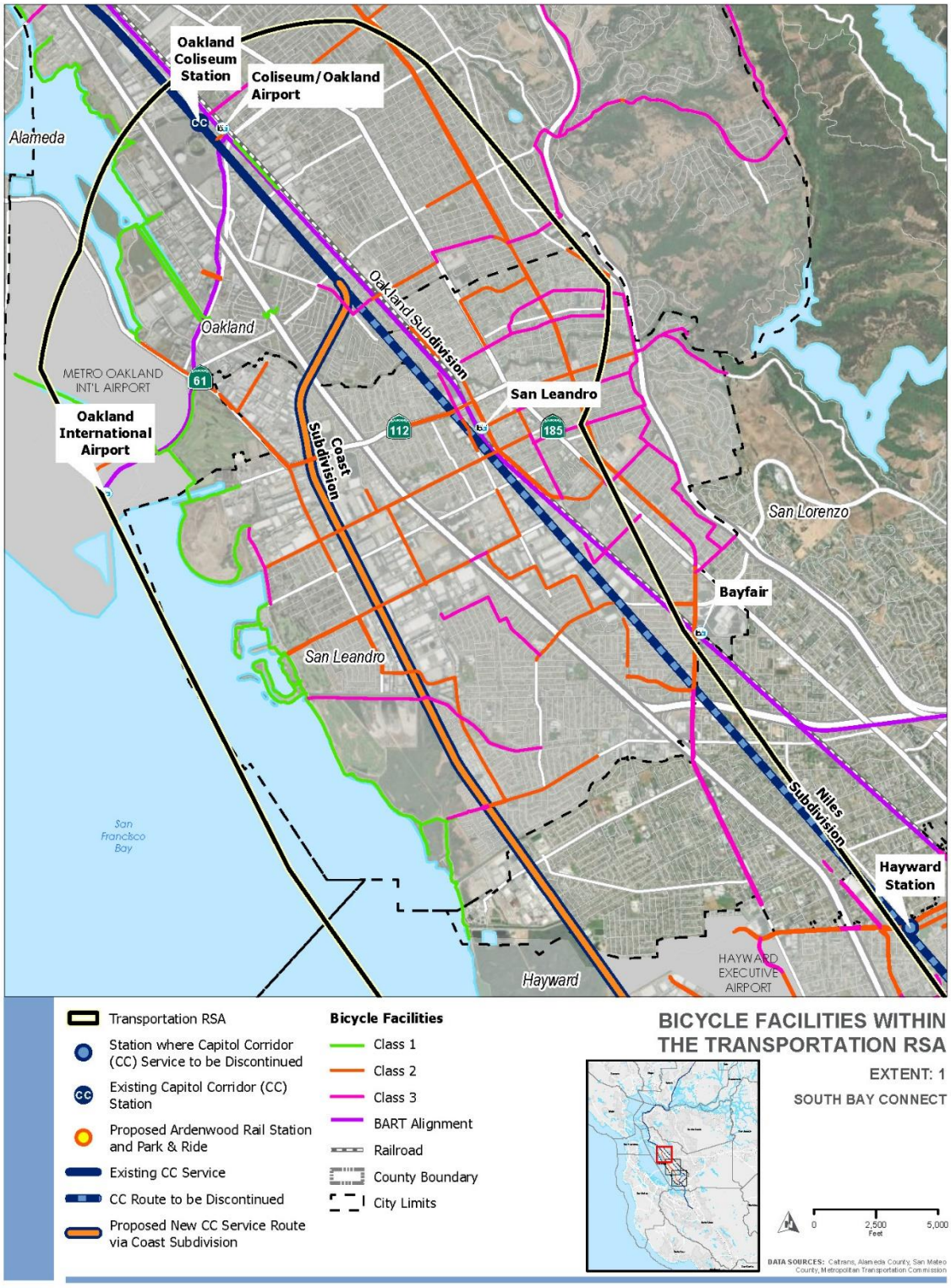


Figure 3.18-3: Bicycle Facilities within the Transportation Resource Study Area (central section)

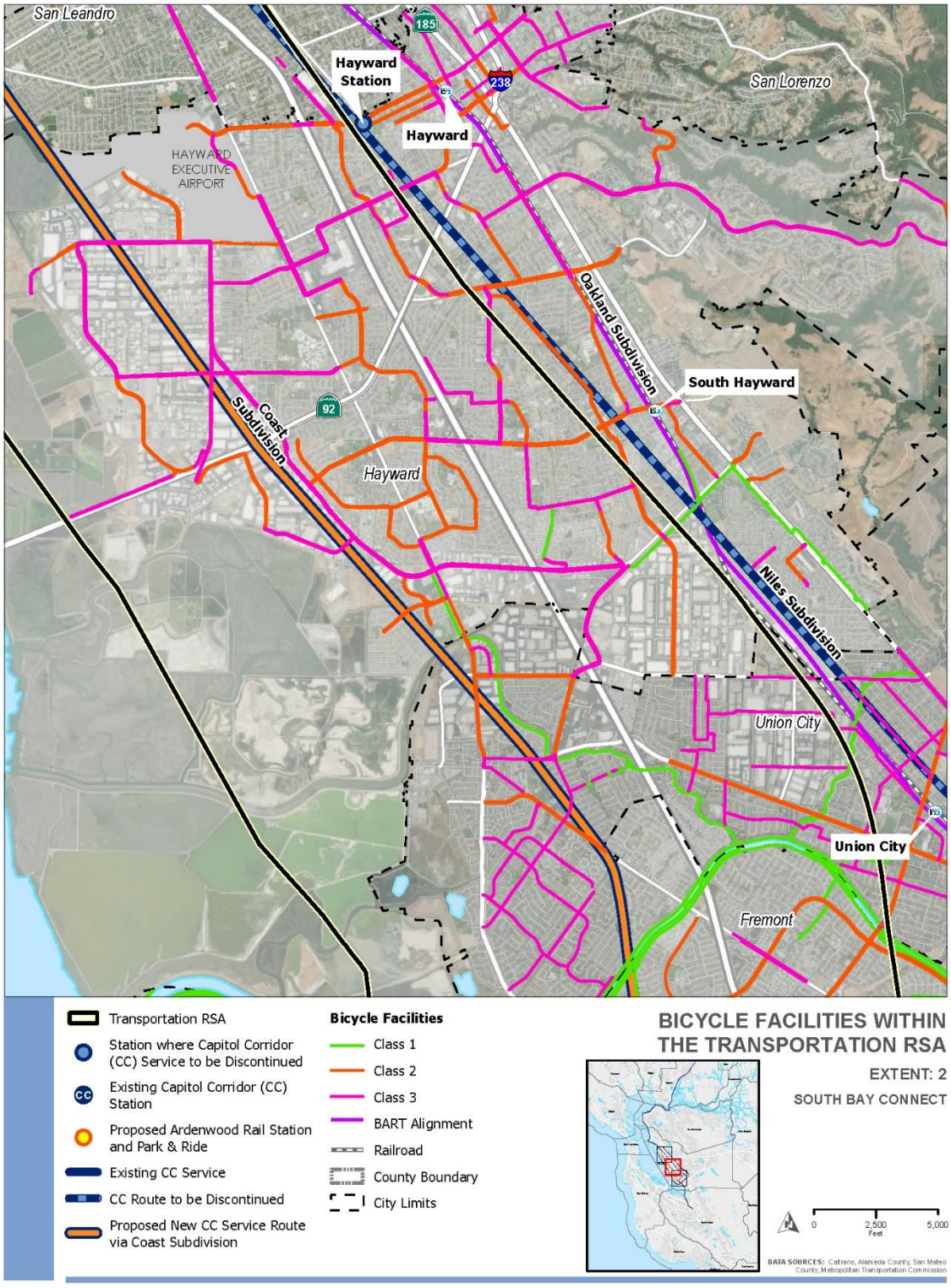


Figure 3.18-4: Bicycle Facilities within the Transportation Resource Study Area (southern extent)

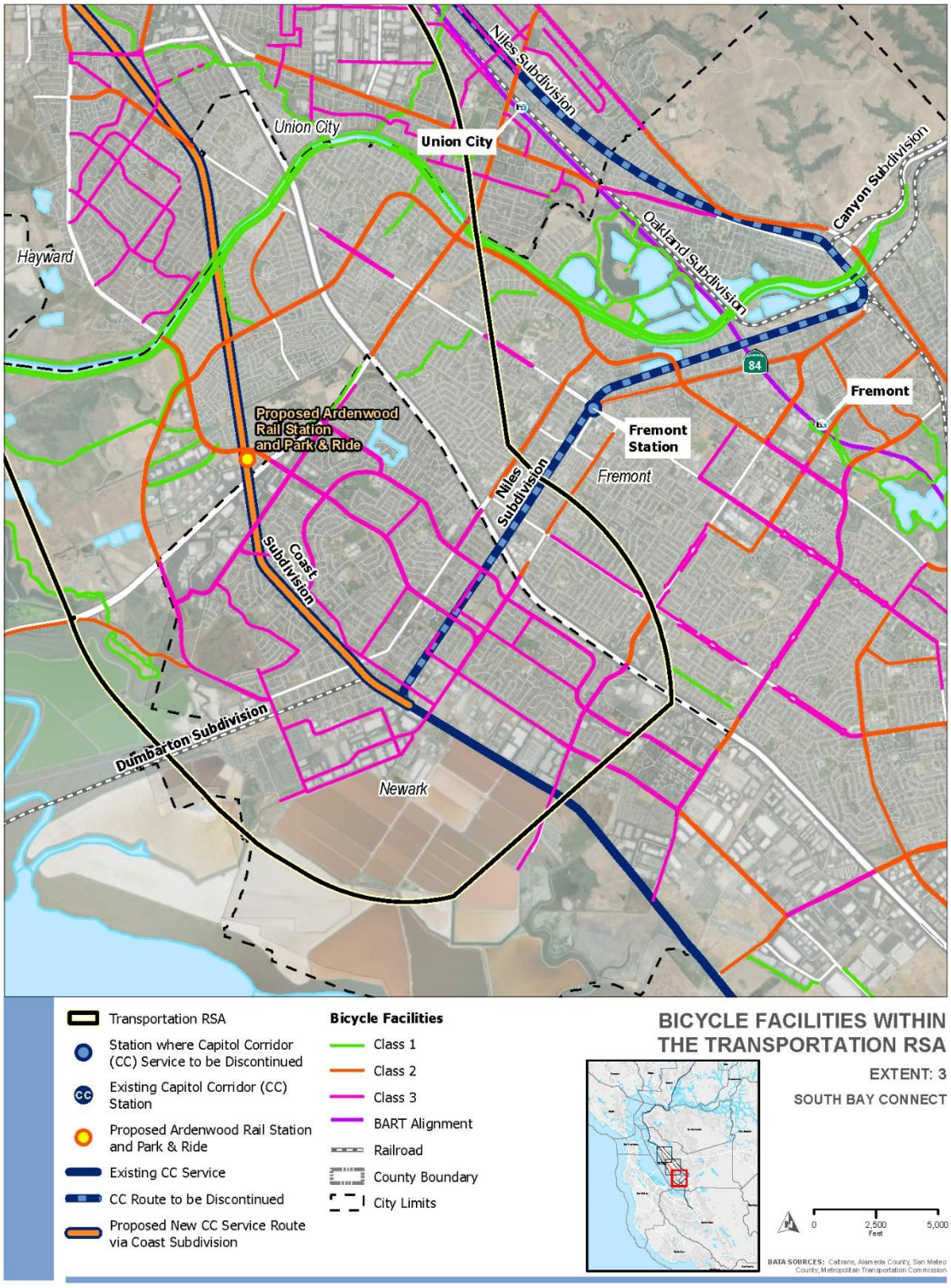


Figure 3.18-5: Fire Stations, Police Stations, and Hospitals Within the Transportation Resource Study Area

3.18.5 Best Management Practices

As noted in Chapter 2, Project Alternatives, CCJPA would incorporate a range of BMPs to avoid and minimize adverse effects on the environment that could result from implementation of the proposed Project. BMPs are included in the proposed Project description, and the impact analyses were conducted assuming application of these practices. The BMPs relevant to transportation are summarized below. Full descriptions of the BMPs are provided in Chapter 2, Project Alternatives.

BMP TR-1: Transportation Management Plan (TMP).

3.18.6 Environmental Impacts

This section describes the potential environmental impacts on transportation as a result of implementation of the proposed Project. Lettering shown within title for each environmental factor below correlates with CEQA Statute and Guidelines, Appendix G table lettering and numbering.

3.18.6.1 (a) Conflict with a program, plan, ordinance, or policy addressing the circulation system, including transit, roadway, bicycle, and pedestrian facilities?

No Project Alternative

No Impact. Under the No Project Alternative, the Capitol Corridor passenger rail service between Oakland and San Jose would not be relocated from the Niles Subdivision to the Coast Subdivision. Improvements proposed for the Niles and Coast Subdivisions associated with the proposed Project would not occur. Capitol Corridor passenger trains would continue to operate based on current routes with no changes to rail connectivity or operational efficiency. Therefore, the No Project Alternative would conflict with a key element of the CCJPA's 2014 Vision Plan update and 2016 Implementation Plan, but it would not conflict with a program, plan, ordinance, or policy addressing the circulation system, including roadway, bicycle, and pedestrian facilities.

Proposed Project

Construction.

Less-than-Significant Impact. During construction of the proposed Project, BMPs would be implemented as part of the proposed Project. With implementation of BMP TR-1: Transportation Management Plan (TMP), a TMP would be developed during final design in coordination with local jurisdictions and first responders within the transportation RSA to maintain emergency, transit, roadway, bicycle, and pedestrian access and to avoid or reduce impacts to traffic circulation and minimize delays. The TMP would address how construction-related activities would be carried out to ensure that access to businesses, residences, schools, hospitals, and public services would be maintained, and delay would be minimized to the extent feasible for multimodal travel and construction. The TMP would provide advance notice to the public for road detours with appropriate signage to avoid and minimize impacts to circulation and to maintain access to adjacent properties. Therefore, the proposed Project would result in a less-than-significant impact during construction.

Operations.

Less-than-Significant Impact. The proposed Project would not conflict with a program, plan, ordinance, or policy addressing the circulation system, including roadway, transit, bicycle, or pedestrian facilities. The proposed Project is a key element in CCJPA's 2014 Vision Plan Update (CCJPA, 2014) and 2016 Vision Implementation Plan (CCJPA, 2016), both of which call for relocating Capitol Corridor service from Oakland and Newark Subdivisions to the Coast Subdivision to provide a shorter and more direct route from Oakland to San Jose and improve the rail network and operations between Oakland and San Jose. The proposed Project is also consistent with an important component of the 2018 California State Rail Plan (Caltrans, 2018), which calls for re-routing passenger rail service from the Niles Subdivision to the Coast Subdivision and re-routing freight operations from the Coast Subdivision to the Niles Subdivision to facilitate faster travel times and a more direct route from Oakland to San Jose.

In addition, based on the LOS analysis of the Transportation Assessment (Fehr and Peers, 2023), the proposed Project is consistent with the Fremont transportation handbook LOS goals for signalized intersections. Moreover, the proposed Project was designed to be consistent with all applicable regional and local plans, ordinances, and policies related to circulation, transportation, and mobility in Alameda County and the cities of Oakland, San Leandro, Hayward, Fremont, Newark, and Union City. Therefore, the proposed Project would result in a less-than-significant impact during operations.

3.18.6.2 (b) Would the project conflict or be inconsistent with CEQA Guidelines Section 15064.3, subdivision (b)

No Project Alternative

No Impact. Under the No Project Alternative, the Capitol Corridor passenger rail service between Oakland and San Jose would not be relocated from the Niles Subdivision to the Coast Subdivision. Improvements proposed for the Niles and Coast Subdivisions associated with the proposed Project would not occur. Capitol Corridor passenger trains would continue to operate based on current routes with no changes to rail connectivity or operational efficiency. Therefore, the No Project Alternative would not conflict or be inconsistent with CEQA Guidelines Section 15064.3, subdivision (b).

Proposed Project

Construction.

Less-than-Significant Impact. Construction activities would include track and signal work, construction of sidings and grade separated crossings, improvements to existing at-grade crossings, and construction of the new Ardenwood Station, parking structure, and pedestrian access. During the anticipated 3-year construction period, the proposed Project would temporarily generate additional VMT related to construction work activities, including the hauling of excavated materials and/or construction equipment or supplies. In addition, travelers may temporarily experience delays and increases in VMT and travel time when traveling through construction zones with detours or temporary lane closures; however, the VMT generated during construction would be offset by the reduction to VMT during operations and result in no impact.

BMPs for transportation would be implemented as part of the proposed Project and a TMP would be developed during final design in coordination with the affected local jurisdictions and first responders to maintain access and reduce impacts to circulation and VMT in accordance with BMP TR-1. The TMP would address how construction-related activities would be carried out to minimize inconvenience and to help ensure access is maintained and delays and VMT are minimized to the extent feasible for travelers and workers. The TMP would include advance notice of road closures and detours with appropriate signage to avoid and minimize impacts to circulation and to maintain access to adjacent properties.

In accordance with CEQA Guidelines Section 15064.3(b)(2), "Transportation projects that reduce, or have no impact on VMT should be presumed to cause a less than significant transportation impact." Therefore, based on CEQA and OPR guidance, the proposed Project would not conflict with CEQA Guidelines Section 15064.3, subdivision (b), and VMT-related construction impacts would be less than significant.

Operations.

Less-than-Significant Impact. The proposed Project would result in changes in ridership patterns along the Capitol Corridor route due to the opening of new travel markets (e.g., Transbay travel connections at Ardenwood Station), reducing service travel times between Oakland and San Jose, using a more direct route for Capitol Corridor services. The proposed Project is anticipated to result in a reduction of regional VMT due to increases in passenger rail ridership. Additional ridership at the proposed Ardenwood Station location in the City of Fremont would result in an increase in traffic around the station.

The proposed Project would result in an additional 950 to 1,050 Capitol Corridor systemwide riders per day in the Opening Year 2025 Pre-COVID Basis scenario. For the Opening Year 2025 Post-COVID Basis scenario, there is an expected increase of 480 to 530 riders per day. Systemwide riders per day in the Horizon Year 2040 Pre-COVID Basis scenario would increase by an additional 1,050 to 1,170, and for the Post-COVID Basis scenario, the increase would be an additional 940 to 1,040 (Table 3.18-2).

Table 3.18-2. Ridership Forecast Overview

Scenario	Pre-COVID Basis Systemwide total Daily Boardings			Post-COVID Basis Systemwide Total Daily Boardings		
	Total	Range Low	Range High	Total	Range Low	Range High
Year 2023 – Existing						
No Project	6,110	-	-	2,780	-	-
Year 2025 – Opening Year						
No Project	10,050	9,550	10,550	4,800	4,560	5,040
Plus Project	11,050	10,500	11,600	5,300	5,040	5,570

Table 3.18-2. Ridership Forecast Overview

Scenario	Pre-COVID Basis Systemwide total Daily Boardings			Post-COVID Basis Systemwide Total Daily Boardings		
	Total	Range Low	Range High	Total	Range Low	Range High
Year 2040 – Horizon Year						
No Project	18,240	17,330	19,150	12,450	11,830	13,070
Plus Project	19,350	18,380	20,320	13,440	12,770	14,110

Source: Fehr & Peers Transportation Assessment (2023)

With the shift in the Capitol Corridor route, the existing Hayward and Fremont-Centerville stations on the Niles Subdivision would no longer be served by Capitol Corridor passenger trains; instead, a new station in the Coast Subdivision at the Ardenwood Park-and-Ride in western Fremont would be constructed to accommodate riders in southwestern Alameda County. The ridership analysis indicates that between 60 percent and 70 percent of this ridership increase is due to the new local and Transbay travel market served at the proposed Ardenwood Station. The remaining ridership increase is attributed to additional regional ridership resulting from reduced Capitol Corridor travel times in the transportation RSA associated with a more direct route between Elmhurst Junction and Newark Junction and the net removal of one stop from the schedule.

Increases in Capitol Corridor ridership would result in fewer drivers traveling between their destinations and an anticipated corresponding reduction in regional VMT. Based on the CEQA Guidelines, transportation projects that reduce or have no impact on VMT should be presumed to cause a less-than-significant transportation impact. Table 3.18-3 shows that VMT is forecasted to decrease by 38,000 VMT in Opening Year 2025 and by 40,000 VMT by Horizon Year 2040 based on the Pre-COVID Basis model and by 20,000 VMT by Opening Year 2025 and 33,000 VMT by Horizon Year 2040 based on Post-COVID Basis model based upon the increased ridership associated with the implementation of the proposed Project. Therefore, the proposed Project would result in a reduction to VMT during Project operation.

Table 3.18-3: Weekday Daily Regional VMT

Scenario	Pre-COVID Basis VMT	Post-COVID Basis VMT
Opening Year 2025		
No Project	227,150,000	227,150,000
Plus Project	227,112,000	227,130,000
Delta	-38,000	-20,000

Table 3.18-3: Weekday Daily Regional VMT

Scenario	Pre-COVID Basis VMT	Post-COVID Basis VMT
	Horizon Year 2040	
No Project	256,390,000	256,390,000
Plus Project	256,350,000	256,357,000
Delta	-40,000	-33,000

Source: Fehr & Peers Transportation Assessment (2023)

The proposed Project is a passenger rail project that would create a more direct passenger rail route and greatly reduce rail travel time between Oakland and San Jose. Reducing travel times would facilitate more auto-competitive travel times for intercity passenger rail trips throughout the Northern California area. The proposed Project would increase ridership on transit, ease congestion on the Bay Area's stressed roadways, and reduce lengthy auto commutes. Increased ridership on transit would reduce regional VMT by 38,000 VMT by the Opening Year 2025 and 40,000 VMT by Horizon Year 2040 based on the Pre-COVID Basis model and by 20,000 VMT by Opening Year 2025 and 33,000 VMT by Horizon Year 2040 based on Post-COVID Basis model and achieve the goals of SB 743. In accordance with CEQA Guidelines Section 15064.3(b)(2), "Transportation projects that reduce, or have no impact on, VMT should be presumed to cause a less than significant transportation impact."

Therefore, based on CEQA and OPR guidance, the proposed Project would not conflict with CEQA Guidelines Section 15064.3, subdivision (b), and VMT-related operational impacts would be less than significant.

3.18.6.3 (c) Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?

No Project Alternative

No Impact. Under the No Project Alternative, the Capitol Corridor passenger rail service between Oakland and San Jose would not be relocated from the Niles Subdivision to the Coast Subdivision. Improvements proposed for the Niles and Coast Subdivisions associated with the proposed Project would not occur. Capitol Corridor passenger trains would continue to operate based on current routes with no changes to rail connectivity or operational efficiency. Therefore, the No Project Alternative would not substantially increase hazards due to a geometric design feature or an incompatible use.

Proposed Project

Construction.

Less-than-Significant Impact. The proposed Project would not substantially increase hazards due to a geometric design feature or incompatible use. The proposed track, signal upgrades, and siding

improvements would be located within or adjacent to existing rail or public transportation ROW and designed based on standards set forth by CCJPA, the local jurisdiction, and/or the host railroad. All at-grade crossings in the transportation RSA are equipped with warning bells, crossing gates, and flashing lights. These rail corridors also currently serve passenger and/or freight rail trips, meaning that trains would run on rail lines that currently experience rail traffic.

Construction activities would include track and signal work; construction of sidings and grade separated crossings; improvements to existing at-grade crossings; and construction of the new Ardenwood Station, parking structure, and pedestrian access. Prior to construction, CCJPA and the host railroad would coordinate with the local jurisdiction in developing a construction traffic management plan which would be implemented during construction activities. As part of BMP TR-1, the construction contractor would provide early notification to local jurisdictions, emergency responders, and to the public of potential traffic control measures and alternative access and/or detours during construction activities. The TMP would be compliant with the provisions of the current *California Manual on Uniform Traffic Control Devices* (Caltrans, 2021b) and local ordinances. With implementation of BMP TR-1, construction activity traffic impacts associated with the proposed Project are anticipated to be less than significant.

Operations.

Less-than-Significant Impact. As previously stated, the proposed Project would not change the existing rail alignment, and rail improvements would be predominantly constructed within existing rail ROW. The proposed Project would be designed according to applicable passenger and freight rail criteria, city, safety, and ADA standards, codes and guidelines to maximize safety for both motorized and non-motorized forms of transportation. Pedestrian improvements include signal-protected pedestrian movements, channelization, barriers to protect and route pedestrians where needed at-grade crossings, ADA-compliant curb ramps, along with warning signs to provide for convenient and safe access to boarding areas. Therefore, the proposed Project would result in less-than-significant impacts for operational activities.

3.18.6.4 (d) Result in inadequate emergency access?

No Project

No Impact. Under the No Project Alternative, the Capitol Corridor passenger rail service between Oakland and San Jose would not be relocated from the Niles Subdivision to the Coast Subdivision. Improvements proposed for the Niles and Coast Subdivisions associated with the proposed Project would not occur. Capitol Corridor passenger trains would continue to operate based on current routes with no changes to rail connectivity or operational efficiency. Therefore, the No Project Alternative would have no impact to current conditions for emergency access.

Proposed Project

Construction.

Less Than Significant Impact. The proposed Project would result in the shifting of Capitol Corridor service from the Niles Subdivision to the Coast Subdivision and is not expected to result in changes in freight rail services along the Niles, Oakland, and Coast Subdivisions. An emergency vehicle access analysis was completed for the proposed Project, which considered the locations of existing fire and police stations and hospitals with emergency services. While no established state or federal

standards for response times have been established for the purposes of identifying CEQA thresholds of significance, for purposes of this analysis, the CEQA threshold of significance for change in emergency vehicle access times would be an increase of 30 seconds (i.e., 10 percent of 300 seconds). The analysis was conducted to determine whether emergency response times (at the daily average level) were projected to decrease, increase by a less-than-significant amount (i.e., less than 30 seconds), or increase by a significant amount (i.e., 30 seconds or more).

Figure 3.18-6 through Figure 3.18-8 show the change in emergency vehicle response times for fire, police, and hospitals (with emergency services) for opening and horizon year as a result of proposed Project implementation. The figures include locations where emergency vehicle response times (at the daily average level) are projected to decrease or increase by a less-than-significant amount (less than 30 seconds). Based upon the analysis, no areas would result in an increase by a significant amount (30 seconds or more).

The following conclusions can be drawn for the proposed Project regarding emergency access:

- **Niles and Oakland Subdivisions**: Shifting of Capitol Corridor service to the Coast Subdivision without a shift in freight trains to the Niles and Oakland Subdivisions will result in a decrease in aggregate crossing closure times. Thus, emergency response times are expected to be minimally affected (or improve) as a result of the proposed Project.
- **Centerville portion of Niles Subdivision**: Shifting of Capitol Corridor service to the Coast Subdivision and retention of No Project-level freight trains will result in a decrease in emergency access times. Therefore, a decrease in access times is projected as a result of the proposed Project.
- **Coast Subdivision**: It is assumed that freight service on the Coast Subdivision stays similar to No Project levels (to be conservative). The proposed Project is projected to result in only a slight increase in access time.

A new driveway would be provided at the Ardentech Court cul-de-sac to connect the new Ardenwood Station parking area to the public roadway system. The existing Ardenwood Boulevard and Ardenwood Terrace entrances to the Ardenwood Park-and-Ride lot, located at 34867 Ardenwood Boulevard in Fremont, California, would be maintained. With implementation of BMP TR-1, CCJPA would coordinate with ACFD Police and/or Sheriff Departments' emergency response providers during development of the TMP to ensure that access remains in compliance with ACFD, county, and local police requirements.

During construction, lane closures, traffic detours, and designated truck routes associated with construction could temporarily result in reduced access and delayed response times for emergency services. BMP TR-1 would require that a TMP be developed and implemented that is compliant with the provisions of the current *California Manual on Uniform Traffic Control Devices* (Caltrans, 2021b) and local ordinances, as applicable, to avoid and minimize impacts on emergency access. The construction contractor would provide early notification of traffic disruption to emergency service providers to ensure that the proposed Project construction activities would not interfere with emergency response. Therefore, the proposed Project would result in less-than-significant impacts related to construction activities.

Figure 3.18-6: Emergency Vehicle Access Time - Fire

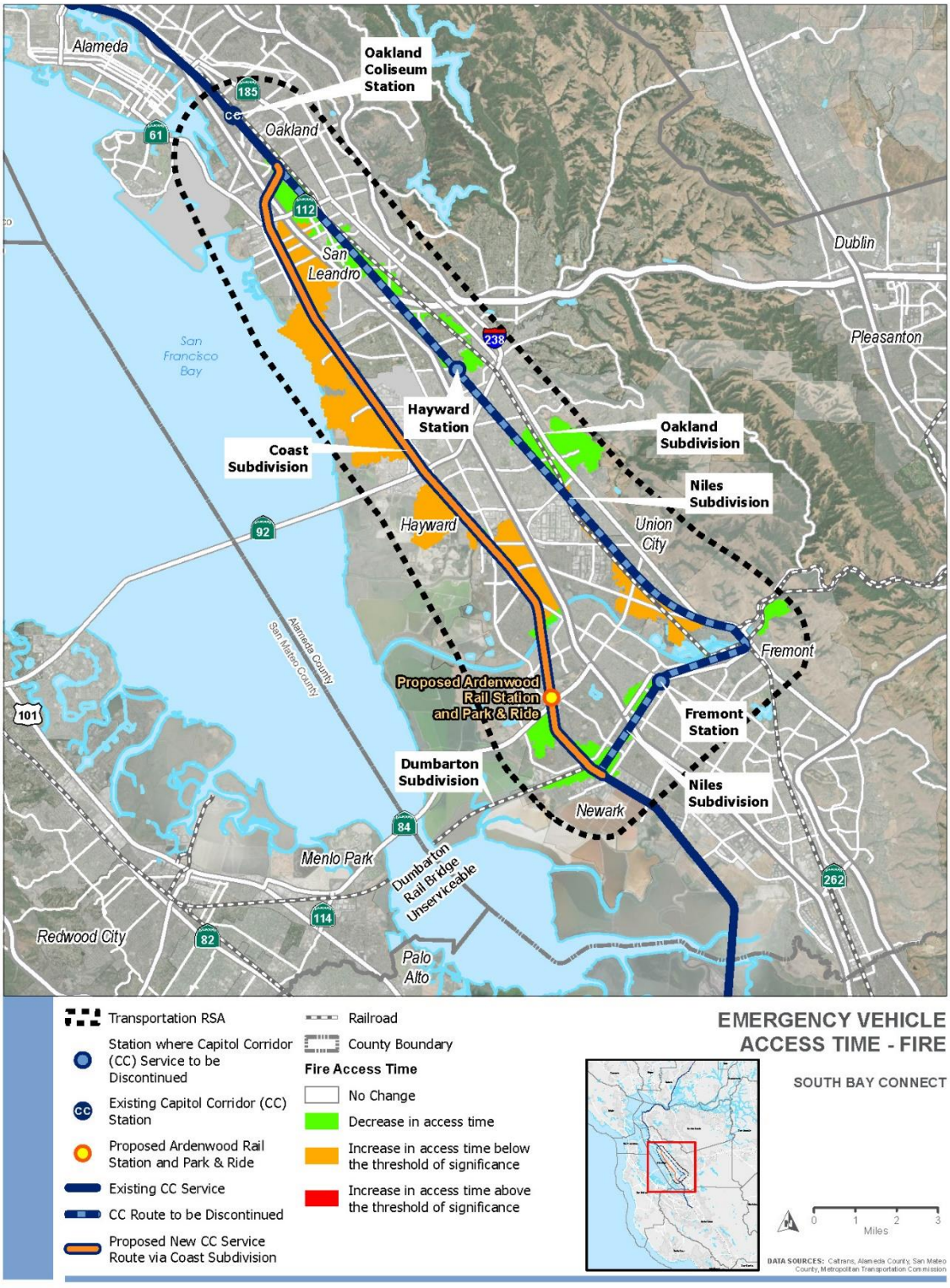


Figure 3.18-7: Emergency Vehicle Access Time - Police

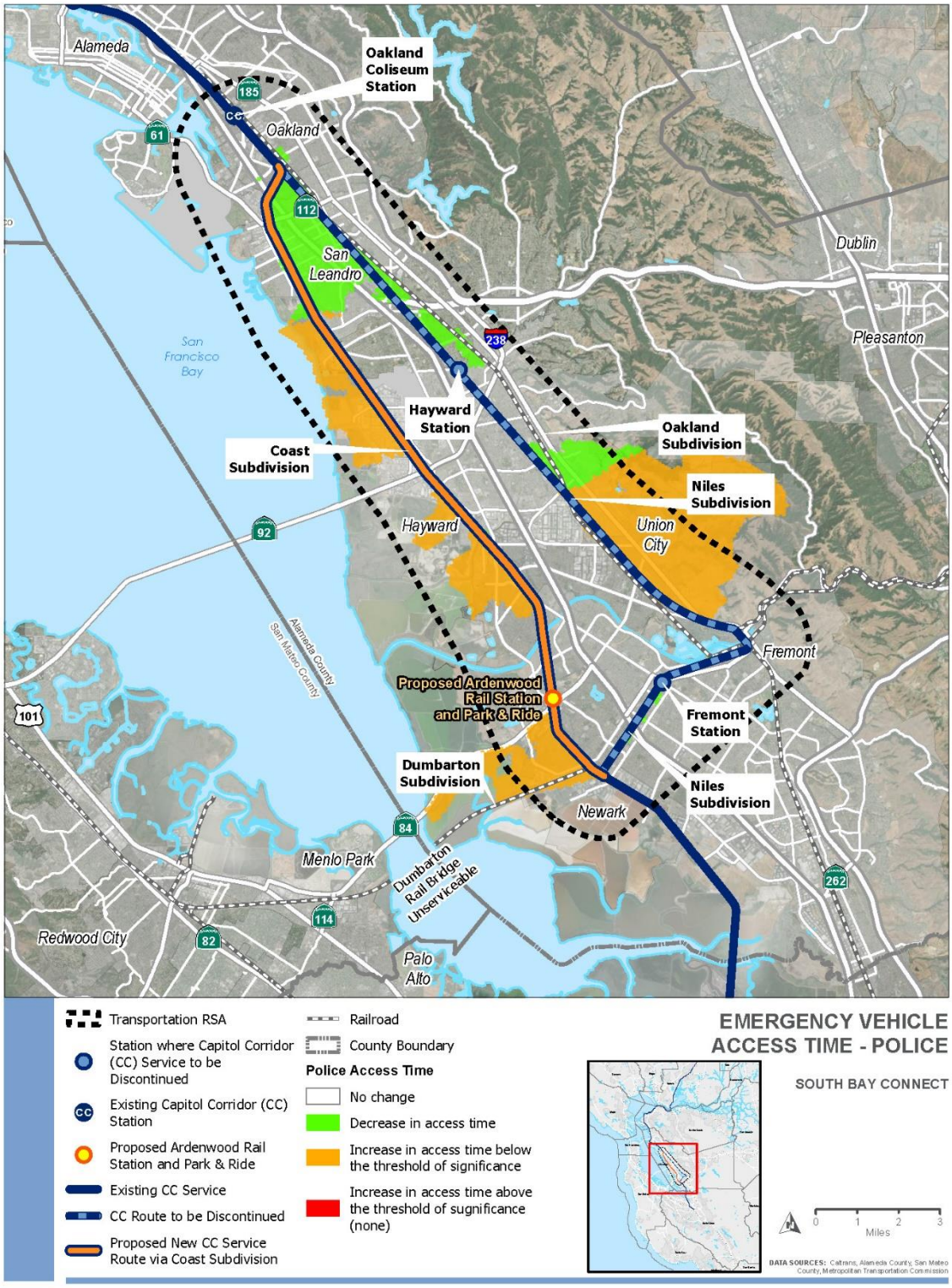
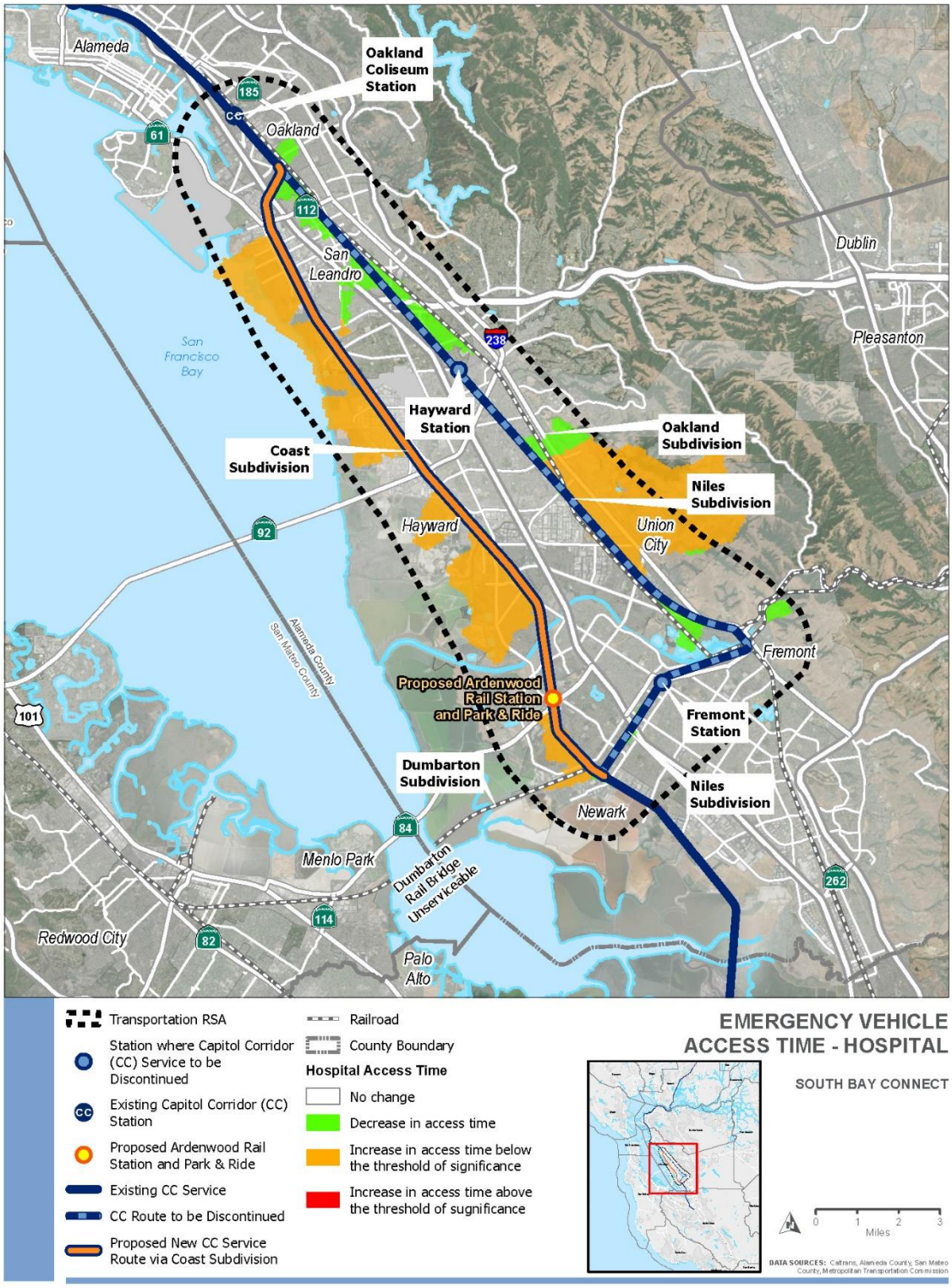


Figure 3.18-8: Emergency Vehicle Access Time - Hospital



Operations.

Less-than-Significant Impact. During operations, in the event that there is a derailment or situation at a station facility, the accident or incident would be communicated to all rail operators in the area and any safety measures, cleanup, and emergency access would be under the control of local jurisdiction emergency responders with assistance from rail operators. Therefore, the proposed Project would result in less-than-significant impacts related to operational activities.

3.18.7 Mitigation Measures

No Mitigation Measures for transportation are required for the proposed Project.

3.18.8 Cumulative Impact Analysis

Cumulative impacts can result from individually minor but collectively substantial impacts from past, present, and reasonably foreseeable future projects (those actions that are likely or probable, versus actions that are merely possible) taking place over a period of time. A cumulatively considerable impact to transportation would occur if the proposed Project, when combined with past, present, and reasonably foreseeable projects, results in cumulatively considerable impact to the transportation network.

The cumulative RSA for transportation includes a 2-mile buffer around the proposed Project improvements in the Cities of Oakland, San Leandro, Hayward, Fremont, Newark, and Union City. The cumulative RSA includes current and reasonably foreseeable transportation improvements and infill development projects. A summary of current and reasonably foreseeable future transportation and infill development projects (cumulative projects) that may affect the transportation network within the cumulative RSA is included in Table 3-1 in Section 3.1, Introduction.

Cumulative projects may require temporary road closures and detours during construction that could affect traffic circulation within the cumulative RSA. However, each identified cumulative project is required to analyze project-specific impacts on the roadway network and mitigate resulting significant impacts. Each cumulative project would be required to adhere to local jurisdiction transportation policies to avoid and/or minimize construction-related impacts on the transportation system and to maintain existing access.

The proposed Project is projected to reduce daily regional VMT by 38,000 miles in Opening Year 2025 and by 40,000 miles in Horizon Year 2040 based on the Pre-COVID Basis model and by 20,000 miles VMT by Opening Year 2025 and 33,000 miles VMT by Horizon Year 2040 based on the Post-COVID Basis model. Therefore, the proposed Project in combination with current and reasonably foreseeable projects would not cumulatively contribute to increases in VMT. The proposed Project would ultimately result in reduced regional cumulative impacts to VMT when combined with other cumulative projects and would provide beneficial impacts. The proposed Project would reduce, not increase, VMT and would have beneficial operational and safety effects when combined with projects that improve rail, such as the Washington Avenue/UPRR Crossing Improvement Project and Centerville Railroad Safety Improvement Project. The proposed Project would also provide increased regional transit connectivity benefits when combined with the SR 84 Intermodal Bus Facility, which would be located next to the new Ardenwood Station and to the development of future transit-oriented development projects close to the proposed Project like the Bayside Network development in the City of Newark.

The proposed Project would not have a cumulatively considerable or potentially significant impact on transportation when combined with other cumulative transportation or infill projects.

3.18.9 CEQA Impact Analysis Table

Table 3.18-4 summarizes the transportation resources impacts of the proposed Project.

Table 3.18-4. Transportation Resources Impacts Summary

Impact	Level of Significance Before Mitigation	Incremental Project Contribution to Cumulative Impacts	Mitigation	Level of Significance with Mitigation Incorporated	Incremental Project Cumulative Impact after Mitigation
Would the project conflict with a program, plan, ordinance, or policy addressing the circulation system, including transit, roadway, bicycle, and pedestrian facilities?	LTS	NCC	N/A	LTS	NCC
Would the project Conflict or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b)?	LTS	NCC	N/A	LTS	NCC
Would the project substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?	LTS	NCC	N/A	LTS	NCC
Would the project result in inadequate emergency access?	LTS	NCC	N/A	LTS	NCC

Notes: LTS = Less-than-Significant Impact, NI = No Impact, N/A = Not Applicable, SI = Significant Impact, S/M = Significant Impact but Mitigable to a Less-than-Significant Level, CC = Cumulatively Considerable, NCC = Not Cumulatively Considerable.

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