

3.12 Socioeconomics and Communities

3.12.1 Introduction

This section describes the regulatory setting and the affected environment for socioeconomics and communities; and the potential construction and operation impacts on communities, residents, businesses, community facilities, and the local economy. The analysis addresses impacts of the San Francisco to San Jose Project Section (Project Section, or project) on community cohesion, children's health and safety, the impacts of displacement and relocation, and economic impacts. The socioeconomic data used in the analysis are derived from various sources, including the U.S. Census Bureau, California Department of Finance, and the various county and city agencies.

The *San Francisco to San Jose Project Section Community Impact Assessment* (San Francisco to San Jose Community Impact Assessment) (California High-Speed Rail Authority [Authority] 2019a) provides additional technical details on socioeconomics and communities from the 4th and King Street Station to Scott Boulevard in Santa Clara, and the *San Jose to Merced Project Section Community Impact Assessment* (San Jose to Merced Community Impact Assessment) (Authority 2019b) provides additional technical details from Scott Boulevard to West Alma Avenue in San Jose.¹ Additional detailed information on property displacements and relocation impacts from the 4th and King Street Station to Scott Boulevard in Santa Clara is provided in the *San Francisco to San Jose Project Section Draft Relocation Impact Report* (San Francisco to San Jose Draft Relocation Impact Report) (Authority 2019c), and for the area from Scott Boulevard to West Alma Avenue in San Jose technical details are provided in the *San Jose to Merced Project Section Draft Relocation Impact Report* (San Jose to Merced Draft Relocation Impact Report) (Authority 2019d). Additional details on socioeconomics and communities are provided in the following appendices in Volume 2, Technical Appendices, of this Draft Environmental Impact Report (EIR)/Environmental Impact Statement (EIS):

- Appendix 2-D, Applicable Design Standards, describes the relevant design standards for the project.
- Appendix 2-E, Project Impact Avoidance and Minimization Features, provides the list of impact avoidance and minimization features (IAMF) incorporated into the project.
- Appendix 2-I, Regional and Local Plans and Policies, provides a list by resource of applicable regional and local plans and policies.

Overview of Socioeconomic and Community Impacts

- Project construction would temporarily disrupt communities along the alignment, with the greatest effects associated with constructing the Brisbane Light Maintenance Facility, expanding the Millbrae Station, and the passing track and viaduct construction (under Alternative B). Project construction could permanently affect social relationships and perceptions of quality of life by displacing residents, businesses, and community and public facilities.
 - No disproportionate impacts on children's health and safety would occur due to project construction or operation.
 - Alternative A would displace 14 residential units, 48 businesses, and 3 community and public facilities; Alternative B (Viaduct to I-880) would displace 42 residential units, 171 businesses, and 6 community and public facilities; and Alternative B (Viaduct to Scott Boulevard) would displace 62 residential units, 202 businesses, and 7 community and public facilities.
 - Overall the project would have a beneficial effect on the local and regional economy due to sales tax and direct and indirect employment generated by construction and operations.
-

¹ Technical reports for the San Francisco to San Jose Project Section evaluate the portions of the HSR alignment between 4th and King Street Station in San Francisco and Scott Boulevard in Santa Clara, while technical reports for the adjacent San Jose to Merced Project Section evaluate the portions of the HSR alignment south of Scott Boulevard to the Project Section terminus at West Alma Avenue south of the San Jose Diridon Station.

- Appendix 2-J, Policy Consistency Analysis, provides a summary by resource of project inconsistencies and reconciliations with local plans and policies.
- Appendix 3.12-A, Relocation Assistance Documents, provides information regarding the rights and benefits of displacees under the Uniform Relocation Assistance Program. It includes information applicable to residences, mobile homes, businesses, farms, and nonprofit organizations.
- Appendix 3.17-A, RIMS II Modeling Details, provides additional information on the modeling conducted for the regional growth analysis.

Ten EIR/EIS resource sections and one chapter provide additional information related to socioeconomics and communities:

- Section 3.2, Transportation, evaluates project impacts on traffic and circulation, including bicycle and pedestrian facilities.
- Section 3.3, Air Quality and Greenhouse Gases, evaluates project impacts on attainment of national ambient air quality standards.
- Section 3.4, Noise and Vibration, evaluates project noise and vibration impacts on sensitive receptors and the feasibility of noise abatement.
- Section 3.5, Electromagnetic Fields and Electromagnetic Interference, evaluates project impacts of electromagnetic fields (EMF) and electromagnetic interference (EMI) on sensitive receptors.
- Section 3.10, Hazardous Materials and Wastes, evaluates project impacts of the use of hazardous materials and wastes during project construction and operation on the public.
- Section 3.11, Safety and Security, evaluates project impacts on pedestrian, bicyclist, and motorist safety, and on emergency response and travel times.
- Section 3.13, Station Planning, Land Use, and Development, evaluates project impacts on existing and planned land use, including consistency with local and regional land use and transportation plans.
- Section 3.14, Parks, Recreation, and Open Space, evaluates project impacts on parks, recreation, and open space.
- Section 3.15, Aesthetics and Visual Quality, evaluates project impacts on the visual environment.
- Section 3.17, Regional Growth, evaluates project impacts on planned and unplanned growth in the region.
- Chapter 5, Environmental Justice, evaluates project impacts on minority and low-income populations.

3.12.1.1 Definition of Resources

The following are definitions relating to socioeconomic and community resources analyzed in this EIR/EIS.

- **Communities**—People living in the same city, town, or neighborhood, who exhibit behavior patterns expressed through daily social interactions, the use of local facilities, participation in local organizations, and involvement in activities that satisfy the population's economic and social needs. This term also refers to areas that have defined boundaries within which a network of roads and nonmotorized transportation routes exist, and that have different characters of land uses and community facilities.
- **Children's health and safety**—Potential environmental impacts that specifically affect children (i.e., people under 18 years of age). These environmental impacts include air quality,

- noise impacts on health and learning, EMI, exposure to hazardous materials, and potential safety risks to children.
- **Displacements and relocations**—*Displacements* refers to the movement of people out of their residences, businesses, or nonprofit organizations as a result of acquisition of private property for a transportation or other government project. *Relocations* refers to the relocation of people into new homes, or commercial or industrial properties with assistance and benefits in accordance with federal and California laws as discussed in Section 3.12.2, Laws, Regulations, and Orders.
 - **Economic impacts**—Changes in employment, business productivity, and public funding induced by a project. Public funding can be affected by displacements and relocations of residences and businesses, which in turn can alter school district funding, and property and sales tax revenues. Changes to regional growth can also influence economic impacts, particularly from changes to employment and population growth.

3.12.2 Laws, Regulations, and Orders

This section presents federal and state laws, regulations, and orders applicable to socioeconomics and communities. The Authority would implement the high-speed rail (HSR) project, including the Project Section, in compliance with federal and state regulations. Volume 2, Appendix 2-I provides regional and local plans and policies relevant to socioeconomics and communities considered in the preparation of this analysis.

3.12.2.1 Federal

Procedures for Considering Environmental Impacts (64 Federal Register 28545)

The Federal Railroad Administration (FRA) Procedures for Considering Environmental Impacts Section 14(n)(14) requires an EIS to assess the impacts of the project alternatives on the transportation and general mobility of the elderly and handicapped.

Improving Access to Services for Persons with Limited English Proficiency (USEO 13166)

U.S. Presidential Executive Order (USEO) 13166 requires each federal agency to confirm that recipients of federal financial assistance provide meaningful access to programs and activities to limited English proficiency (LEP) applicants and beneficiaries.

Protection of Children from Environmental Health Risks and Safety Risks (USEO 13045)

USEO 13045 requires federal agencies to minimize environmental health and safety risks to children and to prioritize the identification and assessment of environmental health and safety risks that may have a disproportionate impact on children.

Americans with Disabilities Act (42 U.S.C. §§ 12101–12213)

The Americans with Disabilities Act (ADA) (42 United States Code [U.S.C.] §§ 12101–12213) prohibits discrimination against persons with disability and requires equal opportunity in employment, state and local government services, public accommodations, commercial facilities, and transportation.

Uniform Relocation Assistance and Real Property Acquisition Policies Act (42 U.S.C. § 61)

The Uniform Relocation Assistance and Real Property Acquisition Policies Act (Uniform Act) requires that persons displaced as a result of a federal action or undertaking involving federal funds must be treated fairly, consistently, and equitably. The Uniform Act outlines a process to provide displaced persons fair and just compensation for any acquisition of property taken for the project. The Uniform Act also requires relocation assistance and benefits to displaced persons.

U.S. Environmental Protection Agency School Siting Guidelines

In December 2007, the Energy Independence and Security Act was enacted by Congress and included a requirement for the U.S. Environmental Protection Agency (USEPA) to develop guidelines for the siting of school facilities with the following considerations: (1) special

vulnerabilities of children to hazardous substances or pollution exposures in any case in which the potential for contamination at a potential school site exists; (2) modes of transportation available to students and staff; (3) efficient use of energy; and (4) potential use of a school as the site of an emergency shelter (USEPA 2011). These guidelines are intended to assist local school districts and community members with understanding environmental factors in making school siting decisions. Though state agencies, such as the Authority, are not subject to the local plans, regulations, and requirements, the Authority may choose to consider factors in the USEPA guidelines when assessing the mitigation measures developed to minimize impacts on existing or planned schools adjacent to the HSR project.

3.12.2.2 State

California Relocation Act (California Government Code § 7260 et seq.)

In parallel with the federal law, the California Relocation Act requires state and local governments to provide relocation assistance and benefits to displaced persons as a result of projects undertaken by state or local governments that do not involve federal funds. However, because the project would receive federal funding, the Uniform Act takes precedence.

California High-Speed Rail Authority Title VI Plan

In March 2012, the Authority adopted a policy and plan for California HSR System compliance with Title VI of the Civil Rights Act of 1964 and related statutes (Title VI). The policy states:

- The Authority is committed to making sure that no person in the state of California is excluded from participation in, nor denied the benefits of, its programs, activities, and services on the basis of race, color, national origin, age, sex, or disability as afforded by Title VI.
- The Authority, as a federal grant recipient, is required by FRA to conform to Title VI. The Authority's sub-recipients and contractors are required to prevent discrimination and implement nondiscrimination in all of their programs, activities, and services.
- As permitted and authorized by Title VI, the Authority will administer a Title VI Plan in accordance with the spirit and intent of the nondiscrimination laws and regulations.

The Title VI Plan includes a commitment to inclusive public involvement of all persons affected by the HSR project (Authority 2012a).

California High-Speed Rail Authority Limited English Proficiency Policy and Plan

In May 2012, the Authority adopted a policy and plan for the California HSR System to comply with the requirements of USEO 13166. The policy states:

It is the policy of the Authority to communicate effectively and provide meaningful access to LEP individuals to all the Authority's programs, services, and activities. The Authority will provide free language assistance services to LEP individuals encountered or whenever an LEP individual requests language assistance services.

The Authority will treat LEP individuals with dignity and respect. Language assistance will be provided through a variety of methods, including staff interpreters, translation and interpreter service contracts, and formal arrangements with local organizations providing interpretation or translation services or telephonic interpreter services.

The LEP Policy and Plan supplements the Title VI Plan (Limited English Proficiency Plan, Resolution 12-15) (Authority 2012b).

3.12.2.3 Regional and Local

County and community plans, including general plans, downtown master plans, community plans, and specific plans, address socioeconomics and communities. Policies and regulations include

guidelines for community design, housing, transportation and circulation, economic development, and land use. Volume 2, Appendix 2-I lists the regional and local plans and describes the policies adopted by the cities and counties in the communities and neighborhoods resource study area (RSA) that were identified and considered in the preparation of this analysis. Volume 2, Appendix 2-J discusses consistencies and inconsistencies with these regional and local plans and policies.

3.12.3 Consistency with Plans and Laws

As indicated in Section 3.1.5.3, Consistency with Plans and Laws, the California Environmental Quality Act (CEQA) and National Environmental Policy Act (NEPA)² regulations require a discussion of inconsistencies or conflicts between a proposed undertaking and federal, state, regional, or local plans and laws. As such, this Draft EIR/EIS describes inconsistency of the project alternatives with federal, state, regional, and local plans and laws to provide planning context.

A number of federal and state laws and implementing regulations, listed in Section 3.12.2.1, Federal, and Section 3.12.2.2, State, prohibit discrimination and require equal treatment and consideration of the needs of sensitive populations, including children, LEP individuals, disabled individuals, elderly individuals, or racial and ethnic minorities. Several adopted federal and state policies pertain to relocation of individuals and are applicable to this Draft EIR/EIS. A summary of the federal and state requirements considered in this analysis follows:

- Federal and state laws that prohibit discrimination on the basis of race, color, national origin, age, sex, or disability in programs receiving federal assistance. Applicable acts include the ADA, California Government Code Section 65040.12(e), and the Authority's Title VI Policy.
- Federal and state laws and regulations that establish requirements for the treatment of displaced persons as a result of state or federal actions, including the Uniform Act and the California Relocation Assistance Act.
- Federal law that establishes requirements for an assessment of environmental health and safety risks that may disproportionately affect children.

The Authority, as the lead agency proposing to implement the HSR system, is required to comply with all federal and state laws, and regulations, and to secure applicable federal and state permits prior to initiating construction on the selected alternative. Therefore, there would be no inconsistencies between the project alternatives and these federal and state laws and regulations.

The Authority as a state agency is not required to comply with local land use and zoning regulations; however, it has endeavored to design and construct the project so that it is consistent with land use and zoning regulations. For example, the project would reduce impacts on socioeconomics and communities through transportation, noise, and air quality controls; context-sensitive design; and relocation assistance and benefits to displaced residents and businesses. The Authority reviewed a total of 31 plans and 257 goals, objectives, and policies and determined the project alternatives were inconsistent with 11 policies, goals, and objectives from the following regional and local policies and plans:

- **Plan Bay Area 2040 (ABAG and MTC 2017)**—The Plan Bay Area 2040 identifies the vacant and industrial lands in Brisbane between Bayshore Boulevard on the west and U.S. Highway (US) 101 on the east as a Priority Development Area due to its potential for transit-oriented development (TOD), which would include planned mixed-use, residential, and commercial development. Both project alternatives would build a light maintenance facility (LMF) on these lands, which would be inconsistent with the Priority Development Area designation because

² NEPA regulations refer to the regulations issued by the Council on Environmental Quality at 40 Code of Federal Regulations Part 1500.

the planned mixed-use, residential, and commercial development would be replaced with industrial development of the LMF.

- **City of Brisbane General Plan** (City of Brisbane 1994)—Policy 8. Alternatives A and B would displace two industrial businesses and one commercial business in Brisbane, although not the same businesses. These displacements would result in a reduction in the City's tax base under both project alternatives, which would reduce the City's property tax revenues.
- **City of Brisbane General Plan (updated)** (City of Brisbane 2020)—Policy LU.5. The West or East Brisbane LMF would be inconsistent with General Plan designations for planned development in Brisbane Baylands. Alternative A would have the greater impact on planned development (residential prohibited) and Alternative B would have the greater impact on planned development (residential permitted) potential. The reduced development potential under both project alternatives would reduce potential tax revenues to Brisbane in the future.
- **San Bruno General Plan, Housing Element** (City of San Bruno 2015)—Housing Element Goal 1. Residential displacement of seven units in San Bruno would occur under both Alternative A and Alternative B. The project would displace three duplexes and one single-family home east of the alignment and just south of Interstate (I-) 380 near the intersection of Walnut Street and Montgomery Avenue. These displacements would not conserve or improve the existing housing supply, which would lessen the quality and stability of existing neighborhoods.
- **City of Millbrae General Plan, Housing Element** (City of Millbrae 2015)—Goal H2. The project would displace one single-family home under both alternatives in Millbrae. This residence is west of the alignment on Hemlock Avenue. This displacement would not protect and enhance the existing housing supply.
- **City of San Mateo General Plan, Housing Element** (City of San Mateo 2015)—Housing Element Goal 1. Residential displacements would only occur in San Mateo under Alternative B and would displace two single-family residences. These displacements would not conserve or improve the existing housing supply, which would change the physical quality of the neighborhood. However, the construction activities associated with the project would not affect the character of San Mateo's residential neighborhoods to the extent that the sense of community character would be reduced.
- **City of Belmont 2035 General Plan** (City of Belmont 2017a)—Land Use Goal 2.5. In Belmont, Alternative A would displace 10 businesses, most of them auto-related businesses along Old County Road. Under Alternative B there would be 65 displaced businesses from construction of the passing track through Belmont. These displaced businesses include the same auto-related businesses displaced by Alternative A, along with others, such as warehouses, outbuildings, home renovation stores, print shops, offices, restaurants, and a dance studio. These displacements would not enhance the Belmont Village Priority Development Area and would reduce the identity for the area as Belmont's vibrant town center.
- **Belmont Village Specific Plan** (City of Belmont 2017b)—Policy 2.1-7. In Belmont, the project would displace 10 commercial and industrial businesses under Alternative A, and 65 commercial and industrial businesses under Alternative B, which could decrease the level of community services available to both residents and local businesses. These displacements would not enhance neighborhood or community services for residential development.
- **Santa Clara County General Plan, Housing Element** (County of Santa Clara 2014)—Policy HG 21. The project would result in the displacement of one single-family residence under both alternatives within Palo Alto. These displacements would not conserve or rehabilitate the existing housing supply. However, aside from the one home that would be displaced, the project would otherwise maintain the existing housing supply in Santa Clara County.
- **City of San Jose Housing Element** (City of San Jose 2015)—Policy H-2.3 and H-3.4. In San Jose, the project would require the acquisition of land within the project footprint,

resulting in the demolition of some existing residences. Removal of these residences would not conserve or rehabilitate the existing housing supply. However, aside from the 4 homes in San Jose that would be displaced under Alternative A, the 23 homes that would be displaced under Alternative B (Viaduct to I-880), and the 18 homes that would be displaced under Alternative B (Viaduct to Scott Boulevard), the project would otherwise maintain the existing housing supply in San Jose.

Volume 2, Appendix 2-J discusses additional details and reconciliations. As a state agency, the Authority is not required to be consistent with these policies. Therefore, while inconsistencies would be minimized through the reconciliations described in Appendix 2-J, they would not be entirely reconciled. Although the project would be inconsistent with these specific policies, the project would provide relocation assistance, maintain access to community services during construction, minimize disruption to individuals and community cohesion related to relocation, and minimize noise, vibration, and visual impacts through project features. The project would also provide benefits, such as improved regional access, improved air quality resulting from vehicle trip reduction, and sales tax revenues from construction spending.

3.12.4 Methods for Evaluating Impacts

NEPA and CEQA require evaluation of impacts on socioeconomics and communities. The following sections define the RSAs and summarize the methods used to analyze the socioeconomic conditions and communities. Additional details on these methodologies can be found in the Community Impact Assessments (Authority 2019a, 2019b), the Draft Relocation Impact Reports (Authority 2019c, 2019d), and Volume 2, Appendix 3.17-A. As summarized in Section 3.12.1, Introduction, 10 other sections and one chapter of the Draft EIR/EIS describe methods used to analyze impacts on resources that are relevant to socioeconomics and communities.

3.12.4.1 Definition of Resource Study Areas

As defined in Section 3.1 of this Draft EIR/EIS, RSAs are the geographic boundaries in which the Authority made environmental investigations specific to each resource topic. There are four RSAs for socioeconomics and communities—communities and neighborhoods, children’s health and safety, property displacements and relocation, and economic impacts. Table 3.12-1 shows these four RSAs, and includes a general definition and boundary definition for each RSA.

Table 3.12-1 Definition of Socioeconomics and Communities Resource Study Areas

Type	General Definition
Communities and Neighborhoods	
Direct—construction and operations	<p>The RSA for direct impacts on communities and neighborhoods is defined as the alternatives’ project footprints.</p> <p>The direct impact area needed to build, operate, and maintain permanent HSR features, and the areas within which impacts on community cohesion and connectivity would result from the disruption or division of established communities through changes in transportation, circulation, and access, including safety hazards, air quality, noise and vibration, aesthetics and visual quality, and displacements and relocations.</p>

Type	General Definition
Indirect—construction and operations	<p>The RSA for indirect impacts on communities and neighborhoods is defined as areas within 0.5 mile of the track and within a 0.5-mile radius around stations and the LMF measured from the outside edge of the project footprint and affected community and public facilities.</p> <p>The indirect impact area within which impacts on community cohesion and connectivity would result from the disruption or division of established communities through changes in transportation, circulation, and access, including safety hazards, air quality, noise and vibration, aesthetics and visual quality, and displacements and relocations.</p>
Children’s Health and Safety	
Direct and indirect—construction and operations	<p>The RSA for direct and indirect impacts on children’s health and safety is defined as areas within 1,000 feet of the track centerline and within a 1,000-foot radius around all stations and the LMF measured from the outside edge of the project footprint and affected community and public facilities.</p> <p>The direct impact area needed to build, operate, and maintain permanent HSR features; the indirect area within which impacts on children’s health and safety would result; and the areas within which impacts on children’s health and safety would result through changes in transportation, circulation, and access, including safety hazards, air quality, noise and vibration, aesthetics and visual quality, displacements and relocations, and use of hazardous materials and wastes.</p>
Property Displacements and Relocations	
Property displacements	<p>The RSA for property displacements comprises privately held residential, commercial, and industrial properties and community and public facilities that fall within the project footprint.</p> <p>Properties and facilities, including residential properties, commercial and industrial facilities (businesses), and community and public facilities, that would be displaced as a result of project construction.</p>
Relocations	<p>Under Alternative A, the RSA for relocations includes the cities of Brisbane, San Bruno, Millbrae, San Mateo, Belmont, and Palo Alto. Under Alternative B, the RSA for relocations includes the cities of Brisbane, San Bruno, Millbrae, San Mateo, Belmont, San Carlos, and Palo Alto.</p> <p>Communities and unincorporated areas where properties and facilities (including residential properties, commercial and industrial facilities [businesses], and community and public facilities) would be relocated as a result of displacements from project construction. Also, nearby cities and communities with similar characteristics where displaced residents and businesses could relocate.</p>

Type	General Definition
Economic Impacts	
Overall economic impacts	The RSA for overall economic impacts is defined as the three-county region of San Francisco, San Mateo, and Santa Clara Counties. The area within which changes related to the economy, including changes in employment, population growth, agricultural production, property taxes, and sales tax revenues, would result from project construction and operations.
School district funding	The RSA for school district funding is defined as the boundaries of all school districts traversed by the project footprint. School districts for which funding would be affected by student relocations as a result of residential displacements, changes in property tax revenues, and changes in bus transportation costs during project construction.

HSR = high-speed rail
 LMF = light maintenance facility
 RSA = resource study area

3.12.4.2 Impact Avoidance and Minimization Features

IAMFs are project features that are considered to be part of the project and are included as applicable in each of the alternatives for purposes of the environmental impact analysis. The full text of the IAMFs that are applicable to the project is provided in Volume 2, Appendix 2-E. The following IAMFs are applicable to the socioeconomics and communities analysis:

- SOCIO-IAMF#1: Construction Management Plan
- SOCIO-IAMF#2: Compliance with Uniform Relocation Assistance and Real Property Acquisition Policies Act
- SOCIO-IAMF#3: Relocation Mitigation Plan
- SOCIO-IAMF#4: Implement Measures to Reduce Disruption to Schools
- TR-IAMF#1: Protection of Public Roadways during Construction
- TR-IAMF#2: Construction Transportation Plan
- TR-IAMF#3: Off-Street Parking for Construction-Related Vehicles
- TR-IAMF#4: Maintenance of Pedestrian Access
- TR-IAMF#5: Maintenance of Bicycle Access
- TR-IAMF#6: Restriction on Construction Hours
- TR-IAMF#7: Construction Truck Routes
- TR-IAMF#8: Construction during Special Events
- TR-IAMF#9: Protection of Freight and Passenger Rail during Construction
- TR-IAMF#11: Maintenance of Transit Access
- TR-IAMF#12: Pedestrian and Bicycle Safety
- AQ-IAMF#1: Fugitive Dust Emissions
- AQ-IAMF#2: Selection of Coatings
- AQ-IAMF#3: Renewable Diesel

- AQ-IAMF#4: Reduce Criteria Exhaust Emissions from Construction Equipment
- AQ-IAMF#5: Reduce Criteria Exhaust Emissions from On-Road Construction Equipment
- SS-IAMF#1: Construction Safety Transportation Management Plan
- SS-IAMF#2: Safety and Security Management Plan
- NV-IAMF#1: Noise and Vibration
- HMW-IAMF#1: Property Acquisition Phase 1 and Phase 2 Environmental Site Assessments
- HMW-IAMF#4: Undocumented Contamination
- HMW-IAMF#5: Demolition Plans
- HMW-IAMF#6: Spill Prevention
- HMW-IAMF#7: Transport of Materials
- HMW-IAMF#8: Permit Conditions
- HMW-IAMF#9: Environmental Management System
- HMW-IAMF#10: Hazardous Materials Plans

This environmental impact analysis considers these IAMFs as part of the project design. Within Section 3.12.6, Environmental Consequences, each impact narrative describes how these project features are applicable and, where appropriate, effective at avoiding or minimizing potential impacts to less than significant under CEQA.

3.12.4.3 Methods for Impact Analysis

This section describes the sources and methods the Authority used to analyze potential project impacts on communities, residents (including children), businesses, community facilities, and the local economy. These methods apply to both NEPA and CEQA unless otherwise indicated. Refer to Section 3.1.5.4, Methods for Evaluating Impacts, for a description of the general framework for evaluating impacts under NEPA and CEQA.

The methodology used to evaluate socioeconomic and community impacts is generally based on the California Department of Transportation (Caltrans) *Standard Environmental Reference Environmental Handbook, Volume 4: Community Impacts Assessment* (Caltrans 2011). The Authority evaluated construction and operations impacts, including direct and indirect, or secondary, impacts. The impacts analysis considered IAMFs that are incorporated into the project and evaluated in Volume 2, Appendix 2-E, as well as design features and best management practices.

The Authority used information relevant to the project from published maps, land use plans, and aerial reconnaissance using Google Earth pertaining to communities within and adjacent to the project to describe the affected environment and evaluate the potential environmental impacts of the project on socioeconomics and communities. The following sections discuss topic-specific evaluation methods for communities, children's health and safety, property displacements and relocations, and economic impacts. Much of the data were compiled into a geographic information system (GIS) database that the Authority used to analyze potential impacts.

Communities and Neighborhoods

Caltrans defines *community* as a "population rooted in one place, where the daily life of each member involves contact with and dependence on other members" and *community cohesion* as "the degree to which residents have a 'sense of belonging' to their neighborhood, a level of commitment of the residents to the community, or a strong attachment to neighbors, groups, and institutions, usually as a result of continued association over time. Cohesion refers to the degree of interaction among the individuals, groups, and institutions that make up the community" (Caltrans 2011). Community cohesion considers the access and linkages among community

facilities and local businesses that provide opportunities for residents to gather and interact. Community cohesion impacts would be associated with the potential for the project alternatives to create visual and functional barriers to community interactions that would disrupt or physically divide the community. Some of the basis for the discussion of these impacts relates to other sections of this EIR/EIS, such as impacts in Sections 3.2, 3.3, 3.4, and 3.15. Impacts on these resources do not necessarily constitute impacts on community cohesion; rather, these impacts are considered to assist in making a determination whether the effect on the resource also would divide or disrupt community interactions.

In addition to considering impacts described in other resource technical reports, the Authority collected and reviewed community data for the three-county region of San Francisco, San Mateo, and Santa Clara Counties, the cities and communities of Brisbane, South San Francisco, San Bruno, Millbrae, Burlingame, San Mateo, Belmont, San Carlos, Redwood City, North Fair Oaks census-designated place (CDP), Atherton, Menlo Park, Palo Alto, Mountain View, Sunnyvale, Santa Clara, and San Jose. The Authority used a variety of data sources to quantify current conditions and trends related to population and demographics, income, and housing. Information and data were obtained from the 2000 U.S. Census; the 2010–2014 U.S. Census Bureau American Community Survey (ACS), the California Department of Finance, the Geographic Names Information System, and county and city planning agencies. ACS data is collected annually and were used because the U.S. Census is the most reliable data source. The 2010–2014 ACS presents 5-year averages, which is more accurate than the annual data. This community data is presented from north to south along the Project Section, and allows for an examination of community characteristics and comparison of communities within the communities and neighborhoods RSA. Information and data related to population age distribution, ethnicity, linguistic isolation, household characteristics, disability status, and household income are included in Tables 5-3 through 5-19 of the San Francisco to San Jose Community Impact Assessment (Authority 2019a).

The Authority performed the following quantitative and qualitative analyses to evaluate potential impacts on communities:

- Conducted an intensive review of aerial photographs and GIS data layers showing the spatial relationship between the project alternatives and existing community resources. The Authority then assessed whether implementation of the project would result in temporary or permanent barriers that could isolate portions of a community, separate residents from important community facilities or services, or alter access to such resources.
- Evaluated the potential for displacements and relocations of households, businesses, and community facilities or the potential to alter the physical shape, character, or function of communities or neighborhoods.
- Examined indirect impacts on communities and neighborhoods from temporary and permanent transportation, noise and vibration, and visual quality impacts.
- Reviewed summary reports of outreach efforts with communities and regional and local stakeholders. Public involvement and outreach—informational materials, including fact sheets; informational and scoping meetings, town hall meetings, public and agency scoping meetings, meetings with individuals and groups, presentations; and briefings—have been held since December 2008. Public comments from outreach conducted during scoping covered the following broad range of topics (Authority and FRA 2016):
 - Protection of the environment
 - Economic development
 - Electrification
 - Traffic impacts and grade separations
 - Safety concerns
 - Quality of life, safety, and noise impacts
 - Health impacts and pollution
 - Property values and acquisition

- Project costs and affordability
- Station planning and passing tracks

Because construction and operations impacts are generally localized in specific communities, the Authority evaluated potential impacts associated with the project at the community level. The Authority assessed benefits of the project on a regional scale because benefits would accrue to the entire region.

Children’s Health and Safety

The Authority determined the impacts on children’s health and safety from construction and operation of the project alternatives by reviewing the construction impacts associated with other sections of this Draft EIR/EIS (e.g., Sections 3.2, 3.3, 3.4, 3.5, 3.10, and 3.11). The Authority then determined whether there would be disproportionate risks to children’s health and safety associated with these impacts.

Property Displacements and Relocations

This section identifies the residential, commercial and industrial businesses, and community and public facility displacements and relocations expected under both of the project alternatives. This section also evaluates the likely availability of suitable replacement properties. The term *displacement* means property acquisitions that result in the acquisition of land that may contain a structure, while the term *relocation* denotes the need to find new homes for residents or new locations for businesses that occupy affected structures. The Authority evaluated the potential for relocations of households, students, businesses, and community facilities or the potential to alter the physical shape, character, or function of communities or neighborhoods, including the perceived quality of life in the neighborhoods.

Partial acquisitions that would not result in displacement or relocation are not included in this analysis because they would consist of minor sliver acquisitions of parcels that are currently adjacent to the Caltrain corridor, which would not substantially affect communities and neighborhoods. Refer to Section 3.13 for additional information on temporary and permanent changes to land uses along the track alignment and at stations and the LMF.

The methodology for the assessment of property displacements and relocation impacts is explained in detail in the Draft Relocation Impact Reports (Authority 2019c, 2019d). The methodology includes an intensive review of GIS data, County Assessors’ parcel maps, and other public information presenting the spatial relationship between the project alternatives, existing parcel boundaries, and structures on affected parcels. The Community Impact Assessments (Authority 2019a, 2019b) assess how these displacements and relocations would disrupt communities and affect community cohesion.

Economic Impacts

The Authority evaluated economic impacts of the project by assessing changes in employment, school district funding, property tax revenues, and sales tax revenues. The following sections describe the methodologies used to evaluate the impacts of the project.

Employment

The Authority evaluated impacts of the project on employment by assessing changes in the demand for workers related to construction and operations. Construction and operations impacts on employment were calculated using the Bureau of Economic Analysis Regional Input-Output Modeling System (RIMS) II model. The RIMS II model uses construction dollars to estimate total construction jobs over the entire duration of the construction period. The regional growth assessment for project operations models direct, indirect, and induced employment impacts of project construction, operations, and maintenance. Detailed methodology may be found in Section 3.17 and Volume 2, Appendix 3.17-A.

Changes in School District Funding

This section identifies the methods for evaluating impacts related to changes in school district funding from either student relocations or changes in property tax revenues from residential displacement as well as potential increases in school bus transportation costs.

Student Relocations

The Authority assessed financial impacts on school districts by evaluating the potential of project construction to relocate a substantial number of students outside of affected school districts, which would reduce district funding. To determine the potential impacts, areas with residential displacements were compared to the total number of housing units displaced in a school district and to the number of available replacement housing units within the district to determine if a substantial number of families with enrolled students may relocate outside of their current school district. The number of affected students in each school district was estimated by first multiplying the percentage of school-age children (K–12th grade) in each county by the average household size in the corresponding county (U.S. Census Bureau ACS 2010–2014a, 2010–2014c) to obtain the average number of school-aged children per household. The number of enrolled students in each school district was obtained from the California Department of Education for the 2015–2016 school year (California Department of Education 2018). School district funding impacts may occur in areas where a large number of displaced households with children would need to relocate to homes in a new school district.

School Bus Transportation Costs

The locations of permanent roadway closures and the realignment of roadways were evaluated in conjunction with the project alternatives' footprints to assess potential impacts on school district bus transportation routes and costs. This information was used to determine if additional out-of-direction travel would be required as a result of the project.

School District Property Tax Revenues

The Authority calculated the potential loss of property tax revenue designated for school districts as a result of property acquisition for project construction. Property tax losses were based on the assessed value of the properties to be acquired and property tax rates, derived from the County of San Mateo, Treasurer-Tax Collector, and the Santa Clara County, Office of the Assessor (County of San Mateo, Treasurer-Tax Collector 2018; County of Santa Clara, Office of the Assessor 2016). The City and County of San Francisco was not included because there would be no property acquisitions within their jurisdictions, which would avoid the loss of property tax revenue.

Property Tax Revenue Changes

The Authority quantitatively estimated potential impacts on property tax revenues collected by county jurisdictions based on permanent property acquisitions. These potential impacts were estimated by calculating the reduction in property tax revenue for county budgets that would result from the permanent removal of properties from the tax rolls. The analysis derived the value of property acquisitions and property tax rates from the County of San Mateo, Treasurer-Tax Collector, and the Santa Clara County, Office of the Assessor (County of San Mateo, Treasurer-Tax Collector 2018; County of Santa Clara, Office of the Assessor 2016). The City and County of San Francisco is not included because there would be no property acquisitions within their jurisdictions, which would avoid the loss of property tax revenue. The property tax rates for the County general fund was applied to the total value of property acquisitions for each county. The Authority then compared these property tax revenues to each County's fiscal year (FY) 2014/2015 general fund property tax revenues.

Sales Tax Revenue Changes

To assess the short-term changes in sales tax revenues during construction, the Authority evaluated whether temporary changes in sales tax revenues from the acquisition of commercial and industrial properties would be substantial as these businesses relocate and re-establish themselves. Sales tax revenues during construction were estimated using the sales tax rates specific to each county and the estimated local expenditures on equipment and materials for each

year of construction. The long-term assessment of sales tax revenues examined the ongoing sales tax revenues that could result from the purchase of goods and services associated with the continued operations and maintenance (O&M) of the project and from new economic development around station sites. The Authority also examined potential sales tax increases from HSR workers and riders at the stations, LMF, and around the station areas.

3.12.4.4 Method for Evaluating Impacts under NEPA

Council on Environmental Quality NEPA regulations (40 Code of Federal Regulations Parts 1500–1508) provide the basis for evaluating project impacts (as described in Section 3.1.5.4). As described in Section 1508.27 of these regulations, the criteria of context, intensity, and duration are considered together when determining the severity of the change introduced by the project.

- **Context**—For this analysis, the *context* would include existing land uses, patterns, and densities within the RSAs, the proximity and sensitivity of the communities and neighborhoods, including children, along the project alignment to construction and operation of the HSR, and the existing housing and business characteristics and economic setting within the cities and communities in the RSAs.
- **Intensity**—For this analysis, *intensity* is determined by assessing the degree to which the project would physically divide established neighborhoods, relocate key businesses, industry, and community and public facilities, relocate large numbers of residences, affect the overall quality of life in a community, affect children’s health and safety, reduce community cohesion, or affect the economy of the region.
- **Duration**—The analysis considers the *duration* of the effect, whether intermittent, temporary, or permanent.

This analysis covers project impacts on the economy, including impacts on employment, school district funding, and property and sales tax revenue. In accordance with USEO 13045, Protection of Children from Environmental Health and Safety Risks, the NEPA analysis also provides an assessment of potential environmental health and safety risks that may have a disproportionate impact on children.

3.12.4.5 Method for Determining Significance under CEQA

The Authority is using the following thresholds to determine if a significant impact on socioeconomics and communities would occur as a result of the project alternatives. For this analysis, the project would result in a significant impact under CEQA on socioeconomics and communities if it would:

- Physically divide an established community.
- Displace substantial amounts of existing housing, necessitating the construction of replacement housing elsewhere.
- Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere.
- Result in substantial physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services, including fire protection, police protection, schools, parks, and other public facilities.

In accordance with Section 15064(e) of the CEQA Guidelines, “economic and social changes resulting from a project shall not be treated as significant effects on the environment.” Therefore, no CEQA significance criteria are provided for economic impacts. Also, no CEQA significance criteria exist that separately address impacts on children; therefore, this section does not provide CEQA significance conclusions related to specific impacts on children. However, effects on children’s health and safety are addressed in this section, as well as in other sections of the Draft EIR/EIS where children are considered sensitive receptors, such as Sections 3.3, 3.4, and 3.10.

3.12.5 Affected Environment

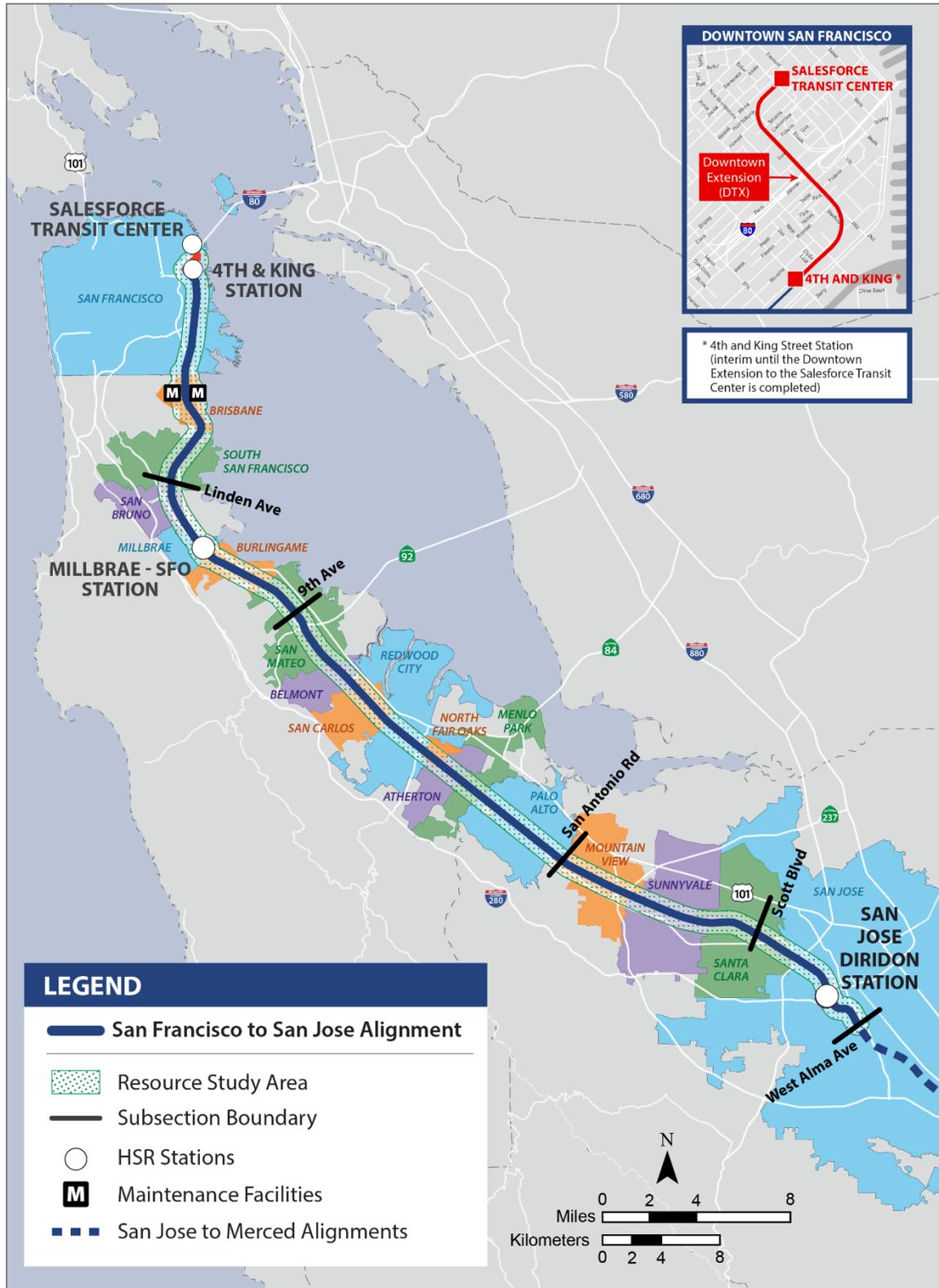
This section describes the affected environment for socioeconomics and communities within the region and the communities within the RSAs from north to south and by subsection, where applicable. This information provides the context for the environmental analysis and the evaluation of impacts.

3.12.5.1 Communities and Neighborhoods

This section provides an overview of the community setting and land uses within the region and within the cities and communities of the communities and neighborhoods RSA. It focuses on the cities and communities that have greater impacts under the project alternatives. The Project Section would travel in an existing and historic rail corridor, largely within the Caltrain right-of-way from San Francisco to San Jose. As the rail alignment and stations were built, towns developed along the corridor that later became the present-day cities on the San Francisco Peninsula. Immediately adjacent to the station areas, new development was influenced by activities associated with the railroad stations, including the creation of active downtown areas and employment hubs. Significant suburban expansion on the San Francisco Peninsula during the post-World War II era resulted in the current blend of residential, commercial, mixed-use, and industrial development that tightly hugs the existing rail corridor.

Cities and Communities in the Resource Study Area by Subsection

Several cities and communities are located in the communities and neighborhoods RSA, as illustrated on Figure 3.12-1 and summarized by subsection in Table 3.12-2. Descriptions of the neighborhoods in each subsection are presented in this section, and additional detail may be found in the Community Impact Assessments (Authority 2019a, 2019b).



MAY 2019

Figure 3.12-1 Communities in the Resource Study Area

Table 3.12-2 Cities/Communities by Subsection

Subsection	City/Community in the Communities and Neighborhoods RSA
San Francisco to South San Francisco	San Francisco, Brisbane, South San Francisco
San Bruno to San Mateo	San Bruno, Millbrae, Burlingame, San Mateo
San Mateo to Palo Alto	San Mateo, Belmont, San Carlos, Redwood City, North Fair Oaks CDP, Atherton, Menlo Park, Palo Alto
Mountain View to Santa Clara	Palo Alto, Mountain View, Sunnyvale, Santa Clara
San Jose Diridon Station Approach	Santa Clara, San Jose

CDP = census-designated place
 RSA = resource study area

Community and public facilities include educational facilities, religious institutions, parks and recreation facilities, government facilities (e.g., courthouses, prisons, city halls, post offices, and libraries), fire stations, police stations, hospitals, social services (e.g., community centers, senior facilities, and food banks), and cultural centers (e.g., entertainment venues and museums). The locations of these services and facilities for each subsection by project alternative are illustrated on Figure 3.12-2 through Figure 3.12-6. Table 3.12-3 shows the total number of community and public facilities within 0.5 mile of the project alternatives (see Appendix A of the Community Impact Assessments [Authority 2019a, 2019b] for a list of all community and public facilities).

Table 3.12-3 Community and Public Facilities within 0.5 Mile of the Project Alternatives

Subsection	Educational Facilities ¹	Religious	Government	Public Safety/Health ²	Social Services	Cultural	Totals
San Francisco to South San Francisco	63	46	17	21	9	2	158
San Bruno to San Mateo	63	58	15	63	3	3	205
San Mateo to Palo Alto	121	68	24	94	5	3	315
Mountain View to Santa Clara	45	34	4	21	0	0	104
San Jose Diridon Station Approach	23	33	22	15	1	14	108
Total for Alternatives A and B	315	239	82	214	18	22	890

Sources: Authority 2019a, 2019b

¹ Includes schools and childcare facilities (e.g., preschools, daycare centers)

² Includes emergency services/hospitals, elder care facilities, and rehabilitation centers and shelters

There are 890 community and public facilities within 0.5 mile of both project alternatives. Educational facilities and religious facilities are the most prevalent community facilities along the project alignment. The greatest number of those facilities are in the San Mateo to Palo Alto Subsection.

Schools and childcare facilities are present in all subsections. The San Mateo to Palo Alto Subsection has the most schools and childcare facilities, followed by the San Francisco to South San Francisco Subsection. Most of the churches and other religious institutions are also in the San Mateo to Palo Alto Subsection, followed by the San Bruno to San Mateo Subsection.

Parks and recreational facilities in the RSA include neighborhood and regional parks, trails, gardens, sports and recreation centers, and other open-space areas. Due to the urban and suburban nature of the corridor, parks occur throughout the RSA. The type and character of the parks, recreational facilities, open spaces, and school district play areas in the RSA vary with the landscape, resulting in a diverse range of resources and associated user experiences.

Each city and community in the RSA also has designated walking routes to schools. These paths consist of designated pedestrian routes that children and parents can use to walk to their local schools. Because school district boundaries can cross the existing Caltrain right-of-way, some of these school walking routes could also cross the future HSR right-of-way.

San Francisco to South San Francisco Subsection

The approximately 10-mile-long San Francisco to South San Francisco Subsection extends from the 4th and King Street Station in San Francisco, the largest city in the RSA, to Linden Avenue, passing through San Francisco, Brisbane, and South San Francisco along the existing Caltrain corridor. Figures 3.13-1 through 3.13-3 in Section 3.13 illustrate the existing land uses in the station area and LMF, and the figures in Volume 2, Appendix 3.13-A, General Plan Land Use Maps—San Francisco to San Jose Project Section Resource Study Area, illustrate the land uses per the General Plan land use designations in each city. Buildings around the 4th and King Street Station are primarily three- to four-story buildings to the west, with much taller buildings (ranging from 6 to 17 stories) north and east of the station. From the 4th and King Street Station, the project alignment would travel along the western edge of the Mission Bay neighborhood, which is primarily a mix of commercial, residential, and mixed uses combined with some industrial areas. The project alignment would continue southward adjacent to the Dogpatch neighborhood, to industrial land uses in the Bayview/Hunters Point neighborhood, and through the Visitacion Valley neighborhood.

South of San Francisco, the alignment would travel through Brisbane and South San Francisco, which range in size from 4,400 people in Brisbane to 65,500 people in South San Francisco. Brisbane is a small Bay-side community, the smallest city in the RSA, and is composed of the light industrial and vacant/undeveloped lands of Brisbane Baylands, office parks and commercial areas, and upland residential development. Light industrial facilities and warehouses adjacent to the project alignment include San Francisco Recology, two lumber yards, a soil processing facility, and the San Francisco Products Pipeline Kinder Morgan Brisbane Terminal, which is a petroleum storage and distribution terminal. The buildings in Brisbane adjacent to the existing Caltrain right-of-way are generally single-story industrial facilities. South San Francisco, known as “The Industrial City,” has a blend of commercial and mixed residential and commercial areas.

Important community and public facilities in this subsection include numerous fire departments, police stations, post offices and libraries, the University of California, San Francisco Medical Center at Mission Bay, San Francisco County Jail, Museum of Craft and Design, Society of California Pioneers, Brisbane Community Center, San Francisco Housing Authority, U.S. Department of Housing & Urban Development, and the Southeast Community Facility. The RSA for this subsection includes 63 schools/childcare facilities, 46 places of worship, 17 government facilities, 21 public safety/health facilities, 2 cultural facilities, and 9 social services facilities. Figure 3.12-2 illustrates the various community and public facilities in the San Francisco to South San Francisco Subsection.

Bicycle facilities within the RSA are primarily along King Street, Townsend Street, and Fifth Street near the 4th and King Street Station. Class II bike lanes are located along the section of King Street between Third Street and the Embarcadero and along Townsend Street between the Embarcadero and Eighth Street. In addition, Class III bike routes are located along Fifth Street between Townsend and Market Streets and Third Street south of Townsend Street. Bicycle racks and lockers are provided at the 4th and King Street Station. Figure 3.2-9 in Section 3.2 illustrates the existing bicycle facilities in the station area. There are also many bicycle facilities in the RSA that are outside the station areas, such as the Bay Trail.

Sidewalks are provided along both sides of the streets surrounding the 4th and King Street Station. Intersections adjacent to the station—Fourth Street/King Street and Fourth Street/Townsend—are signalized with crosswalks on all sides. The signalized intersection of Fifth Street/King Street has a crosswalk across Fifth Street and across the east side of the intersection. Sidewalks are also located on Geneva Avenue and portions of the west side of Bayshore Boulevard. Only portions of Tunnel Avenue have sidewalks, notably along the frontage of the Bayshore Caltrain Station and along the east side of the street in the Little Hollywood residential neighborhood. A pedestrian overpass, over the Caltrain right-of-way, is located at the Bayshore Caltrain Station.

San Bruno to San Mateo Subsection

The 8-mile-long San Bruno to San Mateo Subsection extends from Linden Avenue to Ninth Avenue, traversing the cities of San Bruno, Millbrae, and Burlingame. Figures 3.13-1 through 3.13-3 illustrate the existing land uses in the station area, and the figures in Volume 2, Appendix 3.13-A illustrate the land uses per the General Plan land use designations in each city. San Bruno, adjacent to the San Francisco International Airport (SFO), consists primarily of low-density residential areas with some land designated as parks and open space. The Millbrae Intermodal Station connects Bay Area Rapid Transit (BART), Caltrain, and San Mateo County Transit District (SamTrans) and provides a connector to SFO. A mix of commercial and low- to medium-density residential areas are around the station and continue adjacent to the corridor through Burlingame. Buildings immediately surrounding the station are generally one-story buildings. However, along El Camino Real, there are a handful of taller, four- to five-story mixed-use buildings. Burlingame contains a diverse spread of industries including automobile retailers, high-technology firms, and biotechnology companies. South of Burlingame is San Mateo, with one of the most prominent and developed suburban downtowns in the San Francisco Bay Area (Bay Area).

Important community and public facilities in this subsection include numerous fire departments, police stations, post offices and libraries, Burlingame Museum of PEZ Memorabilia, Peninsula Museum of Art, Millbrae Museum, U.S. Social Security Administration, and Burlingame Parks & Recreation Department. The RSA for this subsection includes 63 schools/childcare facilities, 58 places of worship, 15 government facilities, 63 public safety/health facilities, 3 cultural facilities, and 3 social services facilities. Figure 3.12-3 illustrates the various community and public facilities in the San Bruno to San Mateo Subsection.

Around the existing Millbrae Station, there are limited existing bicycle facilities. El Camino Real is a Class III facility north of Millbrae Avenue, with shared lane markings (called *sharrows*) in its outside lanes. California Drive is also a Class III facility marked with sharrows where it extends south from the Millbrae Station. Despite the markings on El Camino Real, the wide, high-volume, high-speed roadway is a challenging environment for bicyclists. El Camino Real has no bicycle facilities south of Millbrae Avenue, where California Drive serves as another option for bicyclists. Existing bicycle facilities in the Millbrae Station area are illustrated on Figure 3.2-10 in Section 3.2. There are also many bicycle facilities in the RSA but outside the station areas, such as the Bay Trail.

The Millbrae Station and surrounding area is well positioned for pedestrian activity, given its close distance to residential neighborhoods, commercial areas, schools, local parks, and the Bay Trail. Pedestrians are well served within the station area; sidewalks connecting the parking facilities are available. However, the existing lack of direct pedestrian connections, presence of high-volume and high-speed roadways, and poor quality of sidewalks and crossing facilities in and around the station area present major challenges to walking as a mode of station access. Sidewalks are provided on both sides of El Camino Real, Millbrae Avenue, and Rollins Avenue. Adjacent to the station, signalized crosswalks are available at the intersections of Millbrae Avenue/El Camino Real and Millbrae Avenue/Rollins Avenue. Signalized crosswalks are also available at other intersections along El Camino Real.

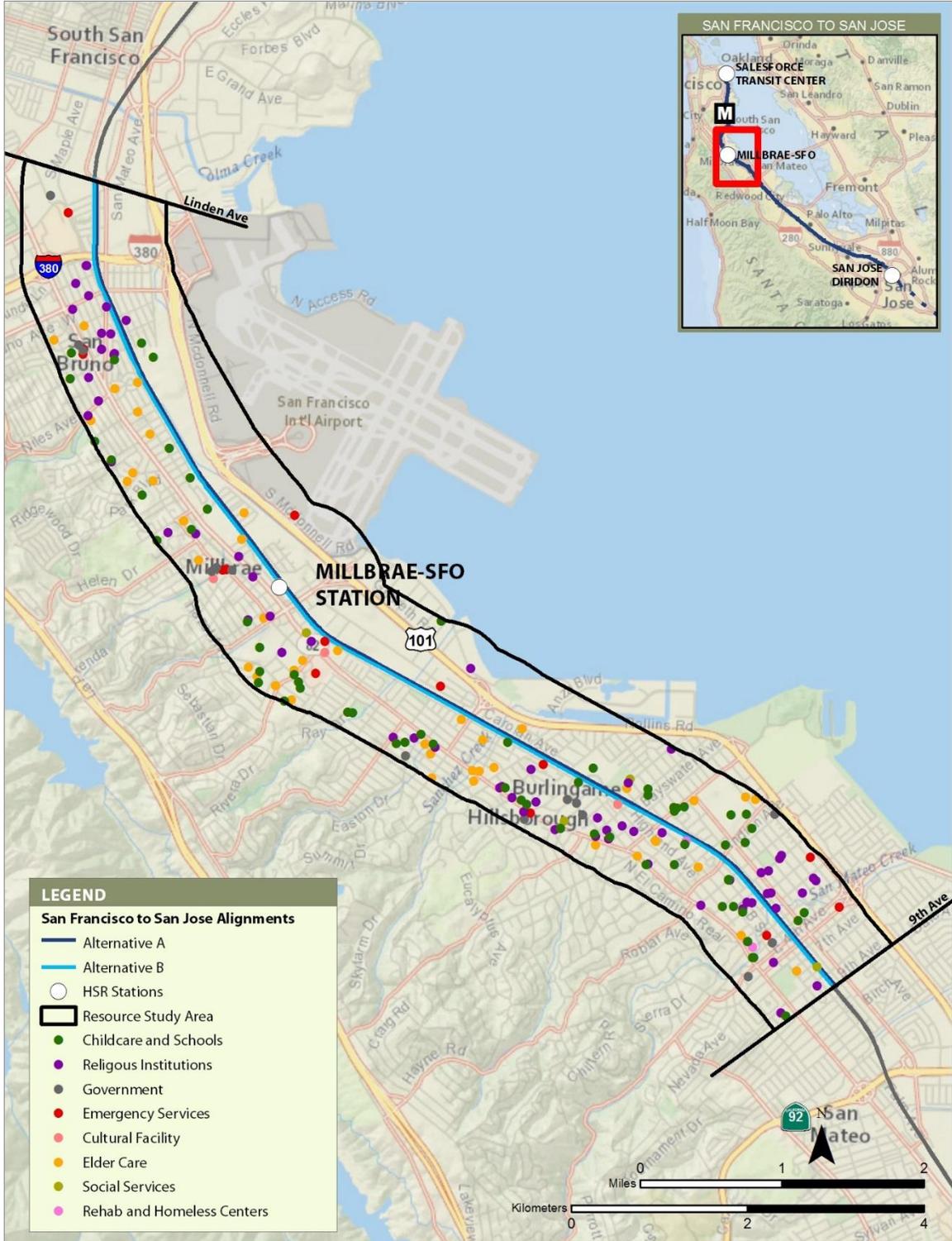


Figure 3.12-3 Community Facilities in the San Bruno to San Mateo Subsection

Pedestrian underpasses or overpasses crossing the Caltrain right-of-way are located at the San Bruno, Millbrae, and San Mateo Caltrain Stations. A pedestrian underpass of the Caltrain right-of-way is located at Sylvan Avenue in San Bruno. At-grade pedestrian crossings of the Caltrain right-of-way are located at Santa Paul Avenue in Millbrae and Morrell Avenue in Burlingame.

San Mateo to Palo Alto Subsection

The 16-mile-long San Mateo to Palo Alto Subsection runs from Ninth Avenue to San Antonio Road, passing through six cities and two communities. The figures in Volume 2, Appendix 3.13-A illustrate the land uses per the General Plan land use designations in each city. San Mateo has one of the most prominent and developed suburban downtowns in the Bay Area. With approximately 100,000 people in the city as a whole, the downtown neighborhoods east of El Camino Real are more densely populated than the western region, which has a blend of commercial and mixed land uses.

Continuing southeast, the right-of-way traverses six more cities and communities in San Mateo County—Belmont, San Carlos, Redwood City, North Fair Oaks CDP, Atherton, and Menlo Park. These communities are primarily suburban with a blend of residential and mixed commercial and residential, with pockets of industrial uses in San Carlos and North Fair Oaks. The population of these cities and communities ranges in size from 7,000 people in Atherton to almost 80,000 people in Redwood City. Land uses adjacent to the right-of-way in Belmont are single-family residential and commercial; in San Carlos, land uses west of the right-of-way are single-family residential, local retail, and service/convenience commercial uses along El Camino Real, while land uses east of the right-of-way are primarily industrial uses north and south of a residential neighborhood. Redwood City has a relatively balanced mix of residential, commercial, and industrial uses, while the North Fair Oaks CDP is largely residential. Land uses adjacent to the right-of-way in Atherton are primarily low-density, single-family residential. Although Menlo Park falls within San Mateo County, it has strong economic ties to Santa Clara County. Land uses in Menlo Park are commercial and varying types of residential, ranging from medium-density apartment to single-family suburban. As the project continues south into Santa Clara County, it passes through Palo Alto, with primarily single-family residential land uses adjacent to the right-of-way. The northern portion of Palo Alto, near San Francisquito Creek and Menlo Park, is more densely populated than the hilly and rural southern portion. With many prominent firms and a large number of business in the Stanford University area, Palo Alto is known as a central economic hub in Silicon Valley. Throughout this subsection, building heights generally range from one-story buildings to six-story buildings adjacent to the Caltrain right-of-way. San Mateo and Redwood City generally have more tall buildings than cities such as Belmont and Atherton.

Important community and public facilities in this subsection include numerous fire departments, police stations, post offices and libraries, San Mateo Medical Center, Kaiser Foundation Hospital, San Carlos Museum of History, San Mateo County History Museum, Belmont Housing Authority, and San Carlos Youth Center. The RSA for this subsection includes 121 schools/childcare facilities, 68 places of worship, 24 government facilities, 94 public safety/health facilities, 3 cultural facilities, and 5 social services facilities. Figure 3.12-4 illustrates the various community and public facilities in the San Mateo to Palo Alto Subsection.

There are many bicycle facilities in the RSA but outside of the station areas, such as the Embarcadero Bike Path in Palo Alto. In addition, most of the existing Caltrain stations are connected to the bicycle network, including the San Mateo, San Carlos, and Palo Alto Caltrain Stations, which all have extensive networks of bicycle facilities around them.

Pedestrian underpasses or overpasses, separated from the Caltrain right-of-way, are located at the Hayward Park, Hillsdale, Belmont, San Carlos, Redwood City, Menlo Park, Palo Alto, and California Avenue Caltrain Stations. A pedestrian underpass of the Caltrain right-of-way is located at F Street and Arroyo Avenue in San Carlos. The Embarcadero Bike Path is an approximately 0.9-mile trail on the west side of the Caltrain right-of-way that connects the Palo Alto Caltrain Station to Churchill Avenue in Palo Alto.

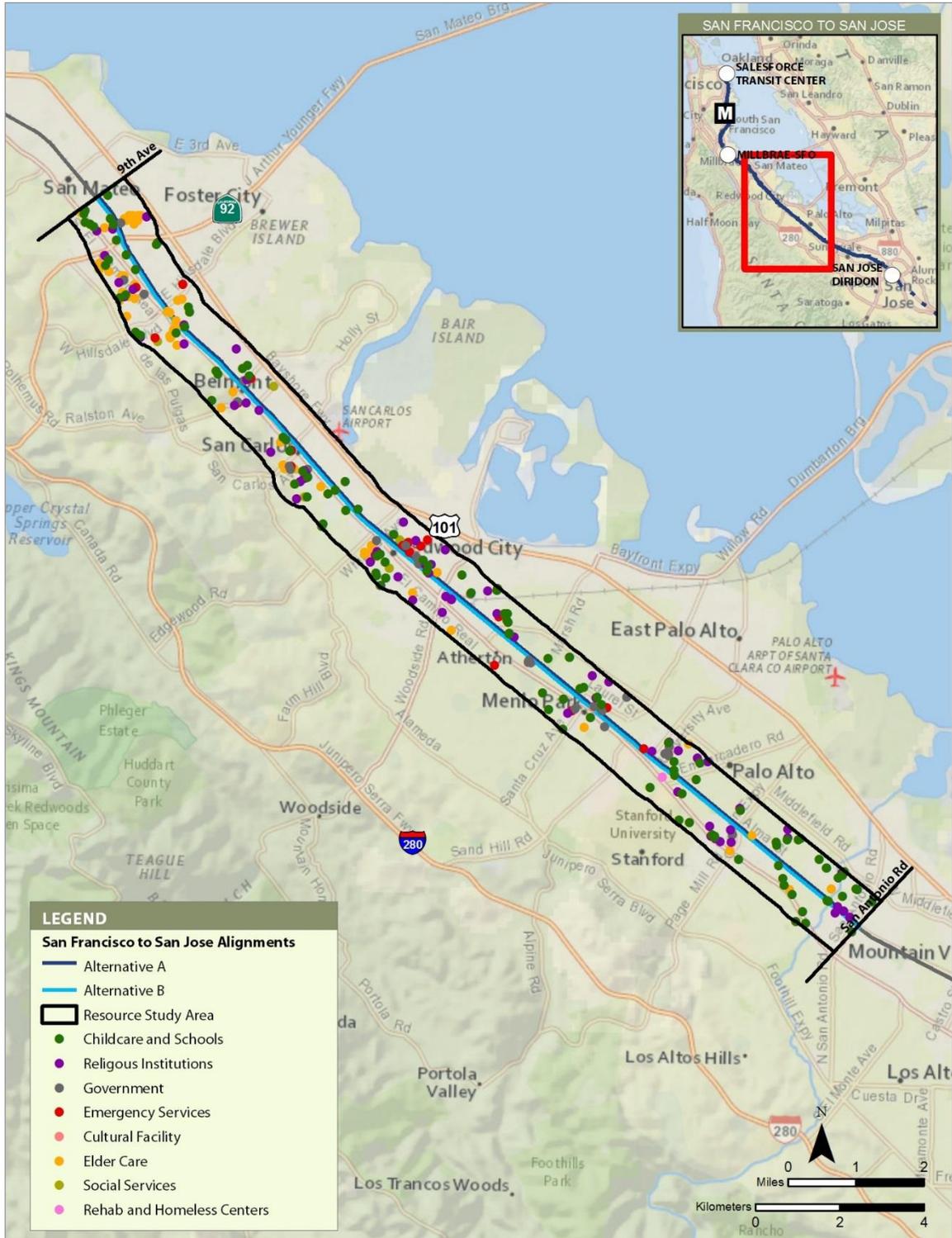


Figure 3.12-4 Community Facilities in the San Mateo to Palo Alto Subsection

Mountain View to Santa Clara Subsection

The 9-mile-long Mountain View to Santa Clara Subsection starts at San Antonio Road and ends at Scott Boulevard, passing through Mountain View, Sunnyvale, and Santa Clara. The figures in Volume 2, Appendix 3.13-A illustrate the land uses per the General Plan land use designations in each city. While Mountain View is primarily residential with a pedestrian-friendly downtown area, it also has spots of commercial use, as it is home to some major technology companies. Aside from San Francisco, Sunnyvale is the most populous city in the RSA with numerous technology companies in this major city in Silicon Valley. Land uses east of the alignment in Sunnyvale are primarily industrial interspersed with low- and medium-density residential. Neighborhood shopping, general business, and residential uses are to the west. Santa Clara is at the center of Silicon Valley and is home to the headquarters of several large high-tech companies, Santa Clara University, Levi's Stadium, and Great America. The Caltrain corridor divides the city, with industrial land uses north of the existing Caltrain corridor and single-family residential land uses to the south. Throughout this subsection, buildings generally range from one-story buildings to six-story buildings adjacent to the Caltrain right-of-way, depending on the specific area of each city. The downtown areas, particularly near the existing Caltrain stations in Mountain View and Sunnyvale, have more tall buildings than other areas of this subsection.

Important community and public facilities in this subsection include numerous fire departments, police stations, Mountain View Public Library, Mountain View City Hall, and the Public Services Department. The RSA for this subsection includes 45 schools/childcare facilities, 34 places of worship, 4 government facilities, and 21 public safety/health facilities. There are no cultural or social service facilities in this subsection. Figure 3.12-5 illustrates the various community and public facilities in the Mountain View to Santa Clara Subsection.

There are many bicycle facilities in the RSA but outside of the HSR station areas. In addition, most of the existing Caltrain stations are connected to the bicycle network, including the Mountain View and Sunnyvale Caltrain Stations, which all have extensive networks of bicycle facilities around them. Pedestrian underpasses or overpasses, separated from the Caltrain right-of-way, are located at the San Antonio, Mountain View, Evelyn, Sunnyvale, and Lawrence Caltrain Stations. The Stevens Creek Trail overpass over the Caltrain right-of-way is just north of State Route (SR) 85. An at-grade pedestrian crossing of the Caltrain right-of-way is near North Frances Street in Sunnyvale.

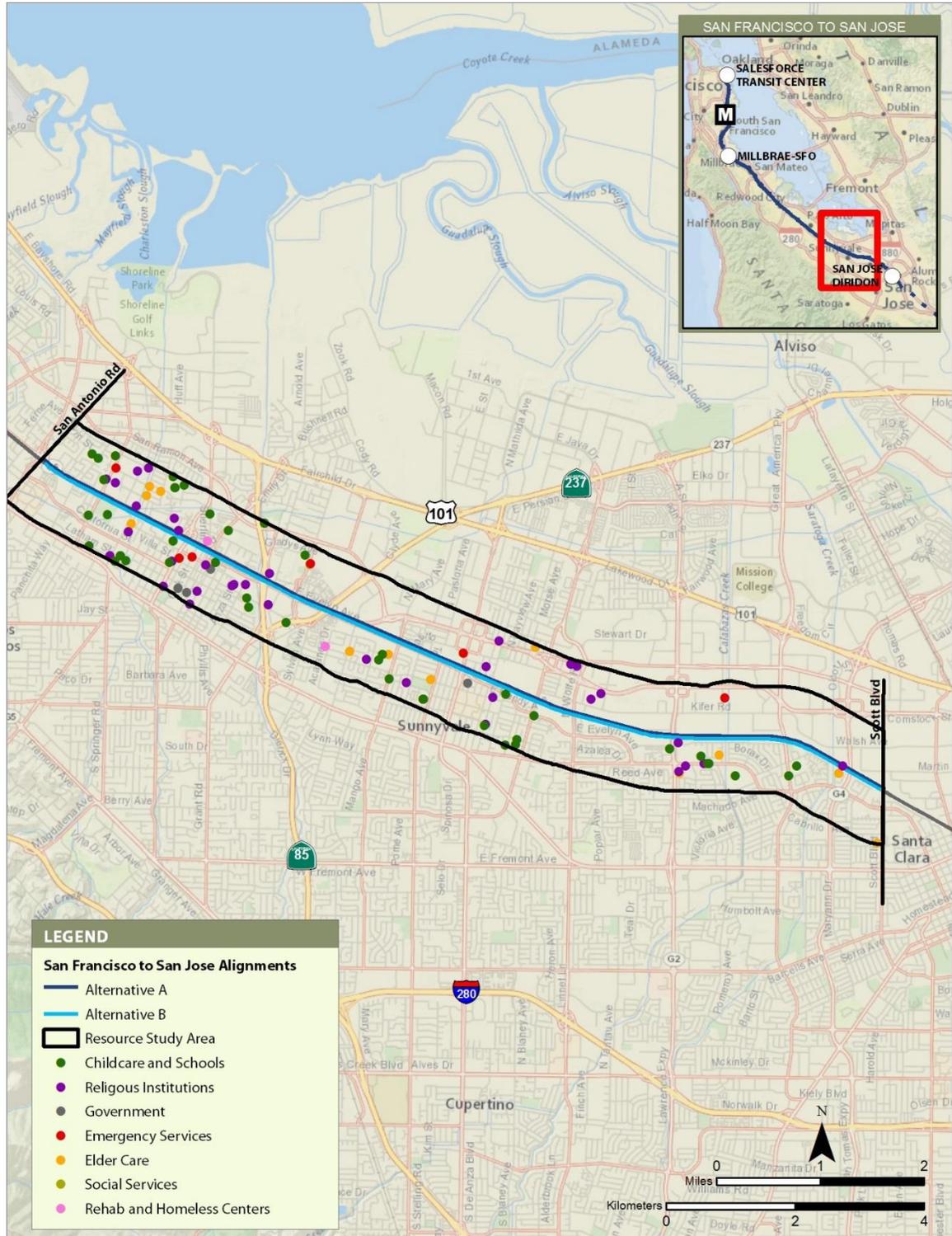


Figure 3.12-5 Community Facilities in the Mountain View to Santa Clara Subsection

San Jose Diridon Station Approach Subsection

The 6-mile-long San Jose Diridon Station Approach Subsection starts at Scott Boulevard and ends at West Alma Avenue, passing through Santa Clara and San Jose. The figures in Volume 2, Appendix 3.13-A illustrate the land uses per the General Plan land use designations in each city. Within this subsection, the project alignment is mostly within the existing Caltrain corridor, except for the southernmost portion of Alternative B; south of the aerial station, the alignment diverges from the Caltrain corridor and continues south on aerial structure to cross over SR 87 and I-280. Alternative A is in blended operation within the Caltrain corridor with an at-grade station at Diridon.

The community character through the San Jose Diridon Approach Subsection is a mix of urban residential, industrial, and commercial uses. Distinct residential neighborhoods border both sides of the Caltrain corridor, as described in greater detail in the San Jose to Merced Community Impact Assessment (Authority 2019b). A mix of single-family and multifamily residential neighborhoods characterize the Autumn-Montgomery, Sunol-Midtown, Auzeais-Josefa, and Market-Almaden neighborhoods. Some industrial uses also are adjacent to the Caltrain corridor. Development on the west side of the San Jose Diridon Station is primarily single-family and multifamily residential, while the east side is characterized by a mix of commercial uses, including the SAP Center at San Jose/HP Pavilion, and some residential uses. Continuing south, the project alignment passes through several smaller residential neighborhoods including the Gardner, North Willow Glen, and Tamien neighborhoods, all of which are a mix of single-family and multifamily residential, with industrial and commercial uses adjacent to the Caltrain corridor.

Important community and public facilities in this subsection include Bellarmine College Preparatory, Santa Clara and San Jose police and fire department facilities, the Children's Discovery Museum, Movimiento de Arte y Cultura Latino Americana, San Jose Civic Auditorium, Daly Science Center, De Saisset Museum, several places of worship and nursing homes, government offices, Tamien Childcare Center at Tamien Station and other childcare facilities, and the Santa Clara County Social Services Center. The RSA for this subsection includes 23 schools/childcare facilities, 33 places of worship, 22 government facilities, 7 emergency services/hospitals, 8 nursing homes or residential care facilities, 14 cultural facilities, and 1 social services facility. Figure 3.12-6 illustrates the various community and public facilities in the San Jose Diridon Station Approach Subsection.

Bicycle facilities in the RSA are primarily centered around the San Jose Diridon Station. Santa Clara Street has Class II Bicycle Lanes in both directions, as does Park Avenue south of its intersection with Montgomery Street. South of Crandall Street, Cahill Street provides green-painted Class II bicycle lanes in both directions; these lanes connect to similar green-painted Class II bicycle lanes on West San Fernando Street. Figure 3.2-11 in Section 3.2 illustrates existing bicycle facilities in the San Jose Diridon Station area. There are also many bicycle facilities in the RSA but outside the station areas, such as the Coyote Creek Trail and the Guadalupe River Trail in San Jose, and the SR 87 north/south bikeway. Additionally, there are many pedestrian facilities within the RSA outside of the station areas. In the urban and suburban areas of the RSA, most streets have sidewalks for pedestrians and signalized intersections.

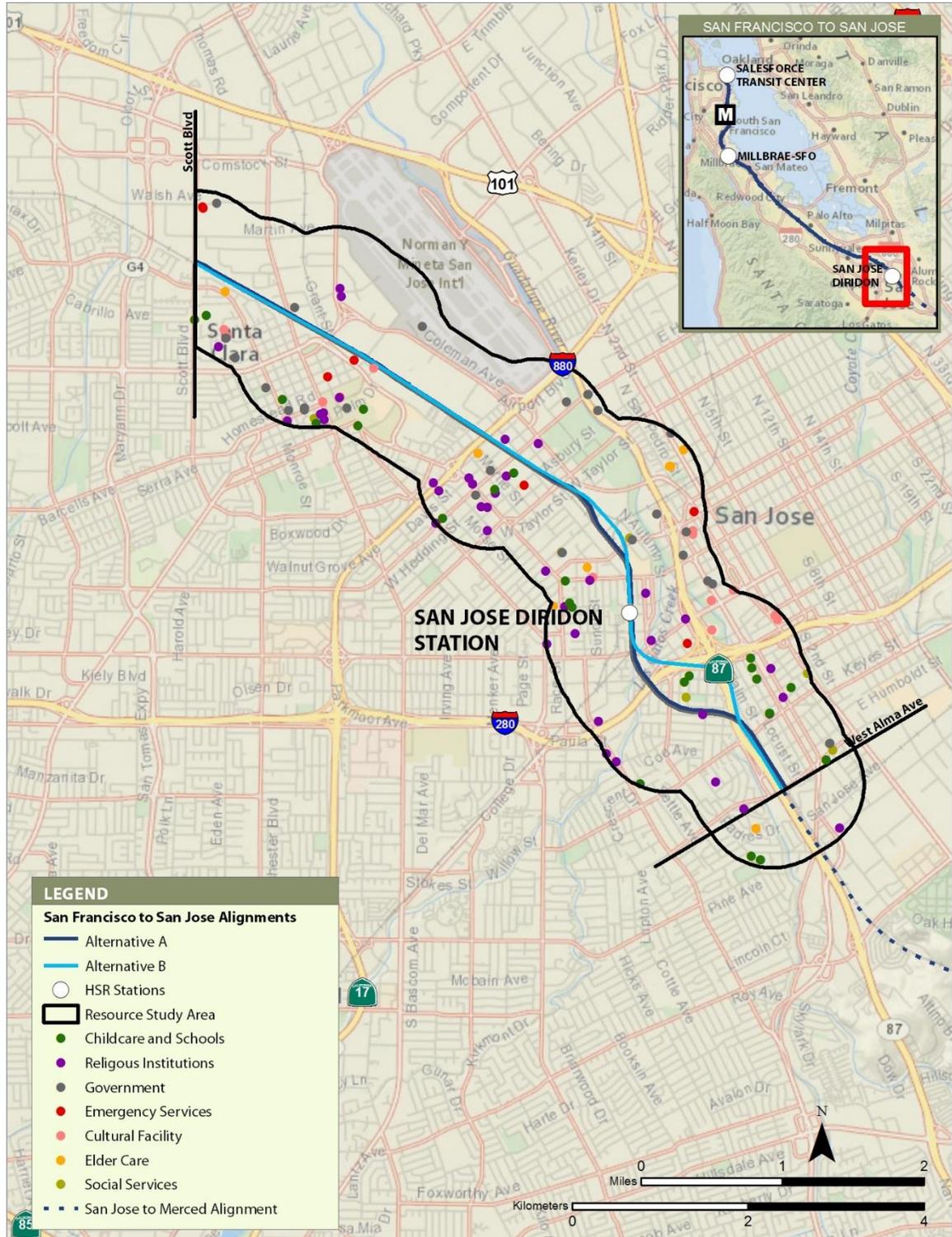


Figure 3.12-6 Community Facilities in the San Jose Diridon Station Approach Subsection

3.12.5.2 Population and Households

Region

As described in detail in the San Francisco to San Jose Community Impact Assessment (Authority 2019a), the population in the three-county region of San Francisco, San Mateo, and Santa Clara Counties was estimated to be 3,410,478 people in 2014 (U.S. Census Bureau ACS 2010–2014a). Most of that population is in Santa Clara County (54 percent), followed by San Francisco County (24 percent), and San Mateo County (22 percent). All three counties are largely urbanized, with San Mateo County being the most suburban of the three. The population in the region increased by nearly 244,000 people (approximately 8 percent) between 2000 and 2014, and is projected to increase an additional 19 percent between 2014 and 2040 (U.S. Census Bureau 2000a; U.S. Census Bureau ACS 2010–2014a; California Department of Finance [CDOF] 2014). Santa Clara experienced the largest increase in population in the region between 2000 and 2014 (adding 158,984 people). These population growth trends are expected to continue through 2040.

The largest age group in all three counties is the 18 to 64 age group³ and the median age across the three-county region was 38.2 in 2014. The increase in median age by 2.5 years between 2000 and 2014 (from 35.7 to 38.2) is consistent with general population trends (i.e., an aging population) in the state and nationally (U.S. Census Bureau 2000a; U.S. Census Bureau ACS 2010–2014b).

According to the 2000 U.S. Census, the three-county region had an average household size of approximately 2.7 people. In 2014, the average household size had remained the same. The percentage of married-couple households increased between 2000 and 2014 in San Francisco and Santa Clara Counties, while the percentage of households headed by a single female remained nearly the same in all three counties (U.S. Census Bureau 2000b, 2000c; U.S. Census Bureau ACS 2010–2014c).

Cities and Communities in the Resource Study Area

Most of the population within the communities and neighborhood RSA reside in San Francisco (31 percent) and San Jose (37 percent), with the remaining population divided between the cities and communities within San Mateo County (17 percent), and the cities and communities in Santa Clara County (15 percent). The least populous cities and communities within the RSA are Brisbane, Atherton, and North Fair Oaks CDP, while the most populous are San Francisco, Sunnyvale, Santa Clara, San Mateo, and San Jose. Over the 2000–2014 period, the percent increase in population within the cities Brisbane (22.9 percent), South San Francisco (8.2 percent), San Mateo (8.3 percent), Palo Alto (12.6 percent), Sunnyvale (10.7 percent), Santa Clara (16.8 percent), and San Jose (10.2 percent) exceeded that of the three-county region (7.7 percent). Two communities—Atherton and North Fair Oaks CDP—experienced a decline in population between 2000 and 2014 (U.S. Census Bureau 2000a; U.S. Census Bureau ACS 2010–2014a).

Between 2000 and 2014, North Fair Oaks CDP, San Bruno, South San Francisco, and Atherton experienced a decrease in the number of people under 18, while all other cities and communities saw an increase. For people 18 to 64, Belmont and Atherton saw a decrease between 2000 and 2014. For people 65 and over, Brisbane saw the greatest increase (125 percent), while Millbrae, Burlingame, and Menlo Park experienced a decrease. Similar to the region, all cities and communities experienced an increase in the median age between 2000 and 2014 (U.S. Census Bureau 2000a; U.S. Census Bureau ACS 2010–2014b).

In 2014, average household size in the RSA ranged from 2.4 persons in Burlingame and Mountain View to a high of 3.7 persons in North Fair Oaks CDP. The urban and suburban communities of the RSA have an average household size of approximately 2.9 persons per

³ This age range was selected because it is a standard age range provided by the U.S. Census Bureau and it omits children and elderly persons.

household. The composition of households varies by city and community, but North Fair Oaks CDP is notable for its high rate of female head of household (comprising 20 percent of households in 2014) (U.S. Census Bureau 2000b, 2000c; U.S. Census Bureau ACS 2010–2014c).

3.12.5.3 Property Displacements and Relocations

This section summarizes residential, commercial, and industrial business characteristics of the property displacements and relocations RSA. Housing and commercial and industrial business characteristics are presented in this section to provide context for the property displacements and relocation impacts discussed in Section 3.12.6.4, Property Displacements and Relocations Impacts.

Housing Characteristics

Region

In 2014, in the three-county region, the percentage of single-family homes varied from 32.0 percent for the City and County of San Francisco to 65.2 percent for San Mateo County, while Santa Clara County fell in between, at 63.9 percent. The percentage of single-family homes was higher in San Mateo and Santa Clara Counties due to the more suburban setting of these counties, whereas highly urbanized San Francisco had a greater percentage of multifamily housing units (67.8 percent). Between 2000 and 2014, the total number of housing units increased in each of the three counties, with San Francisco's stock increasing by 9.8 percent (33,991 units), San Mateo County's stock increasing by 4.5 percent (11,611 units), and Santa Clara County's housing stock increasing by 10.5 percent (61,110 units) (U.S. Census Bureau 2000c; U.S. Census Bureau ACS 2010–2014d).

Cities and Communities in the Resource Study Area

In 2014, most of the cities and communities in the RSA had a majority of single-family housing types. Exceptions include Burlingame, which was composed of approximately 50 percent single-family units and 50 percent multifamily units, and Mountain View, which had a majority of multifamily unit housing types (55 percent). Owner-occupied housing represented more than half of the housing in all cities and communities except for the City and County of San Francisco, Mountain View, Santa Clara, and Sunnyvale; in these four cities, most units were renter-occupied, at 58.1, 55.9, 50.8, and 52.4 percent, respectively, in 2014. Atherton had the highest percentage of owner-occupied housing (85.6 percent) as well as the highest percentage of vacant housing (5.8 percent) (U.S. Census Bureau 2000c; U.S. Census Bureau ACS 2010–2014d).

Commercial and Industrial Businesses

Region

Santa Clara County is the economic powerhouse of the region, with approximately 47,019 businesses (more than twice that of San Mateo County) according to the 2012 economic census (U.S. Census Bureau 2012).⁴ There are 33,189 businesses within San Francisco and 20,653 in San Mateo County. The types of businesses in each county are fairly similar. A large percentage of the businesses in San Francisco, San Mateo, and Santa Clara Counties provide professional, scientific, and technical services (roughly 21, 15, and 19 percent, respectively). Retail trade, health care and social assistance, and accommodation and food services each comprise another 10 percent of the businesses within each of these three counties. Comprehensive tables that show the types of commercial and industrial businesses in the three counties can be found in the San Francisco to San Jose Community Impact Assessment (Authority 2019a).

⁴ The U.S. Census Bureau conducts an economic census every 5 years. The most recent economic census available at the start of this analysis was the 2012 economic census.

Cities and Communities in the Resource Study Area

In addition to the 33,189 businesses within San Francisco, there are approximately 40,724 businesses within the cities and communities of the RSA in San Mateo and Santa Clara Counties. Most of those businesses are in the cities of San Jose (40.0 percent), Santa Clara (8.6 percent), Palo Alto (7.3 percent), and San Mateo (7.0 percent). The types of businesses within each community varies. San Jose has a high percentage of businesses associated with professional, scientific, and technical services; health care and social assistance; retail trade; and accommodation and food services. For the city of Santa Clara, most businesses are associated with professional, scientific, and technical services; manufacturing; and accommodation and food services. The majority of businesses in Palo Alto and San Mateo are associated with professional, scientific, and technical services; retail trade; or health care and social assistance. Most cities and communities within the RSA are dominated by businesses focused on professional, scientific, and technical services (U.S. Census Bureau 2012).

3.12.5.4 Economic Setting

Employment

Region

Unemployment has generally been low in the RSA, as described in Section 3.17.5.2, Employment and Unemployment. However, unemployment rates in both San Mateo and Santa Clara Counties approximately doubled from 2000 to 2014, which is reflective of the unemployment spikes that occurred in 2009 and 2010 due to the Great Recession. The City and County of San Francisco experienced the smallest percent increase in unemployment rates from 2000 to 2014, from approximately 4.6 to 7.6 percent. While Santa Clara County had the highest unemployment rate of the three counties in 2014, it also had a civilian labor force almost twice the size of San Francisco or San Mateo Counties and employed roughly 890,000 people (U.S. Census Bureau 2000d; U.S. Census Bureau ACS 2010–2014e).

The largest employment sector in San Francisco and San Mateo Counties in 2000 and 2015 was professional and business services. In Santa Clara County, the largest employment sector in 2000 was manufacturing, which shifted to professional and business services in 2015. Over the 2000–2015 period, agricultural and manufacturing employment decreased most drastically in the region (decreases of 30.5 and 36.0 percent, respectively). Meanwhile, the educational, health, and social services industries had employment increases within the region of approximately 60.7 percent, with the largest growth in Santa Clara County (approximately 78.3 percent). Each of the three counties experienced similar increases in the leisure and hospitality sector, with a regional increase of 29.3 percent. Between 2000 and 2015, Santa Clara County saw a large increase in employment in the information sector (approximately 63 percent), while the largest growth in the City and County of San Francisco was in the professional and business services sector.

Cities and Communities in the Resource Study Area

All of the communities in the economic impacts RSA except Atherton experienced growth in the civilian labor force between 2000 and 2014 despite the increase in overall unemployment rates during the same period (U.S. Census Bureau 2000d; U.S. Census Bureau ACS 2010–2014e). San Jose had the largest civilian labor force among cities and communities in the RSA from 2000 to 2014, followed by Sunnyvale, Santa Clara, and San Mateo. Unemployment within the cities and communities of the RSA in 2014 ranged from a low of 4.6 percent in San Jose to a high of 10 percent in Brisbane. San Jose, Burlingame, Menlo Park, and Palo Alto had the lowest unemployment rates of the cities and communities in the RSA. In addition, all of the cities and communities in the RSA, except for Brisbane, had a lower unemployment rate than the regional average of 8.2 percent. San Carlos experienced the largest increase in unemployment rates among the cities and communities of the RSA between 2000 and 2014.

School District Funding

Funding for California's public schools (kindergarten [K] through 12) comes primarily from the state budget, with local property taxes and the federal government as the other significant contributors. Each school district has its own particular combination of federal, state, and local sources for funding, but most school district funding comes through revenue limits. Each district receives a dollar amount per student (the revenue limit), which is measured by average daily attendance. Revenue limit is funded by local property taxes and state funds. A percentage of the property taxes generated by real property in each district goes to the district, with the difference made up in state funds (mainly consisting of monies from income, sales, corporate, and capital gains taxes). If the school district collects more property tax revenue than its entitlement (base revenue limit multiplied by the number of students), the district can retain these (excess) taxes. The revenue limit can only be increased by state legislation, and any increase in property taxes results in the state's proportion decreasing. However, if the property taxes exceed the revenue limit and no state aid is required, then the districts can keep the excess property tax revenues. This is known as basic aid. The federal government also provides funding to the school districts; typically, the federal government distributes this funding to the districts based on the needs of the children and special programs. School districts can also raise funds for specific purposes (e.g., build new facilities) by issuing bonds, which need the approval of two-thirds of local voters or 55 percent if certain conditions are met.

Each individual school district's funding is based on the average number of students attending district schools during the year, typically referred to as the average daily attendance (EdSource 2009). Overall funding of K through 12 public education in California has risen from \$64 billion in the 2011–2012 school year to approximately \$83 billion for the 2015–2016 school year (California Department of Education 2016a, 2017a). In terms of spending per pupil, however, spending has been relatively unchanged over that period (California Department of Education 2013, 2016b). Table 3.12-4 shows the 2015–2016 school year funding for each of the 11 school districts that would be affected by relocations in the RSA; most of the school districts in the RSA would not be affected by relocations and are not listed.

Table 3.12-4 School Year 2015–2016 Funding for School Districts in the Resource Study Area

School District	2015–2016 Funding
Bayshore Elementary School District (Brisbane)	\$3,196,837
Jefferson Union High School District (Brisbane)	\$39,068,885
San Bruno Park Elementary School District (San Bruno)	\$19,931,625
Millbrae Elementary School District (Millbrae)	\$17,694,808
San Mateo Union High School District (San Bruno, Millbrae, San Mateo)	\$117,143,731
San Mateo Foster City Elementary School District (San Mateo)	\$86,414,190
Belmont-Redwood Shores Elementary School District (Belmont)	\$27,585,216
Sequoia Union High School District (Belmont)	\$110,567,554
Palo Alto Unified School District (Palo Alto)	\$157,554,329
Santa Clara Unified School District	\$153,361,022
San Jose Unified School District	\$430,311,581
Total All School Districts	\$1,162,829,778

Source: California Department of Education 2017b

Property Taxes

Property tax is imposed on real property and is based on the assessed value of the property. Table 3.12-5 shows general property tax levies in San Francisco, San Mateo, and Santa Clara Counties for FY 2014/2015. Property tax levies in San Francisco County experienced an increase from \$1,859 million in FY 2011/2012 to \$2,138 million in FY 2014/2015. Trends in property tax revenues were similar in San Mateo and Santa Clara Counties, in which property tax levies increased between FY 2011/2012 and FY 2014/2015. Property tax levies in San Mateo County were increased by 18 percent, compared to Santa Clara County's 21 percent increase.

Table 3.12-5 General Property Tax Levies by County for Fiscal Year 2014/2015

County	Net Taxable Assessed Value ¹ (\$ Million)	Property Tax Allocations and Levies (\$ Million) ²					Average Tax Rate (percent)
		City	County ³	School ³	Other District ⁴	Total ⁴	
San Francisco	181,809.9	1,260.8	N/A	642.4	234.8	2,138.1	1.176
San Mateo	166,386.6	182.3	209.8	1,168.6	289.6	1,850.2	1.112
Santa Clara	358,541.9	385.9	612.4	2,675.3	635.6	4,309.2	1.202

Source: CBOE 2016a

N/A = not applicable

¹ These are the assessed values on which general property taxes were actually levied in 2014/2015. Tax exemptions are excluded.

² The county levies at a rate of 1 percent of assessed value have been allocated among the jurisdictions receiving a portion of those levies. Excluded are the state reimbursements to local governments and for the homeowners' exemption described in table note 1.

³ County levies for school purposes, such as junior college tuition and countywide school levies, are included with school levies.

⁴ Includes debt levies on land and/or improvements and other levies

Property tax revenues are based on the total amount of property taxes a property pays in a given year. Property taxes in California are limited by Proposition 13, which was passed in 1978. Proposition 13 decreased property taxes by assessing values at their 1976 value and restricted annual increases of assessed value of real property to an inflation factor, not to exceed 2 percent per year. It also prohibited reassessment of a new base year value except in cases of (a) change in ownership, or (b) completion of new construction. These rules apply equally to all real estate, residential and commercial, whether owned by individuals or corporations. This means that some properties, if they have been owned by the same owner for many years, would have a much lower property tax bill than properties recently sold at current market value.

Sales Tax Revenues

Sales tax is imposed on retailers for the privilege of selling tangible personal property in California. The sales tax rate is a composite of various tax rates: a state rate, a 1 percent city-county rate, a local transportation rate, a statewide rate for local public safety services, and a statewide rate for local health and social services.

California imposes a statewide sales tax rate of 7.25 percent, which is collected by the California State Board of Equalization (CBOE). As of 2017, 6 percent goes to state funds, 0.25 percent goes to the local county transportation fund, and the remaining 1 percent is allocated for the local city or county operations (CBOE 2017a). San Francisco County has an additional 1.25 percent tax imposed by the San Francisco County Public Finance Authority (0.25 percent), San Francisco County Transportation Authority (0.5 percent), and BART (0.5 percent), for a total sales tax rate of 8.5 percent (CBOE 2017b). San Mateo County has an additional 1.5 percent tax imposed by the San Mateo County Retail Transactions and Use Tax (0.5 percent), San Mateo County Transportation Authority (0.5 percent), and SamTrans (0.5 percent), for a total sales tax rate of 8.75 percent (CBOE 2017b). Santa Clara County has an additional 1.75 percent tax imposed by the Santa Clara County Retail Transactions and Use Tax (0.125 percent), Santa Clara County Transactions and Use Tax (0.5 percent), Santa Clara County Transit District (0.5 percent), Santa Clara Valley Transportation Authority (VTA) (0.5 percent), and the VTA BART Operating and

Maintenance Transactions and Use Tax (0.125 percent), for a total sales tax rate of 9 percent (CBOE 2017b). Specific cities within these counties may also have additional tax levies as allowed by law, such as a 9 percent tax rate in the city of San Mateo, which includes 6 percent from the state, 0.25 percent from San Mateo County, 0.25 percent from the City of San Mateo, and a 2.5 percent special tax.

The CBOE distributes local tax revenues, less an administrative fee, to the cities and counties on a quarterly basis. Total revenue distributions to San Francisco, San Mateo, and Santa Clara Counties and their cities increased by approximately 21 percent in San Francisco County and 16 percent in San Mateo and Santa Clara Counties between FY 2011/2012 and FY 2014/2015 (CBOE 2013, 2016b).

3.12.6 Environmental Consequences

3.12.6.1 Overview

This section evaluates how the No Project Alternative and project alternatives would affect socioeconomics and communities. Temporary and permanent construction impacts and permanent operations impacts are evaluated for community cohesion, children's health and safety, displacements and relocations, and economic impacts. Impacts on communities from implementing the project alternatives address disruption or severance of community interactions or division of established communities. Children's health and safety considers the potential direct and indirect impacts of the project on children's health and safety. Displacements and relocations address impacts on residences, commercial and industrial businesses, and community and public facilities. Economic impacts consider impacts on employment, school district funding, and county and city property and sales tax revenues.

3.12.6.2 Disruption or Division of Existing Communities Impacts

The following sections describe anticipated disruptions or divisions of existing communities during both construction and operations for both the No Project Alternative and the project alternatives. Both project alternatives would follow existing transportation corridors and would not represent new divisions of existing communities or neighborhoods. Construction of the project would temporarily disrupt access to residences, businesses, and community and public facilities and would have localized transportation, noise and vibration, and visual quality impacts. However, because all communities are currently adjacent to an existing transportation corridor, the addition of construction traffic, noise and vibration, air quality, and visual changes would not substantially affect community character or cohesion. Project construction could permanently affect established community interactions and perceptions of quality of life by displacing residents, businesses, and community and public facilities. Additionally, operation of the alternatives could result in permanent disruptions or divisions of established communities.

No Project Impacts

The No Project Alternative could result in impacts related to the disruption or division of existing communities. The population in San Francisco, San Mateo, and Santa Clara Counties is expected to grow through 2040 (see Section 2.6.1.1, Projections Used in Planning). Development to accommodate the population increase under the No Project Alternative would result in direct and indirect impacts on socioeconomics and communities. The No Project Alternative considers the effects of conditions forecasted by current land use and transportation plans in the vicinity of the project, including planned improvements to the highway, aviation, conventional passenger rail, freight rail, and port systems through the 2040 planning horizon. Without the HSR project, the forecasted population growth would increase pressure to expand highway and airport capacities. The Authority estimates that additional highway and airport projects (up to 4,300 highway lane miles, 115 airport gates, and 4 airport runways) would be needed to achieve equivalent capacity and relieve the increased pressure (Authority 2012c). Section 3.18, Cumulative Impacts, identifies planned and other reasonably foreseeable future projects anticipated to be built in the region to accommodate the projected growth in the area, including shopping centers, industrial parks, transportation projects, and residential developments.

The No Project Alternative includes the implementation of bicycle and pedestrian projects from state and local plans identified in Volume 2, Appendix 2-I. These projects include the implementation of bike lanes or trails, and pedestrian sidewalk, crosswalk, and signal timing enhancements in the 4th and King Street Station and Millbrae Station areas. The bicycle and pedestrian improvement projects that would be built under the No Project Alternative are described in Table 3.2-17 of Section 3.2. However, the planned pedestrian and vehicular safety improvements at at-grade crossings and the perimeter of the right-of-way would not occur under the No Project Alternative.

Development in the project vicinity would likely continue creating demand for infrastructure projects. These development and infrastructure projects could temporarily or permanently during construction, or permanently during operations, disrupt or divide established communities as a result of increased traffic congestion, increased noise and vibration, air quality deterioration, degradation of visual quality, and increased health and safety risks. The infrastructure and development projects would at a minimum be subject to regional and local land use plans, policies, and zoning ordinances to address and minimize these impacts. Future developments planned under the No Project Alternative would require individual environmental review, such as permits, regulatory requirements, and design standards and compliance with all applicable codes and ordinances.

Project Impacts

Construction Impacts

Construction of the project alternatives would include modifying the existing 4th and King Street, Millbrae, and San Jose Diridon Stations; track realignment; building the LMF; relocating the Bayshore Caltrain Station (both alternatives) and San Carlos Caltrain Station (under Alternative B) and construction of the passing track and aerial viaduct under Alternative B; and implementing four-quadrant gates at at-grade crossings. Activities associated with constructing this infrastructure are establishing equipment and materials storage areas close to construction sites, expanding existing station areas to accommodate HSR, removal and replacement of tracks, and temporary road closures. Construction of the project is expected to occur in multiple phases over a 4.5-year period, with impacts lasting for several years for the major construction activities such as construction of the expanded Millbrae and San Jose Diridon Stations, the Brisbane LMF, or the passing track and aerial viaduct under Alternative B. Construction duration of all other activities would be less than 1 year at any given location. Construction activities are described in Chapter 2, Alternatives.

Impact SOCIO#1: Temporary Disruption or Division of Established Communities from Project Construction

Community cohesion takes into consideration access and linkages, community facilities, and local businesses in the surrounding area that provide opportunities for residents to gather. Construction activities would temporarily disrupt communities and neighborhoods along the alignment through changes in circulation and access (e.g., lane closures, detours, and temporary road closures) affecting pedestrians, bicyclists, motorists, and transit users; increased noise and vibration; and changes to the visual environment from construction fencing, barricades, construction equipment, and material stockpiles. The project alternatives pass through 16 cities and 2 unincorporated communities, with residential neighborhoods and commercial/industrial areas proximate to the project alignment that would be affected by construction activities. The following discussion evaluates whether the temporary, localized impacts on transportation, circulation, and access, including pedestrian hazards; noise and vibration levels; and visual resources would affect community cohesion and social engagement in the communities adjacent to the project alternatives. The discussion is organized by project subsection from north to south.

Transportation, Circulation, and Access

Construction of the project would require temporary road and lane closures or modifications associated with construction of stations, the Brisbane LMF, modifications of roadway structures to accommodate the passing track and aerial viaduct (under Alternative B), and the installation of

four-quadrant gates at at-grade crossings, resulting in the temporary diversion of traffic from closed roads or lanes. Table 3.12-6 identifies the locations and anticipated durations of construction on roadways, which could result in temporary lane closures or periodic nighttime and weekend road closures for both project alternatives. Roadway modifications required for the project alternatives differ only in the San Francisco to South San Francisco, San Mateo to Palo Alto, and the San Jose Diridon Station Approach Subsections. In addition to automobile traffic, temporary lane closures or road closures would alter pedestrian, bicycle, and transit circulation patterns in the communities along the project alternatives, which would inconvenience residents and businesses. Temporary road closures would disrupt communities and community interactions where access to some neighborhoods, businesses, or community facilities would be temporarily obstructed, especially for those with ingress and egress on roadway segments that are under construction. Residents and community members would be required to take short, temporary detours. The changes to circulation and access during construction would result in short-term inconvenience and increased travel times for pedestrians, bicyclists, motorists, and transit, which would affect established social engagement patterns within the communities. Section 3.2 presents more detail on the impacts on circulation and access during construction.

Table 3.12-6 Roadway Modifications with the Potential to Result in Temporary Lane Closures or Periodic Road Closures

Description of Activity	Roadway (Location)	Alternative		Construction Duration
		A	B	
San Francisco to South San Francisco Subsection				
Installation of four-quadrant gates	3—Mission Bay and 16th Street (San Francisco); Linden Avenue (South San Francisco)	X	X	2–4 weeks
Road realignment to accommodate East Brisbane LMF	1—Tunnel Avenue (Brisbane)	X		1–3 months
Realignment of the grade separation	1—Tunnel Avenue overpass (Brisbane)	X	X	1–3 months
Road extension	1—Lagoon Road (Brisbane)	X	X	1–3 months
San Bruno to San Mateo Subsection				
Installation of four-quadrant gates	16—Scott Street (San Bruno); Center Street (Millbrae); Broadway, Oak Grove Avenue, North Lane, Howard Avenue, Bayswater Avenue, and Peninsula Avenue (Burlingame); Villa Terrace, Bellevue Avenue, 1st Avenue, 2nd Avenue, 3rd Avenue, 4th Avenue, 5th Avenue, and 9th Avenue (San Mateo)	X	X	2–4 weeks
Widen existing underpass	1—Hillcrest Boulevard (Millbrae)	X	X	6–9 months
San Mateo to Palo Alto Subsection				
Installation of four-quadrant gates	15—Whipple Avenue, Brewster Avenue, Broadway, Maple Street, Main Street, Chestnut Street (Redwood City); Watkins Avenue (Atherton); Encinal Avenue, Glenwood Avenue, Oak Grove Avenue, Ravenswood Avenue (Menlo Park); Alma Street, Churchill Avenue, Meadow Drive, and Charleston Road (Palo Alto)	X	X	2–4 weeks

Description of Activity	Roadway (Location)	Alternative		Construction Duration
		A	B	
Extension of existing underpasses	7—25th Avenue, 28th Avenue, 31st Avenue, 42nd Avenue (San Mateo), Harbor Boulevard (Belmont), Brittan Avenue (San Carlos), Howard Avenue (San Carlos)		X	6–9 months
Replacement of existing underpasses	2—Ralston Avenue (Belmont), Holly Street (San Carlos)		X	6–9 months
Mountain View to Santa Clara Subsection				
Installation of four-quadrant gates	4—Rengstorff and Castro Street (Mountain View); Mary Avenue and Sunnyvale Avenue (Sunnyvale)	X	X	2–4 weeks
San Jose Diridon Station Approach Subsection				
Replace overcrossing with an undercrossing	De la Cruz Boulevard (Santa Clara)		X ³	1 year
New rail overcrossing	I-880 (San Jose)		X ³	6 months
Replace overcrossing	West Hedding Street (San Jose)		X ²	1 year
Replace overcrossing with an undercrossing	West Hedding Street (San Jose)		X ³	1 year
Road realignment	Chestnut Street (San Jose)		X ^{2,3}	1–3 months
New rail overcrossing	West Taylor Street (San Jose)	X		6 months
New rail overcrossing and reconstruction of undercrossing	West Taylor Street (San Jose)		X ²	1 year
Road realignment	West Taylor Street (San Jose)		X ³	1–3 months
Road extension	4—North Montgomery Street, Stover Street, Crandall Street, Cahill Street (San Jose)		X ^{2,3}	3 months
New rail overcrossing	I-280	X		2 years
New rail overcrossing	I-280/SR 87 Interchange		X ^{2,3}	2 years
Realignment	SR 87 On-Ramp		X ^{2,3}	6–12 months
Installation of four-quadrant gates	2—Auzerais Avenue and West Virginia Avenue (San Jose)	X		2–4 weeks
New rail overcrossing and reconstruction of undercrossing	2—Bird Avenue and Delmas Avenue (San Jose)	X		6–12 months

Description of Activity	Roadway (Location)	Alternative		Construction Duration
		A	B	
New rail overcrossing	Prevost Street	X		6–12 months
Realignment	Fuller Avenue	X		1 year
New rail overcrossing	SR 87	X		2 years
New rail overcrossing	Willow Street	X		6–12 months

Sources: Authority 2019a, 2019b

I = Interstate

LMF = light maintenance facility

¹ The actual duration of lane closures or road closures would be less than the construction durations.

² Alternative B (Viaduct to I-880)

³ Alternative B (Viaduct to Scott Boulevard)

Although access to some neighborhoods, businesses, and community and public facilities could temporarily be obstructed, especially for those with ingress and egress on roadway segments that are under construction, access would continue to be provided. The construction contractor would prepare a construction transportation plan (CTP) (TR-IAMF#2), as further described in Section 3.2. The CTP would be reviewed and approved by the Authority and detail the activities to be carried out in each construction phase. The CTP would provide a traffic control plan that would identify when and where temporary closures and detours would occur, with the goal of maintaining traffic flow, especially during peak travel periods. The traffic control plan would be developed for affected locations and would include, at a minimum, signage to alert drivers, bicyclists, and pedestrians to the construction zone, traffic control methods, traffic speed limitations, and alternative access and detour provisions during road or lane closures. Temporary closure or removal of parking areas or roadways during construction would be restored upon completion of construction. Roadways that would require realignment would be constructed before the closure of the existing roadway to minimize impacts. In addition, efforts would be made to avoid construction work on four-quadrant gates on adjacent crossings at the same time, which could cause people to travel farther on their detour around the construction area to cross the corridor.

Standard construction procedures related to traffic management would be used for construction of the project, including identification of when and where temporary closures and detours would occur to maintain traffic flow during peak-travel periods. For example, in areas where a temporary road closure is required, detours would be identified first, as necessary, and traffic diverted. After construction is completed, traffic would be diverted back to the original roadway. Additionally, the Authority would incorporate the following IAMFs to minimize temporary construction-related traffic impacts, all of which are designed to minimize detours and construction-related hazards and maintain accessibility to residents, businesses, and community facilities: TR-IAMF#1, TR-IAMF#2, TR-IAMF#3, TR-IAMF#4, TR-IAMF#5, TR-IAMF#6, TR-IAMF#7, TR-IAMF#8, TR-IAMF#9, TR-IAMF#11, and TR-IAMF#12.

Detailed construction access plans would be developed before the start of construction, and the affected cities would review these plans before construction would begin to avoid or minimize conflicts with access to community facilities and emergency services. All construction vehicles would be parked off main streets in designated staging areas and access points, either in off-street parking or remote parking areas with a shuttle for construction workers. Parking lots for shopping areas would not be used to accommodate construction vehicles. Construction truck routes would be assigned to avoid residential neighborhoods, and areas of peak congestion and pedestrian, bicycle, and transit access would be maintained. In addition, construction material deliveries would be restricted to off-peak hours to minimize vehicular, pedestrian, and bicyclist delays or access restrictions. While some road, bicycle lane, or sidewalk closures would be

inevitable during the construction period, these project features would reduce conflicts between motorized and nonmotorized vehicles and pedestrians and construction-related traffic, maintain access, and minimize the impacts of delays resulting from construction.

Track construction and construction of new or modified structures would disrupt access to community and public facilities within the communities and neighborhoods RSA. Disruptions in access would be most likely to occur for those facilities within 250 feet of construction activities, where driveways may be blocked and lanes could be closed. Facilities that are farther away from construction activities would in most cases have greater options for detours, and access would likely not be obstructed. As shown in Table 3.12-7, a total of 69 community and public facilities are within 250 feet of construction for Alternative A, 81 facilities for Alternative B (Viaduct to I-880), and 83 facilities for Alternative B (Viaduct to Scott Boulevard). Alternative B would result in the most community and public facilities where access could be affected by project construction. The greatest impacts would occur in the San Mateo to Palo Alto Subsection under both project alternatives.

Table 3.12-7 Number of Community and Public Facilities within 250 Feet of Project Construction

Facility	Alternative A	Alternative B ¹
San Francisco to South San Francisco Subsection		
School/childcare facility	3	3
Religious facility	4	4
Government facility	1	1
Emergency services/hospitals	3	3
Cultural center	0	0
Social services	1	1
Subtotal	12	12
San Bruno to San Mateo Subsection		
School/childcare facility	5	5
Religious facility	3	3
Government facility	0	0
Emergency services/hospital	3	3
Cultural center	1	1
Social services	2	2
Rehabilitation centers and shelters	1	1
Subtotal	15	15
San Mateo to Palo Alto Subsection		
School/childcare facility	17	18
Religious facility	7	10
Government facility	5	6
Emergency services/hospital	1	1
Cultural center	1	1

Facility	Alternative A	Alternative B ¹
Social services	0	0
Subtotal	31	36
Mountain View to Santa Clara Subsection		
School/childcare facility	3	3
Religious facility	3	3
Government facility	0	0
Emergency services/hospital	0	0
Cultural center	0	0
Social services	0	0
Subtotal	6	6
San Jose Diridon Station Approach Subsection		
School/childcare facility	1	3
Religious facility	2	5/6
Government facility	1	2/3
Emergency services/hospital	1	1
Cultural Center	1	1
Subtotal	5	12/14
Total	69	81/83

Sources: Authority 2019a, 2019b

I- = Interstate

¹ Where differences occur, values are presented for Alternative B (Viaduct to I-880) first, followed by Alternative B (Viaduct to Scott Boulevard).

While community access patterns would be disrupted during construction, access to the community and public facilities within 250 feet of construction would be maintained through the application of the CTP. Pedestrian hazards would be minimized or eliminated. The Authority would also develop and implement a construction safety transportation management plan (SS-IAMF#1), which would describe the contractor's coordination efforts with local jurisdictions for maintaining access to community and public facilities. Potential conflicts with special events (e.g., fairs, athletic events, major conventions) would be addressed through implementation of TR-IAMF#8, which would require police officers to direct traffic, special event parking, and other traffic controls. Through such mechanisms, roadway capacity would be maintained, and emergency vehicle access for police and fire protection services would be maintained at all times in coordination with local police, fire, and emergency services. While there would be a temporary disruption to the established community interaction patterns from the temporary access changes, this disruption would not physically divide the communities because construction would primarily occur within the existing Caltrain corridor that currently travels through these communities, and because impacts would be temporary and detours would be provided.

San Francisco to South San Francisco Subsection

Construction activities resulting in temporary traffic, circulation, and access impacts within the San Francisco to South San Francisco Subsection are associated with the 4th and King Street Station modifications, the East or West Brisbane LMF, and the installation of three four-quadrant gates (Table 3.12-6). These modifications would be similar for both project alternatives. Outside these areas, construction within this subsection would be limited to minor track modifications

within the existing Caltrain right-of-way, which would have no impact on community circulation and access, avoiding disruption to or division of the community.

Temporary lane closures would be required at 4th and King Street Station and at the locations of two at-grade crossings where four-quadrant gates would be installed under both project alternatives. These temporary lane closures would result in disruptions to community circulation and access during the construction period. However, the disruption would be brief (e.g., lasting 2 to 4 weeks at each location), and circulation and access would be maintained, minimizing potential disruptions to the community and avoiding division of the community.

In Brisbane, temporary lane closures would be required for modifications to the Bayshore Station and reconfiguration of the Tunnel Avenue overpass and extension of Lagoon Road under both project alternatives, which would last an estimated 1 to 3 months. Additionally, Alternative A would require the temporary road closure and realignment of Tunnel Avenue to facilitate construction of the East Brisbane LMF. This disruption to community circulation and access in Brisbane would be experienced most directly by adjacent industrial businesses along Tunnel Avenue and Bayshore Boulevard, and also has the potential to affect the Brisbane Fire Station at 3445 Bayshore Boulevard from temporary road closures or detours in the area. The realignment of the Tunnel Avenue overpass, required for the project alternatives, would require closure of Tunnel Avenue for 1 month. This closure of Tunnel Avenue would affect emergency access and response of the Brisbane Fire Station, near the southern terminus of Tunnel Avenue.

San Bruno to San Mateo Subsection

Construction activities resulting in temporary traffic, circulation, and access impacts within the San Bruno to San Mateo Subsection are associated with the track and station modifications at the Millbrae Station and installation of four-quadrant gates, which would be the same for both project alternatives (Table 3.12-6). Outside of these areas, construction within this subsection would be limited to minor track modifications and existing Caltrain station modifications within the existing Caltrain right-of-way, which would have no impact on community circulation and access, avoiding disruption to or division of the community.

Temporary lane closures would be required for the installation of 16 four-quadrant gates under both project alternatives. These temporary lane closures would result in disruptions to community circulation and access during the construction period. However, the disruption would be brief (e.g., lasting 2 to 4 weeks at each location) and circulation and access would be maintained, minimizing potential disruptions to the community and avoiding division of the community. Efforts would be made to avoid construction work on four-quadrant gates on adjacent crossings at the same time, which could cause people to travel farther on their detour around the construction area to cross the corridor.

Temporary road or lane closures in Millbrae under both project alternatives would also occur as a result of construction of improved access roads on the west side of Millbrae Station, including the extension of California Drive and permanent closure of Serra Avenue, and widening of the Hillcrest Boulevard underpass north of the Millbrae Station. In addition, project-related construction traffic associated with the construction of a new HSR station facility on the west side of the existing Caltrain corridor, construction of additional HSR tracks, and modifications to station platforms and structures would occur. Temporary construction easements (TCE) would be required on all streets surrounding the station to build the Millbrae Station modifications, and temporary roadway closures or modifications would disrupt circulation and access around the station for approximately 2 years. However, these impacts during construction would not create a new barrier or divide a community because they would be temporary and access to the existing Caltrain station would be maintained during construction.

San Mateo to Palo Alto Subsection

Construction activities resulting in temporary traffic, circulation, and access impacts within the San Mateo to Palo Alto Subsection would differ between the project alternatives because Alternative B would include a passing track, while Alternative A would not. Under Alternative A, construction activities would include track modifications predominantly in San Mateo, Belmont, San Carlos, and Palo Alto; station platform modifications at the Atherton Station; and the

installation of four-quadrant gates. Temporary lane closures associated with the installation of 15 four-quadrant gates would be required at 15 at-grade crossing locations identified in Table 3.12-6. These temporary lane closures would result in disruptions to community circulation and access lasting 2 to 4 weeks at each location, but circulation and access would be maintained. Outside of these intersections, construction within this subsection under Alternative A would typically occur within the existing Caltrain right-of-way, which would have no impact on community circulation and access.

Alternative B would have greater construction temporary traffic, circulation, and access impacts within the northern portion of the San Mateo to Palo Alto Subsection given the track and station modifications associated with construction of the 6-mile-long four-track passing track that would extend through San Mateo, Belmont, San Carlos, and into the northern portion of Redwood City. Alternative B would extend existing underpasses in San Mateo, Belmont, San Carlos, and Redwood City. Construction activities associated with these roadway modifications would last 6 to 9 months each, and could require occasional temporary road closures and lane closures. Alternative B would also require modifications at the existing Hayward Park, Hillsdale, Belmont, San Carlos, and Atherton Stations, including relocation of the San Carlos Station approximately 2,260 feet south of its current location. Construction of the passing track and associated station and roadway modifications would require TCEs and temporary roadway closures or modifications, which would disrupt community circulation and access during the construction period in San Mateo, Belmont, San Carlos, and northern Redwood City. However, these impacts during construction would not create a new barrier or divide a community because they would be temporary and detours would be provided. Although Alternatives A and B differ in the northern portion of this subsection, the characteristics of the southern portion of Alternative B would be the same as those described for Alternative A. The same temporary lane closures would be required at the 15 at-grade crossings between Redwood City and Palo Alto. These temporary lane closures would result in disruptions to community circulation and access lasting 2 to 4 weeks at each location, but circulation and access would be maintained.

Mountain View to Santa Clara Subsection

The Mountain View to Santa Clara Subsection would experience minor temporary transportation impacts from construction activities under both project alternatives. For both project alternatives, minor track modifications would be required in several locations in Mountain View, Sunnyvale, and Santa Clara. Temporary lane closures would be required at four at-grade crossings where installation of four-quadrant gates would be required under both project alternatives. These temporary lane closures would result in minor disruptions to community circulation and access lasting 2 to 4 weeks at each location for the installation of four-quadrant gates, and circulation and access would be maintained. Because of the minor nature of these improvements, construction would not disrupt community circulation or access, or physically divide the communities of Mountain View, Sunnyvale, or Santa Clara.

San Jose Diridon Station Approach Subsection

The San Jose Diridon Station Approach Subsection would experience minor temporary transportation impacts from construction activities under Alternative A, which would modify existing track and build new track within the existing Caltrain right-of-way, build new rail overcrossings, and install four-quadrant gates at two at-grade crossings. These activities would result in temporary lane or road closures at 10 roadways for a duration ranging from several hours for short-term freeway lane closures to up to 2 years for substantial roadway modifications. However, because Alternative A would be built in the existing right-of-way, there would be limited disruption of community circulation and access adjacent to the construction activities, and no physical division of the communities of Santa or Santa Clara would occur.

Alternative B would have greater construction-related traffic, circulation, and access impacts than Alternative A given that construction of the viaduct would modify and require temporary lane or road closures at 12 (Alternative B [Viaduct to I-880]) or 15 (Alternative B [Viaduct to Scott Boulevard]) roadways in Santa Clara and San Jose. The greatest disruption would result from building a new rail overcrossing of the I-280/SR 87 Interchange under Alternative B, which would require building foundations for bridge pier footings, placing structural elements, removing

falsework, and relocating utilities. These activities would result in temporary highway lane and roadway closures with closed on- and off-ramps, which would cause increased traffic disruption in neighborhoods, width reductions, reduced speed limits, and detours. A limited number of weekend full closures of I-280 in coordination with Caltrans would also be required. The residential communities closest to the construction of the new rail overcrossing of the I-280/SR 87 Interchange (Gardner, Washington-Guadalupe, and Auzerais-Josefa) would experience the greatest amount of community disruption from construction activities. However, these impacts during construction would not create a new barrier or divide a community because they would be temporary, and detours would be provided.

Noise and Vibration

Daytime and nighttime construction activities would increase ambient noise levels in exceedance of FRA's construction noise guidelines in some construction areas along the project alignment. These impacts would be temporary and intermittent. Most construction activities would occur primarily during the week between 7:00 a.m. and 7:00 p.m. to avoid noise effects during nighttime periods when receptors are most sensitive to noise. Work at turnouts, temporary passing tracks, track and overhead contact system (OCS) pole relocation, and some roadway realignments would require weekend and nighttime construction work. Nighttime construction work would also likely be required for the modification of existing underpasses to accommodate the passing track and construction of new overcrossings of a freeway or active heavy rail line (e.g., the new rail overcrossing of the I-280/SR 87 Interchange) under Alternative B. Construction noise has the potential to disrupt residents, businesses, and community facilities close to construction sites.

As described in Section 3.4, sensitive receptors are near the proposed right-of-way in all subsections. The closest residential sensitive receptors are within 20 feet of the right-of-way, where the FRA noise guidelines would be exceeded during typical track construction activities. For typical track construction scenarios, the residential nighttime 8-hour equivalent sound level (L_{eq}) criterion of 70 A-weighted decibels (dBA) would potentially be exceeded up to 500 feet from the excavation work activity, 792 feet from the earthwork and retaining wall work, and as far as 706 feet from track construction activity. Sensitive receptors at these distances would experience temporary noise levels in exceedance of the FRA noise impact criteria for up to 2 years at any given location. Parks, recreational facilities, and open-space resources within 1,000 feet of the project footprint would also experience temporary increases in noise and vibration under both project alternatives. Such construction-related impacts could create nuisance impacts that could affect the user experience. Section 3.4 provides a full description of temporary construction noise impacts.

The Authority would implement a construction management plan (CMP) prior to construction that would include noise controls to reduce construction noise levels (SOCIO-IAMF#1). The project would also incorporate NV-IAMF#1, which identifies a variety of noise reduction measures to be used during construction. These measures include:

- Building noise barriers (e.g., temporary walls, piles on excavated materials) between noisy activities and noise-sensitive resources
- Routing traffic away from residential streets where possible
- Building walled enclosures around especially noisy activities or around clusters of noisy equipment
- Combining noisy operations so that they occur in the same period
- Phasing demolition, earthmoving, and ground-impacting operations such that they do not take place concurrently
- Avoiding impact pile driving where possible in vibration-sensitive areas by requiring compliance with the FRA and FTA guidelines for minimizing construction noise and vibration impacts when work is conducted within 1,000 feet of sensitive receptors

In addition to the identified IAMF, mitigation measures to reduce noise and vibration impacts are discussed in Section 3.4.7, Mitigation Measures, of this Draft EIR/EIS.

San Francisco to South San Francisco Subsection

Residential uses in this subsection would be subject to noise impacts during construction. These impacts would be substantially similar under both project alternatives because both project alternatives would modify platforms and tracks at the 4th and King Street Station and the Bayshore Station, build an LMF with connections from the yard lead tracks to the mainline tracks, build the realigned Tunnel Avenue overpass, install four-quadrant gates and radio towers, and realign track at several locations. These construction activities, some of which could occur at night and on weekends, would generate temporary construction noise impacts where they occur near noise-sensitive land uses. Nighttime work within this subsection could be required to build the Tunnel Avenue overpass and realign tracks, and could occur within 500 feet of residences near the 4th and King Street Station and the Little Hollywood and Visitacion Valley neighborhoods in San Francisco. Construction activities for the East Brisbane LMF under Alternative A would be occur approximately 1,900 feet from the nearest residences, while construction activities for the West Brisbane LMF under Alternative B would occur 1,500 feet from residences. Sensitive receptors would experience these temporary construction noise impacts for up to 2 years at any given location. The project alternatives would be built in an existing rail corridor, which generates high levels of existing noise and vibration for adjacent land uses. In addition, the project would incorporate NV-IAMF#1 to minimize noise impacts by requiring compliance with the FRA and FTA guidelines for minimizing construction noise and vibration impacts when work is conducted within 1,000 feet of sensitive receptors. Therefore, although communities would be temporarily inconvenienced by noise and vibration during construction, it would not cause division of an established community, nor would it degrade community character or cohesion because the communities developed around the corridor and are currently exposed to high noise levels due to their proximity to the railroad corridor.

San Bruno to San Mateo Subsection

Residential uses in this subsection would be subject to noise impacts during construction, which would be the same under both project alternatives. Expansion of the Millbrae Station over a 2-year construction period and nighttime track realignment within 500 feet of residences in San Bruno, Millbrae, Burlingame, and San Mateo would contribute the most noise and vibration impacts in this subsection. The project alternatives would be built in an existing rail corridor, which generates high levels of existing noise and vibration for adjacent uses. In addition, the project would incorporate NV-IAMF#1 to minimize noise impacts by requiring compliance with the FRA and FTA guidelines for minimizing construction noise and vibration impacts when work is conducted within 1,000 feet of sensitive receptors. Therefore, although communities would be temporarily inconvenienced by noise and vibration during construction, it would not cause division of an established community, nor would it degrade community character or cohesion because the communities developed around the corridor and are currently exposed to high noise levels due to their proximity to the railroad corridor.

San Mateo to Palo Alto Subsection

The San Mateo to Palo Alto Subsection contains the greatest number of residences of any subsection, and they are in a more suburban environment. Construction of Alternative A would realign track in San Mateo, Belmont, San Carlos, Menlo Park, and Palo Alto; modify tracks and platforms at the Hayward Park and Atherton Stations; and install four-quadrant gates and radio towers. Alternative B would build an approximately 6-mile-long passing track from Ninth Street in San Mateo to Whipple Avenue in Redwood City, which would require realignment of tracks, roadway modifications, and station and platform modifications at the existing Hayward Park, Hillsdale, Belmont, and San Carlos Stations during a construction period lasting up to 4.5 years. Some of these construction activities for both project alternatives would occur at night and would be within 500 feet of residences. However, construction of passing tracks and associated track and station modifications under Alternative B would generate more noise and vibration impacts than Alternative A due to the greater level of construction activity and the proximity to sensitive receptors.

Residences adjacent to the right-of-way and other sensitive receptors such as schools, childcare facilities, hospitals, and parks would be exposed to increases in noise. However, because the project alternatives would be built in an existing rail corridor, which already generates high levels of existing noise and vibration for adjacent uses, construction noise and vibration would not affect community cohesion. The project would incorporate NV-IAMF#1 to minimize noise impacts by requiring compliance with the FRA and FTA guidelines for minimizing construction noise and vibration impacts when work is conducted within 1,000 feet of sensitive receptors. Therefore, although communities would be temporarily inconvenienced by noise and vibration during construction, it would not cause division of an established community, nor would it degrade community character or cohesion because the communities developed around the corridor and are currently exposed to high noise levels due to their proximity to the railroad corridor.

Mountain View to Santa Clara Subsection

Construction in this subsection would be limited to minor track modifications, installation of four-quadrant gates at four at-grade crossings, and four communication radio towers. Track modifications could occur at night within 500 feet of residences in Mountain View, Sunnyvale, and Santa Clara. Construction activities would be the same for both project alternatives and would last for only a few months at any given location. Although communities would be temporarily inconvenienced by noise and vibration during construction, it would not cause division of an established community, nor would it degrade community character or cohesion because the communities developed around the corridor and are currently exposed to high noise levels due to their proximity to the railroad corridor.

San Jose Diridon Station Approach Subsection

Construction in this subsection under Alternative A would realign and install new tracks in San Jose, construct new railroad overcrossings, expand the San Jose Diridon Station, install four-quadrant gates and a radio tower, and potentially upgrade equipment at a Peninsula Corridor Electrification Project traction power facility in San Jose. Construction under Alternative B would build an aerial structure that begins at either I-880 (Alternative B [Viaduct to I-880]) or at Scott Boulevard (Alternative B [Viaduct to Scott Boulevard]), aerial platforms and station improvements at the San Jose Diridon Station, track realignments, track crossovers, and would install a radio tower and a new traction power substation, resulting in temporary noise impacts. Under both project alternatives, nighttime construction could be required for track realignments, construction of new overcrossings, and roadway modifications, and would be within 500 feet of residences. Although communities would be temporarily inconvenienced by noise and vibration during construction, it would not cause division of an established community, nor would it degrade community character or cohesion because the communities developed around the corridor and are currently exposed to high noise levels due to their proximity to the railroad corridor.

Visual Quality

During the construction period, the presence of construction equipment, storage, earthmoving, and construction of structures would change the visual environment for adjacent viewers. As noted in Section 3.15, construction activities for either project alternative would increase visual disorder during ground-disturbing activities and demolition while introducing large-scale construction equipment and materials into adjacent public views. During the 4.5-year construction period, heavy equipment and associated vehicles such as cranes, dozers, graders, scrapers, and trucks, would be visible in the communities and neighborhoods RSA. Dust, material stockpiles, and other visual signs of construction would also be present and visible to nearby viewers. Depending on their location, viewers would see staging areas, worker parking, and equipment and materials storage areas, which would add industrial elements into the landscape.

Construction activities that would block views to established scenic resources for highly sensitive viewers, such as residents and recreationists, would disrupt their established patterns through altering the visual environment. The project would implement a CMP that requires screening of construction equipment to the extent feasible. Tall cranes used for construction would, however, remain visible. Section 3.15 describes the scenic resources in the RSA.

The RSA is highly urbanized, with a blend of residential, commercial, mixed-use, and industrial development that tightly hugs the rail corridor. Viewer groups along the corridor are likely

accustomed to seeing machinery, trucks, and vehicles in the area because roadway improvement projects, development projects, and rail maintenance activities require the use of such equipment. Introducing construction equipment and construction staging areas into the landscape would not represent a notable visual change. Where HSR construction would occur in the existing rail corridor (e.g., equipment staging, minor track shifts, utility relocations, modifications to existing Caltrain structures and station platforms), the changes to the visual environment would be less apparent because of the existing industrial character of the corridor and would not be expected to affect community cohesion. In the more suburban areas of the project and in areas where construction would occur outside the Caltrain right-of-way (e.g., construction of major track realignments, HSR station modifications, construction of the Brisbane LMF, roadway modifications, construction of the passing track and viaduct under Alternative B, and installation of communication radio towers and four-quadrant gates) the visual change would be more noticeable. However, alteration of the visual environment from construction activities would be temporary, and would not be expected to alter the sense of community character and belonging to a place for residents; nor would it physically divide any of the communities along the project because construction activities are a common occurrence in an urban environment. Additionally, mitigation measures to reduce visual disruption and light disturbance during construction are identified in Section 3.15.7, Mitigation Measures, of this Draft EIR/EIS.

San Francisco to South San Francisco Subsection

Construction activities within this subsection would predominantly occur in the existing right-of-way, with the exception of the Brisbane LMF, which would be built on vacant lands in the Brisbane Baylands area. Construction of the Brisbane LMF would require construction staging, excavation, grading, clearing and grubbing, building construction, and trackwork over a period of approximately 1 year. Under Alternative A, the East Brisbane LMF would be built east of the existing Caltrain right-of-way and would require the realignment of Tunnel Avenue to the east of the LMF. Under Alternative B, the West Brisbane LMF would be built west of the existing Caltrain right-of-way.

Because of the urbanized and industrialized nature of the visual setting in this subsection, construction activities would not affect visual unity and intactness to the extent that the sense of community character would be reduced or community interactions would be limited. Construction activities and equipment would not represent a visual barrier that would affect community interactions and cohesion because construction access roads and materials and equipment staging would occur adjacent to and primarily within the right-of-way, not in established neighborhoods. The Authority and its contractors would minimize impacts on visual quality during construction by screening and siting construction activities away from sensitive viewers where feasible and restoring temporary construction sites to their pre-construction condition. In addition, the Authority and its contractors would develop a CMP that would include visual protection measures designed to minimize impacts on residents and businesses (SOCIO-IAMF#1). Therefore, construction of the project alternatives in an existing rail corridor would not physically divide the communities in the San Francisco to South San Francisco Subsection because the communities developed around the corridor and currently have train and rail infrastructure in their viewsheds due to their proximity to the railroad corridor.

San Bruno to San Mateo Subsection

The visual environment transitions from urbanized and industrialized to more suburban south of San Bruno, and construction activities would be visible for residential viewers in the San Bruno, Millbrae, Burlingame, and San Mateo communities. Construction of the new HSR station facility and tracks at the existing Millbrae Station under both project alternatives would require more extensive construction activities than in other subsections, lasting for up to 2 years. Primary construction staging would be between the existing station and El Camino Real. Most construction activity would be set back from sensitive residential viewers. The Authority and its contractors would minimize impacts on visual quality during construction by screening and siting construction activities away from sensitive viewers where feasible, restoring temporary construction sites to their pre-construction condition, and developing a fugitive dust control plan to minimize fugitive dust emissions and associated visual impacts (AQ-IAMF#1). In addition, the

Authority and its contractors would develop a CMP that would include visual protection measures designed to minimize impacts on residents and businesses (SOCIO-IAMF#1).

Viewers in this subsection are likely to be accustomed to seeing machinery, trucks, and vehicles in the area because roadway improvement projects, development projects, and rail maintenance activities typical of the existing condition in the subsection require the use of such equipment. Adding industrial features into the already developed landscape would be temporary and would not alter existing community patterns of social interaction because these features are not out of character with highway and rail construction and maintenance activities in the subsection. Construction of the project alternatives in an existing transportation corridor would not physically divide the communities in the San Bruno to San Mateo Subsection because the communities developed around the corridor and currently have train and rail infrastructure in their viewsheds due to their proximity to the railroad corridor.

San Mateo to Palo Alto Subsection

Under Alternative A, track shifts and corresponding modifications to the OCS would occur predominantly within the existing right-of-way and would be similar to maintenance work regularly occurring on the railway. Modifications of existing grade crossings to provide four-quadrant gates and median barriers would employ crews and machinery viewers would be familiar with from common traffic signal and street improvement projects. Impacts from these construction activities would be similar to those previously described and familiar to viewers used to ongoing Caltrain maintenance activities. With protections in place for sensitive viewers (AQ-IAMF#1, SOCIO-IAMF#1), these construction activities would not alter existing community patterns of social interaction.

Alternative B would have a greater impact on visual quality in the northern portion of the San Mateo to Palo Alto Subsection given the track and station modifications associated with construction of the passing track that would extend through San Mateo, Belmont, San Carlos, and into the northern portion of Redwood City. Construction of the passing track would entail the construction of a wider railbed, modification of existing structures over grade-separated roadways to support the tracks, installation of additional track, and relocation of OCS poles. Construction staging associated with the passing track would occur mostly within the existing right-of-way and a 15-foot-wide TCE on either side of the existing right-of-way. While residents along Old County Road in Belmont and San Carlos under Alternative B could view construction activities that would impair their visual quality, the Authority and its contractors would screen and site activities away from sensitive viewers and restore temporary construction sites to their pre-construction condition. South of the passing track, the visual impact from construction would be the same as described for Alternative A, because the project alternatives would be the same in the southern portion of the San Mateo to Palo Alto Subsection.

For both project alternatives, visual quality impacts associated with project construction in an already developed landscape would be temporary and would not alter existing community patterns of social interaction because these features are not out of character with highway and rail construction and maintenance activities in the subsection. Construction of the project alternatives in an existing transportation corridor would not physically divide the communities in the San Mateo to Palo Alto Subsection because the communities developed around the corridor and currently have train and rail infrastructure in their viewsheds due to their proximity to the railroad corridor.

Mountain View to Santa Clara Subsection

In the Mountain View to Santa Clara Subsection, track shifts and corresponding modifications to the OCS would be similar to maintenance work regularly occurring on the railway. Modifications of existing grade crossings to provide four-quadrant gates and median barriers would employ crews and machinery that viewers would be familiar with from common traffic signal and street improvement projects. Impacts from these construction activities would be similar to those described for other subsections, and familiar to viewers used to ongoing Caltrain maintenance activities. Therefore, these construction activities would not alter existing community patterns of social interaction because these features are not out of character with highway and rail

construction and maintenance activities in the subsection. Construction of the project alternatives in an existing transportation corridor would not physically divide the communities in the Mountain View to Santa Clara Subsection because the communities developed around the corridor and currently have train and rail infrastructure in their viewsheds due to their proximity to the railroad corridor.

San Jose Diridon Station Approach Subsection

Under Alternative A, track shifts and corresponding modifications to the OCS would occur predominantly within the existing right-of-way and would be similar to maintenance work regularly occurring on the railway. Modifications of existing grade crossings to provide four-quadrant gates and median barriers would employ crews and machinery viewers would be familiar with from common traffic signal and street improvement projects. Impacts from these construction activities would be similar to those previously described, and familiar to viewers used to ongoing Caltrain maintenance activities. With protections in place for sensitive viewers (AQ-IAMF#1, SOCIO-IAMF#1), these construction activities would not alter existing community patterns of social interaction.

Under Alternative B, a new aerial viaduct and station would be constructed within this subsection using precast span construction, for which elevated guideway sections would be manufactured at a central facility and conveyed to the construction site on transporters that would move along the completed portions of the viaduct. This method would reduce the limits of construction, area of disturbance, and amount of equipment needed to build the viaduct. Because of the urbanized and industrialized nature of the visual setting in this subsection, construction activities would be unlikely to affect visual unity and intactness to the extent that the sense of community character would be reduced or community interactions would be limited. Construction activities and equipment would not represent a visual barrier that would affect community interactions and cohesion because construction access roads and materials and equipment staging would occur adjacent to and primarily within the right-of-way, not in established neighborhoods. Construction of Alternative B in an existing transportation corridor would not physically divide the communities in the San Jose Diridon Station Approach Subsection because the communities developed around the corridor and currently have train and rail infrastructure in their viewsheds.

CEQA Conclusion

The impact would be less than significant under CEQA because construction activities would not physically divide established communities due to changes in transportation, noise and vibration, and visual quality. While there would be a temporary disruption to the established community interaction patterns from the temporary circulation and access changes, these impacts would be temporary and access would be maintained. Although communities would be temporarily inconvenienced by construction-related noise and vibration increases, it would not cause division of an established community because the communities developed around the corridor and are currently exposed to high noise levels due to their proximity to the railroad corridor. Similarly, construction of the project alternatives in an existing rail corridor would not physically divide the communities because the communities developed around the corridor and currently have train and rail infrastructure in their viewsheds. Therefore, CEQA does not require any mitigation.

Impact SOCIO#2: Permanent Disruption or Division of Established Communities from Project Construction

Permanent infrastructure and associated physical changes could result in impacts on community cohesion in residential communities adjacent to the project alternatives. Community cohesion could be permanently affected by the physical division of communities, residential and business displacements, permanent road closures, and the degradation of visual quality. Community cohesion takes into consideration access and linkages, community facilities, and local businesses in the surrounding area that provide opportunities for residents to gather. Construction of permanent infrastructure would disrupt communities and neighborhoods along the alignment through changes in circulation and access (e.g., road realignments or modifications) affecting pedestrians, bicyclists, motorists, and transit; displacements and relocations; and changes to the visual environment resulting from views of infrastructure. The following evaluates whether the

permanent changes to local access, displacement of residential and commercial uses, and changes to views of visual resources would affect community cohesion and social engagement in the communities adjacent to the project alternatives.

Transportation, Circulation, and Access

The substantive permanent roadway changes would be limited to the following: the realignment of Tunnel Avenue for the East Brisbane LMF under Alternative A; the realignment of the Tunnel Avenue overpass, extension of Lagoon Road, and new southern connection of Tunnel Avenue to the intersection of Bayshore Boulevard and Valley Drive associated with the East or West Brisbane LMF under both project alternatives; the closure of Serra Avenue, widening of the Hillcrest Boulevard underpass, and extension of California Drive to Victoria Avenue on the west side of the Millbrae Station for both project alternatives; and the closure of Stockton Avenue, University Avenue, Emory Street, and Chestnut Street in San Jose to through traffic for Alternative B (either viaduct option). The remaining roadway modifications would involve widening, extending, or replacing existing grade separations. The permanent road closures in San Jose would result in localized changes in circulation and access, but these changes would be limited to minor roadways in a mostly industrial area east of the Caltrain corridor and south of I-880. As a result, these permanent road closures would not affect established patterns of community interaction nor would they physically divide an established community.

In addition, changes to circulation and access in Brisbane would be experienced most directly by adjacent industrial businesses along Tunnel Avenue and Bayshore Boulevard, and have the potential to affect emergency access and response from the Brisbane Fire Station at 3445 Bayshore Boulevard. Construction of either the East Brisbane LMF under Alternative A or the West Brisbane LMF under Alternative B would require relocation of the Tunnel Avenue overpass and extension of Lagoon Road. The relocation of the Tunnel Avenue overpass would include the relocation of the southern terminus of Tunnel Avenue from the intersection of Bayshore Boulevard/Old County Road to Bayshore Boulevard/Valley Drive, which is the primary vehicle access to and from the Brisbane Fire Station. Currently, the fire station has a driveway with exclusive access to and from the east leg of the signalized Bayshore Boulevard/Valley Drive intersection.

For Alternative A, the Brisbane Fire Station would be relocated approximately 600 feet to the south of the existing fire station, with two driveways connecting to Bayshore Boulevard. The southerly driveway for the relocated fire station would connect to the east leg of the signalized Bayshore Boulevard/Old County Road intersection (Figure 3.11-12 in Section 3.11), providing full access to Bayshore Boulevard that is equivalent to the existing level of access provided at the signalized Bayshore Boulevard/Valley Drive intersection. A second northerly driveway would connect to Bayshore Boulevard at the existing station's secondary driveway located approximately 400 feet north of Old County Road. This secondary driveway is a mid-block location that provides right-in, right-out access to northbound Bayshore Boulevard. This relocation would avoid disruption to the established community interaction patterns from permanent roadway changes, and it would not physically divide communities, access would continue to be provided, and public services would be maintained.

For Alternative B, the Brisbane Fire Station would be relocated approximately 150 feet to the south of the existing fire station, with a single driveway for the relocated fire station connecting to Bayshore Boulevard via the existing station's secondary driveway (Figure 3.11-13 in Section 3.11). As noted above, this secondary driveway is a mid-block location that provides right-in, right-out access to northbound Bayshore Boulevard. Fire trucks exiting the relocated fire station would only be able to turn northbound onto Bayshore Boulevard. To reach destinations to the south of the existing fire station, fire trucks would have to make a U-turn at the signalized Bayshore Boulevard/Valley Drive intersection. During congested conditions, fire trucks required to make this U-turn under Alternative B would experience additional delays compared to existing conditions. A mitigation measure identified in Section 3.11.7, Mitigation Measures, of this Draft EIR/EIS, would modify the driveway access control for the relocated Brisbane Fire Station under Alternative B and provide improved access from the fire station to Bayshore Boulevard, which would minimize changes in emergency vehicle response times. As a result, while there would be

a disruption to the established community interaction patterns from permanent roadway changes, this disruption would not physically divide communities, access would continue to be provided, and public services would be maintained.

The presence of new or modified station, platform, track and track alignment structures, and road realignments or modifications would have minor impacts on automobile traffic and pedestrian, bicycle, and transit circulation patterns in the communities along the project alternatives, potentially causing minor inconveniences to residents and businesses. In addition, the relocation of the Bayshore Station under both alternatives and the San Carlos Station under Alternative B would change transit access for individuals who currently walk to these facilities. However, these minor changes would not greatly affect travel times for pedestrians, bicyclists, motorists, and transit or access to communities or community facilities. In addition, access to existing roadways and communities would be maintained.

Alternative A would have 41 at-grade crossings within the Project Section, while Alternative B would have 39 at-grade crossings. Safety improvements at existing at-grade crossings that would benefit nonmotorized circulation and access include the installation of four-quadrant gates extending across all lanes of travel and median separators that would channelize and regulate paths of travel. These measures would be effective in minimizing conflicts with pedestrians and automobiles.

Because there would be only a small number of permanent road closures or realignments, access to communities and community facilities would not be disrupted, nor would community interactions change. Minor inconveniences to residents and businesses may result from roadway realignments or closures, though these inconveniences would not disrupt access or divide a community. Established social engagement patterns within communities would not change from permanent changes to the transportation system. Therefore, the permanent transportation features associated with the project alternatives would not physically divide an established community.

Displacements and Relocations

Permanent changes to the community would result from the acquisition of land outside of the existing right-of-way to accommodate construction of the track modifications, passing track, the Brisbane LMF, and modifications to the Millbrae Station and San Jose Diridon Station. Alternative A would displace 14 residential units, 48 businesses, and 3 community and public facilities. Alternative B (Viaduct to I-880) would displace 42 residential units, 171 businesses, and 6 community and public facilities. Alternative B (Viaduct to Scott Boulevard) would displace 62 residential units, 202 businesses, and 7 community and public facilities. The greater number of residential and business displacements under Alternative B would be associated with additional right-of-way acquisition required for construction of the passing track within the San Mateo to Palo Alto Subsection and viaduct construction in the San Jose Diridon Station Subsection. Table 3.12-8 shows the residential and business displacements by subsection and alternative.

Table 3.12-8 Number of Residential and Business Displacements by Subsection and Alternative

Facility	Alternative A	Alternative B ¹
San Francisco to South San Francisco Subsection		
Residential displacements	0	0
Business displacements	3	3
Community and public facility displacements	1	1
San Bruno to San Mateo Subsection		
Residential displacements	8	8
Business displacements	15	15
Community and public facility displacements	1	1

Facility	Alternative A	Alternative B ¹
San Mateo to Palo Alto Subsection		
Residential displacements	2	11
Business displacements	11	90
Community and public facility displacements	0	2
Mountain View to Santa Clara Subsection		
Residential displacements	0	0
Business displacements	0	0
San Jose Diridon Station Approach Subsection		
Residential displacements	4	23/43
Business displacements	19	63/94
Community and public facility displacements	1	2/3
Totals		
Residential displacements	14	42/62
Business displacements	48	171/202
Community and public facility displacements	3	6/7

Sources: Authority 2019e, 2019f

I- = Interstate

¹ Where differences occur, values are presented for Alternative B (Viaduct to I-880) first, followed by Alternative B (Viaduct to Scott Boulevard).

The property displacements resulting from track realignments would not cause permanent direct impacts on cities or communities because the right-of-way would not create a new physical division of city or community centers because the track alignment for both project alternatives is mostly within the Caltrain right-of-way, an existing rail corridor. Because the Caltrain corridor is an established transportation corridor, the addition of the project to this corridor would not create a new division of city or community centers, nor would it result in reductions or restrictions in access to city or community centers. In addition, because the cities around the corridor have developed and expanded around the existing right-of-way, these track realignments would not greatly change the character or function of the cities or lessen community cohesion.

Modifications at the 4th and King Street Station would not result in any residential or business displacements. However, expansion of the Millbrae Station would result in 1 residential and 14 business displacements under both alternatives. While some acquisitions would be required to accomplish the necessary station modifications, the modifications would occur at an existing Caltrain station, avoiding the creation of a new barrier or division of city or community centers and preventing any loss of community character or cohesion. The proposed HSR station could also have beneficial effects on Millbrae by enhancing the downtown area through support for the City's planning efforts to encourage higher-density, mixed-use TOD around the station, which could eventually lead to a more vibrant downtown and improved community character and cohesion. This would also help to improve the function of the city as a transportation hub.

The clusters of business displacements in Millbrae under both alternatives could affect the long-term viability of the commercial areas in which these businesses are located. In Millbrae, the business displacements would be clustered around the Millbrae Station. Many other businesses are currently located around the station that would not be affected and, due to the potential for TOD around the station, it is unlikely that these displacements around the Millbrae Station would negatively affect the businesses in the area or surrounding community under either alternative. The businesses that would be displaced are not the anchor businesses for the commercial district and they are not a substantial part of that commercial district. Therefore, their relocation would not jeopardize the long-term survival of the remaining businesses in the business district.

Construction of the Brisbane LMF under either project alternative would not require any residential displacements, but it would require three business displacements under both alternatives. However, both the East and West Brisbane LMF would be located east of and outside the surrounding developed area of Brisbane in land that is currently partially vacant. This location avoids the creation of a new barrier or division of Brisbane, preventing reductions or restrictions in access and preventing any loss of community character, function, or cohesion.

In San Mateo under Alternative B, the displacements would be west of the right-of-way and are either clustered just north of SR 92 in the Hayward Park neighborhood, or scattered along El Camino Real south of Hillsdale Boulevard in the southern portion of San Mateo. In Belmont under both alternatives, but more so under Alternative B, the business displacements would be primarily on the east side of the right-of-way, and would affect a narrow strip of businesses between the right-of-way and Old Country Road. The displacements are in a linear pattern and are currently adjacent to the Caltrain corridor. Because the linear business district extends over a long distance along the Caltrans corridor, the displaced businesses represent only a few of these businesses in the whole district. The other surrounding businesses would be able to continue operating, and the long-term viability of the area is unlikely to be affected. In addition, the businesses that would be displaced are not the anchor businesses for the district and are not a substantial part of that district. Therefore, their relocation would not jeopardize the long-term survival of the remaining businesses in the business district.

In Santa Clara and San Jose, Alternative A would be built as an at-grade blended system entirely within the Caltrain right-of-way, whereas Alternative B would be built as a dedicated HSR track alignment on viaduct predominantly within or adjacent to the existing Caltrain right-of-way. The construction of new dedicated HSR track would require a larger project footprint than the blended system, resulting in a greater number of displacements. Displacements under Alternative A would be limited to one to two buildings at major intersections such as I-880, West Taylor Street, West Santa Clara Street, and SR 87. Displacements under Alternative B would consist of commercial and industrial buildings in the area between I-880 and I-280 on the east and west sides of the alignment. Additionally, both project alternatives would displace commercial and industrial buildings around the San Jose Diridon Station. These displacements under both project alternatives would not affect community cohesion because they would occur on the edges of these neighborhoods.

As discussed in more detail under Impact SOCIO#7, the overall number of available residential units for sale and for rent within the relocation RSA (2,145 for Alternative A and 2,874 for Alternative B) exceeds the number of displaced residential units (ranging from 14 to 62) under both project alternatives. It is anticipated that there are sufficient relocation resources in the relocation RSA and in the specific communities where displacements would occur for displaced residents to relocate within the same community, which would prevent the loss of community character and cohesion.

Between two and four community and public facilities in San Mateo County have the potential to be displaced, while three community and public facilities in Santa Clara County have the potential to be displaced. While some of the affected community and public facilities would be fully displaced and require relocation, others would likely be reconfigured on their current sites. For instance, under both project alternatives, the Brisbane Fire Station on Bayshore Boulevard would require relocation and reconfiguration due to the realigned Tunnel Avenue overpass. For the facilities that would require relocation, it is anticipated that there are sufficient available replacement properties to accommodate these facilities within their existing communities, which would prevent the loss of community character and cohesion, and would preserve the function of these resources in each city.

Visual Quality

Construction of the project would primarily consist of minor changes to the existing Caltrain railway that would not change the visual quality of the railway. The locations where the project would introduce large-scale infrastructure into adjacent public views are limited to the expansion of the existing Millbrae and San Jose Diridon Stations, construction of the Brisbane LMF,

construction of the viaduct and the passing track between San Mateo and Redwood City under Alternative B, radio communication towers, and four-quadrant gates at at-grade crossings. Where this new infrastructure could not be shielded from sensitive receptors, the project would permanently alter the visual environment for some adjacent viewers under both project alternatives.

In the more heavily urbanized and industrialized portions of the project, introducing large-scale infrastructure into the landscape would not represent a notable visual change. HSR structures such as new station facilities, the Brisbane LMF, passing track and viaduct structure under Alternative B, radio communication towers, and four-quadrant gates would be predominantly within the existing Caltrain corridor. Changes to the visual environment in these areas would be less apparent because of the existing industrial character of the corridor and would not be expected to affect community cohesion. In the more suburban areas, the visual change resulting from the project would be slightly more noticeable. However, HSR structures would still be in the existing Caltrain corridor, and would have only minor impacts on the cities and communities in the RSA. Section 3.15 provides additional information.

Along the corridor, viewer groups are likely to be accustomed to seeing large-scale transportation infrastructure such as US 101, I-280, I-380, SR 82, SR 92, and SR 237 near the project. The visual changes from new heavy rail infrastructure would not be expected to alter the sense of community character and belonging to a place for residents. Alteration of the visual environment from new rail infrastructure would not physically divide any of the communities along the project corridor because the communities developed around the corridor and currently have train and rail infrastructure in their viewsheds.

San Francisco to South San Francisco Subsection

Because of the urbanized and industrialized nature of the visual setting in this subsection, the additional of new transportation infrastructure would not affect visual unity and intactness to the extent that the sense of community character would be reduced or community interactions would be limited. The new transportation infrastructure, which includes the new facilities around the 4th and King Street Station (station platforms to provide level boarding for HSR trains, adding ticketing facilities and fare gates, and new signage), the Brisbane LMF, four-quadrant gates, and OCS modifications would not represent a visual barrier that would affect community interactions and cohesion because transportation infrastructure would occur adjacent to and primarily within the right-of-way, not in established neighborhoods. Improvements at the 4th and King Street Station would be perceived as minor changes to the existing and long-established railway corridor, as the exterior appearance of the station building would be unchanged except for new signage. The siting of the Brisbane LMF would be consistent with current industrial and vacant uses in the vicinity of the sites for both project alternatives. The few buildings in Brisbane adjacent to the existing Caltrain right-of-way are generally single-story industrial facilities, and the nearest residences are on San Bruno Mountain nearly 1 mile south of the site. Although either the East or West Brisbane LMF would reduce the amount of open space between Brisbane and San Francisco, it would not block prominent landscape features and would generally be consistent with the existing visual character of the area. Therefore, the presence of the project alternatives in an existing rail corridor would not physically divide the communities or change the community character or cohesion in the San Francisco to South San Francisco Subsection because the communities developed around the corridor and currently have train and rail infrastructure in their viewsheds due to their proximity to the railroad corridor.

San Bruno to San Mateo Subsection

The visual environment transitions from urbanized and industrialized to more suburban south of San Bruno. The modifications to the existing Millbrae Station, including the demolition of commercial buildings along the east side of El Camino Real to accommodate surface parking lots, and the construction of the new HSR station building would be visible to some residential viewers on the west side of the corridor in Millbrae. Buildings immediately surrounding the station are generally one-story buildings. However, along El Camino Real, there are a handful of taller, four- to five-story mixed-use buildings. The addition of transportation infrastructure into the already developed landscape would not alter existing community patterns of social interaction

because these features are not out of character with the existing rail corridor. In addition, the heights of the new HSR structures would blend in with and be consistent with the existing visual character of the area. Therefore, the presence of the project alternatives in an existing transportation corridor would not physically divide the communities or change the community character or cohesion in the San Bruno to San Mateo Subsection because the communities developed around the corridor and currently have train and rail infrastructure in their viewsheds due to their proximity to the railroad corridor.

San Mateo to Palo Alto Subsection

Under Alternative A, minor changes to the existing Caltrain railway would be visible for residential viewers in the subsection, but it would be contained primarily within the existing transportation corridor. Under Alternative B, construction of the passing track would require an expansion of the existing right-of-way, resulting in the acquisition and demolition of residences and businesses in San Mateo, Belmont, and San Carlos. This would cause degraded visual quality in this subsection under Alternative B. Despite this reduced visual quality, expansion of transportation infrastructure in the already developed landscape would not alter existing community patterns of social interaction because these features are not out of character with the existing rail corridor. In addition, building heights generally range from one story to six stories adjacent to the Caltrain right-of-way, with San Mateo and Redwood City generally having more tall buildings than cities such as Belmont and Atherton. The new HSR structures would blend in with and be consistent with the existing visual character and building heights of the areas. Therefore, the presence of the project alternatives in an existing transportation corridor would not physically divide the communities or change the community character or cohesion in the San Mateo to Palo Alto Subsection because the communities developed around the corridor and currently have train and rail infrastructure in their viewsheds due to their proximity to the railroad corridor.

Mountain View to Santa Clara Subsection

In this subsection, minor changes to the existing Caltrain railway would be visible for residential viewers. Adding transportation infrastructure into the already developed landscape would not alter existing community patterns of social interaction because these features are not out of character with the existing rail corridor. In addition, building heights generally range from one story to six stories adjacent to the Caltrain right-of-way, depending on the specific area of each city. The downtown areas, particularly near the existing Caltrain stations in Mountain View and Sunnyvale, have more tall buildings than other areas of this subsection. The new HSR structures would blend in with and be consistent with the existing visual character and building heights of the areas. Therefore, the presence of the project alternatives in an existing transportation corridor would not physically divide the communities or change the community character or cohesion in the Mountain View to Santa Clara Subsection because the communities developed around the corridor and currently have train and rail infrastructure in their viewsheds due to their proximity to the railroad corridor.

San Jose Diridon Station Approach Subsection

Under Alternative A, minor changes to the existing Caltrain railway would be visible for adjacent viewers within this subsection. Adding transportation infrastructure into the already developed landscape would not alter existing community patterns of social interaction because these features are not out of character with the existing rail corridor. Under Alternative B, a new viaduct structure and station would be constructed to accommodate HSR service through the landscape unit. The viaduct, at a height of more than 60 feet above grade to pass over roads and highways, would be taller than most surrounding homes, offices, and other buildings adjacent to the railway corridor. Because of the urbanized and industrialized nature of the visual setting in this subsection, the introduction of the new viaduct structures would not affect visual unity and intactness to the extent that the sense of community character would be reduced or community interactions would be limited. Viaducts would not represent a visual barrier that would affect community interactions and cohesion because transportation infrastructure would occur adjacent to and primarily within the right-of-way, not through established neighborhoods. Presence of the project alternatives in an existing rail corridor would not physically divide the communities in the San Jose Diridon Station Approach Subsection.

CEQA Conclusion

The impact would be less than significant under CEQA because HSR infrastructure would not physically divide established communities. Rail infrastructure would occur within an existing transportation corridor. Because there would be a very small number of permanent road closures or new grade separations, access to communities and community facilities would not be disrupted, nor would community interactions change. Minor inconveniences to residents and businesses may result from roadway realignments or closures, although these changes would not disrupt access or divide a community. Established social engagement patterns within communities would not change from permanent changes to the transportation system. Therefore, the permanent transportation features associated with the project alternatives would not physically divide an established community.

Regarding displacements and relocations, it is anticipated that there are sufficient relocation resources within the relocation RSA and in the specific communities where displacements would occur for displaced residents to relocate within the same community (detailed under Section 3.12.6.4), which would prevent the division of an established community. Construction of the project would require the physical alteration of government facilities—the realignment of the Tunnel Avenue overpass would require reconfiguration of the Brisbane Fire Station under both project alternatives—but because emergency access and response times would be maintained, the reconfiguration would not be expected to result in substantial environmental impacts.

In terms of impacts from changes in visual quality, the presence of the project alternatives in an existing rail corridor would not physically divide the communities or change the community character or cohesion in the Project Section because the communities developed around the corridor and currently have train and rail infrastructure in their viewsheds due to their proximity to the railroad corridor. Therefore, CEQA does not require any mitigation.

Operations Impacts

HSR operations would involve scheduled train travel along the HSR line through the Project Section, as well as inspection and maintenance along the track and railroad right-of-way and at stations and the Brisbane LMF, and on structures, fencing, power system, positive train control, and communications. O&M activities are described in Chapter 2.

Impact SOCIO#3: Permanent Disruption or Division of Established Communities from Project Operations

Most of the impacts of division or disruption to communities along the project alignment would occur during construction and are discussed under Impact SOCIO#1 and Impact SOCIO#2. After construction, community members would use new transportation routes and would not be affected by construction traffic, noise, dust, or visual impacts. New community interactions would take place, and the HSR alignment would become part of the visual and functional environment in which these communities exist. New station operations as well as operations at the Brisbane LMF would result in increased traffic around these new facilities, noise, and light and glare, which could affect community cohesion in San Francisco, Brisbane, Millbrae, and San Jose.

Transportation, Circulation, and Access

When operational, the HSR system would divert vehicle trips from airports and other intercity travel hubs, and shift vehicle trips to train trips. This diversion of trips, even with the addition of new trips at the stations and LMF, would change regional and statewide travel patterns. Overall, the impact of these shifts and changes would be a reduction in vehicle miles traveled (VMT). By 2040, the project would reduce overall VMT in San Francisco County by 0.9 percent, in San Mateo County by 1.8 percent, and in Santa Clara County by 1.7 percent. This reduction in VMT would be the same for both project alternatives because ridership and trip diversion associated with the project alternatives would be the same.

Operation of the project would, however, result in increases in vehicle congestion and delay at intersections from increased traffic generated by project trips at the 4th and King Street Station, Millbrae Station, Brisbane LMF, and San Jose Diridon Station. Increases in vehicle congestion and delay at intersections would also result from increases in train service with a corresponding

increase in the total time that railroad crossing four-quadrant gates are down at at-grade crossings. The increased gate-down time would make it take longer for vehicles, bicycles, and pedestrians to cross the right-of-way, and would increase the time required for the crossing, thus increasing congestion and delay. This could lead to weakened cohesion between cities that cross the right-of-way. The increased vehicle congestion would be very similar under both project alternatives and would occur within each subsection. Table 3.12-9 summarizes the intersections by subsection that would experience increased congestion and delay under 2029 and 2040 conditions.

Table 3.12-9 Summary in Intersection Congestion and Delay by Subsection

Area and Condition	Existing No. of Intersections Operating at LOS E or F	Additional No. of Intersections with Adverse Effects under Alternatives A and B		
		Total	AM Peak	PM Peak
San Francisco to South San Francisco Subsection				
4th and King Street Station area (2029)	15	9	5	8
At-grade crossings (2040)	7	6	5	4
Brisbane LMF area (2040)	4	2	0	2
San Bruno to San Mateo Subsection				
Millbrae Station area (2040)	11	10	3	10
At-grade crossings (2040)	34	22	17	16
San Mateo to Palo Alto Subsection				
At-grade crossings (2040)	41	27	18	22
Mountain View to Santa Clara Subsection				
At-grade crossings (2040)	11	8	8	6
San Jose Diridon Station Approach Subsection				
At-grade crossings under Alternative A (2040)	25	11	11	6
At-grade crossings under Alternative B (2040)	26	16	13	9

Sources: Authority 2019e, 2019f
 LMF = light maintenance facility
 LOS = level of service

Each subsection would experience delays at affected intersections from added gate-down time. The following lists the increase in delays from added gate-down time at the at-grade crossings and the most affected intersections. Additional information on this topic can be found in Section 3.2.

- San Francisco to South San Francisco Subsection**—Under 2040 Plus Project conditions, delay increases at affected intersections would range from 3 seconds to 72 seconds. The greatest increase in delays would occur at intersections adjacent to the 16th Street at-grade crossing in San Francisco (72-second increase) and the Linden Avenue at-grade crossing in South San Francisco (22-second increase).
- San Bruno to San Mateo Subsection**—Under 2040 Plus Project conditions, delay increases at affected intersections would range from 1 second to 169 seconds. The greatest increase in delays would occur at intersections adjacent to the Oak Grove Avenue at-grade crossing in Burlingame (169-second increase), the Bayswater Avenue at-grade crossing in Burlingame

(145-second increase), and the Peninsula Avenue at-grade crossing in San Mateo (107-second increase).

- **San Mateo to Palo Alto Subsection**—Under 2040 Plus Project conditions, delay increases at affected intersections would range from 1 second to 387 seconds. The greatest percent increase in delays would occur at intersections adjacent to the Meadow Drive at-grade crossing in Palo Alto (187-second increase), the Churchill Avenue at-grade crossing in Palo Alto (334-second increase), and the Brewster Avenue at-grade crossing in Redwood City (387-second increase).
- **Mountain View to Santa Clara Subsection**—Under 2040 Plus Project conditions, delay increases at affected intersections would range from 6 seconds to 132 seconds. The greatest percent increase in delays would occur at intersections adjacent to the Moffett Boulevard/Castro Street at-grade crossing in Mountain View (175-second increase) and the Rengstorff Avenue at-grade crossing in Mountain View (114-second increase).
- **San Jose Diridon Station Approach Subsection**—For Alternative A under 2040 Plus Project conditions, delays at intersections adjacent to the Auzerais Avenue and West Virginia Street at-grade crossings would increase partially as a result of added gate-down time at these locations. The Bird Avenue/Auzerais Avenue intersection, adjacent to the Auzerais Avenue grade crossing, delay would increase from 82 seconds to 129 seconds (47-second increase). The Harrison Street/West Virginia Street intersection, adjacent to the West Virginia Street intersection, delay would increase from 7 seconds to 8 seconds (1-second increase). There would be no increase in delay due to added gate-down time under Alternative B.

The increased delays at the listed intersections would weaken community cohesion in these communities because it would make it more difficult and increase the time it would take to cross the right-of-way. This inconvenience could cause people to change their behaviors or how they interact with their community. For example, people could choose to drive farther to grade-separated crossings (e.g., Embarcadero Road and University Avenue in Palo Alto) to avoid delays at at-grade crossings (e.g., Churchill Avenue and Palo Alto Avenue in Palo Alto), which could increase congestion and delay in places with grade separations. Also, people could change the locations in which they shop in order to avoid using an at-grade crossing. This could lead to weakened community cohesion near at-grade crossings with greater delays due to increased length of lines of idling vehicles extending into neighborhoods.

Both project alternatives would also add project-related trips and increase gate-down time at at-grade rail crossings, which would affect nine high-frequency bus routes (routes with service every 15 minutes or less): San Francisco Municipal Railway Routes 30, 45, and 55, SamTrans ECR, SamTrans Route 296, VTA routes 181, 22, 64, and DASH. Increased traffic congestion along these routes would affect bus performance, for which mitigation has been identified in Section 3.2.7, Mitigation Measures.

However, the project would provide improved safe and accessible bike and pedestrian facilities in the form of new or modified underpasses or overpasses and four-quadrant gates at at-grade crossings. Facilities would be designed to the latest standards and guidance and would provide adequate access. Pedestrian and bicycle accessibility would be provided and maintained and would be prioritized over motor vehicle access. More details on the impacts on circulation and access during operations are presented in Section 3.2.

Although community cohesion would be weakened during project operation from increased congestion and delay, the project alternatives would not physically divide the communities because the project would operate within the existing Caltrain corridor that currently travels through these communities, and because access would be maintained or improved to neighborhoods, businesses, and community and public facilities.

Noise and Vibration

Operation activities would permanently and intermittently increase ambient noise levels in exceedance of the FRA's noise guidelines in some areas along the project corridor. Operation

noise would disrupt residents, businesses, or community facilities close to the rail line primarily during daytime hours. Operational noise impacts would be similar under both project alternatives. In 2029, Alternatives A and B would both result in zero moderate and severe impacts in the San Francisco to South San Francisco Subsection. In 2040, Alternative A would result in 1,758 severe impacts and 4,296 moderate impacts on sensitive receptors, Alternative B (Viaduct to I-880) would result in 1,648 severe impacts and 4,186 moderate impacts on sensitive receptors, and Alternative B (Viaduct to Scott Boulevard) would result in 1,628 severe impacts and 4,141 moderate impacts on sensitive receptors. Operations noise impacts would occur primarily as a result of an increase in the number of train passby events per day (more than double existing train volumes), increased speeds of both Caltrain and HSR trains, and horn sounding at at-grade crossings. In 2040, moderate and severe noise impacts would predominantly occur in the San Bruno to San Mateo and San Mateo to Palo Alto Subsections where residential uses are close to the existing rail corridor. See Section 3.4 for a full description of noise impacts. FRA noise impact criteria for human annoyance are based on the comparison of existing outdoor noise levels and future outdoor noise levels from the project. Moderate impact means the change in noise level is noticeable to most people, but may not be sufficient to cause strong, adverse reactions from the community. Project-generated noise in the severe impact range can be expected to cause a substantial percentage of people to be highly annoyed by the new noise levels. See Section 3.4 for additional information on how these impacts are calculated and where they would be located.

Operation of HSR stations would provide only a minor contribution to the overall noise generated by project operations, avoiding disruptions or divisions of the community. Because the dominant noise source at HSR stations would be train operations, the minor contribution of traffic within the station and Brisbane LMF parking facilities would not generate noise levels in excess of standards for a severe impact established by FRA. However, increased traffic generated by project trips at the 4th and King Street Station in 2029 would result in noise level increases greater than or equal to 3 decibels (dB) at two roadway segments. In 2040, increased traffic generated by project trips at the San Jose Diridon Station would result in noise level increases greater than or equal to 3 dB at four roadway segments under Alternative A and five roadway segments under Alternative B.

Vibration impacts are separated into ground-borne vibration impacts and ground-borne noise impacts. The ground-borne noise impacts are limited to the existing Caltrain tunnels in San Francisco. In 2040, Alternative A would result in 2,493 ground-borne vibration impacts on sensitive receptors and 18 ground-borne noise impacts on sensitive receptors. Alternative B (Viaduct to I-880) would result in 2,307 ground-borne vibration impacts on sensitive receptors and 18 ground-borne noise impacts, while Alternative B (Viaduct to Scott Boulevard) would result in 2,366 ground-borne vibration impacts and 18 ground-borne noise impacts. The vibration impacts would occur in all five subsections and would occur primarily as a result of an increase in the number of train passby events per day and increased speeds of both Caltrain and HSR trains. These operational noise and vibration impacts could disrupt established communities by reducing student learning or outdoor recreational activities.

Parks, recreational facilities, and open-space resources would also experience permanent increases in noise and vibration under both project alternatives. Impacts would occur at parks adjacent to the right-of-way under both project alternatives because the new source of noise from project operations, including train O&M activities, could degrade the user experience at adjacent parks. Refer to Section 3.14 for a comprehensive discussion of the impacts on parks, recreational facilities, and open-space resources, and Chapter 4 for a description of the Section 4(f) impacts.

These operational noise impacts could lead to a slight weakening of community cohesion throughout the RSA. However, because the project would be almost entirely within the existing Caltrain corridor, these severe noise impacts would not substantially affect the community character or divide the cities and communities in the RSA because these communities already experience noise and vibration associated with train operations along the Caltrain corridor and because the communities developed around the corridor and currently experience high noise levels due to their proximity to the railroad corridor.

Visual Quality

Visual quality could also be affected by operation of the alternatives, mainly by light and glare. Operation of project would not substantially increase lighting levels at the 4th and King Street Station, Millbrae Station, or San Jose Diridon Station because they are existing transit facilities that are lit throughout the night. New lighting for HSR facilities would be concentrated at the Brisbane LMF where various buildings and facilities would be lit through the night and would be visible from upland residential areas in Brisbane. Train operations would also introduce increased frequency of intermittent light along the corridor.

Because the project corridor is either urbanized and industrialized or suburban, changes from operations would be minimal. In addition, both project alternatives would operate within the existing Caltrain corridor, causing the changes to the visual environment to be less apparent because the visual changes would be consistent with the existing character of the corridor. Therefore, visual changes from project operations would not be expected to affect community cohesion because the communities developed around the corridor and currently have train and rail infrastructure in their viewsheds due to their proximity to the railroad corridor.

CEQA Conclusion

The operations impact on disruption or division of communities would be less than significant under CEQA because ongoing operations would not physically divide established communities. Although community cohesion could be weakened during project operation from increased congestion and delay, the project alternatives would not physically divide the communities because the project would operate in the existing Caltrain corridor that currently travels through these communities, and because access would be maintained or improved to neighborhoods, businesses, and community and public facilities.

Regarding noise and vibration, because the project would be almost entirely within the existing Caltrain corridor, severe noise impacts would not divide the cities and communities in the RSA because these communities already experience noise and vibration associated with train operations along the Caltrain corridor, and because the communities developed around the corridor and currently experience high noise levels due to their proximity to the railroad corridor.

In terms of impacts on visual quality, because the project corridor is either urbanized and industrialized or suburban, changes from operations would be minimal. In addition, both project alternatives would operate in the existing Caltrain corridor, causing the changes to the visual environment to be less apparent because the visual changes would be consistent with the existing character of the corridor. Therefore, visual changes from project operations would not physically divide cities or communities in the RSA because they developed around the corridor and currently have train and rail infrastructure in their viewsheds due to their proximity to the railroad corridor. Therefore, CEQA does not require any mitigation.

3.12.6.3 *Children's Health and Safety Impacts*

This section describes potential impacts on children's health and safety as a result of construction and operations of the project alternatives. Potential impacts on children's health and safety include potential respiratory impacts associated with air quality, noise impacts on health and learning, EMF/EMI, exposure to hazardous materials, and potential safety risks to children.

No Project Impacts

Development in the region to accommodate population and employment growth would continue under the No Project Alternative, resulting in associated direct and indirect impacts on children's health and safety. Other future development would occur on currently vacant land or as infill development, which could be adjacent to or near locations where children congregate. Section 3.18 identifies planned and other reasonably foreseeable future projects anticipated to be built in the region to accommodate projected growth. This future development includes shopping centers, industrial parks, transportation projects, and residential projects. These future development projects have the potential to affect children's health and safety during their construction and operation. All future public development projects under the No Project Alternative would be required to minimize impacts on children's health and safety through federal, state, or local

controls, such as local noise regulations and regional air quality controls, and would undergo their own environmental reviews.

Project Impacts

Construction Impacts

Impact SOCIO#4: Temporary Impacts on Children’s Health and Safety from Project Construction

During construction, children could experience temporary health and safety impacts related to air quality, noise and vibration, EMF/EMI, and safety and security. Table 3.12-10 shows the number of schools/childcare facilities within 1,000 feet of construction that could experience adverse health impacts. There are 117 schools and childcare facilities within 1,000 feet of construction for Alternative A and 122 within 1,000 feet for Alternative B. Those sensitive receptors would experience greater health risks from exposure to construction air quality emissions, noise and vibration, EMF/EMI, and safety and security issues. As shown in Table 3.12-10, the most impacts on sensitive receptors would occur in the San Mateo to Palo Alto Subsection under both alternatives. This analysis focuses on schools and childcare facilities because that is where children spend the most time.

Table 3.12-10 Number of Schools/Childcare Facilities within 1,000 Feet of Project Construction

Subsection	Alternative A	Alternative B
San Francisco to South San Francisco Subsection	19	19
San Bruno to San Mateo Subsection	28	28
San Mateo to Palo Alto Subsection	51	53
Mountain View to Santa Clara Subsection	11	11
San Jose Diridon Station Approach Subsection	8	11
Total	117	122

Air Quality

As noted in Section 3.3, construction of the project alternatives would generate emissions that could contribute to changes in regional air quality. Impacts on children could occur in the areas immediately adjacent to the locations of construction activity and within 1,000 feet of construction activity, where elevated pollutant concentrations could lead to an increase in health risks and affect quality of life. Depending on the localized level of dust and emissions from construction activities, families could experience disruption if outdoor activities are curtailed because of poor air quality. Decrease in air quality could particularly affect schools and childcare facilities in the children’s health and safety RSA. (Refer to Section 3.3 for a full discussion of these construction impacts.) Although fugitive dust could present a nuisance to some recreational users of parks, these impacts would result in minor disruptions to normal use of parks and other recreational and open-space resources. Therefore, the use and functions of these resources would not be prevented or diminished by fugitive dust emissions. (Refer to Section 3.14 for a comprehensive discussion of the impacts of project construction on parks and recreational facilities.)

Those schools and childcare facilities within 1,000 feet of construction would experience greater health risks from exposure to construction emissions. As noted in Section 3.3, construction activities would not generate construction emissions in excess of applicable local air district health risk thresholds or criteria. However, it is anticipated that the use of heavy construction equipment and trucks could generate fugitive dust emissions that would contribute to existing violations of the state ambient air quality standards for particulate matter 10 microns in diameter or less and particulate matter 2.5 microns in diameter or less, which could be harmful to children.

AQ-IAMF#1 would reduce the potential for construction activities to generate dust, further minimizing the health risks to children. Dust control measures would be required and implemented during construction, including watering areas where demolition and excavation would occur, covering all haul vehicles traveling on public roads to limit dust emissions, cleaning all trucks and equipment before exiting the construction site, and suspending any dust-generating activities when average wind speed exceeds 25 miles per hour, reducing the potential impacts on children's health from fugitive dust.

Construction emissions would be somewhat greater under Alternative B due to construction of the passing track in the San Mateo to Palo Alto Subsection. Construction activities under both project alternatives would also result in daily nitrogen oxide emissions, and construction activities under Alternative B would result in reactive organic gas emissions that would exceed the Bay Area Air Quality Management District's threshold, which would be harmful to children's health. Construction-related criteria pollutant concentrations would lead to new exceedances of the state or national air quality standards. The project would also minimize off-gassing emissions of volatile organic compounds (VOC) that would occur from paints and other coatings by requiring the use of low-VOC paint that has a lower VOC content than that required by Bay Area Air Quality Management District rules (AQ-IAMF#2), all of which would minimize project impacts on children's health. AQ-IAMF#3, AQ-IAMF#4, and AQ-IAMF#5 would further reduce emissions from construction equipment. Additionally, the Authority has identified mitigation measures to avoid, minimize, or compensate for certain impacts on air quality, as discussed in Section 3.3.7, Mitigation Measures, of this Draft EIR/EIS, which would reduce the construction air quality emissions impacts on children's health. Construction emissions, including fugitive dust and greenhouse gases, would not be expected to be in substantial enough concentration that the health of children would be compromised and would not affect the quality of life in the communities in the RSA.

Noise and Vibration

Construction of the project alternatives would occur near residences, parks, schools and childcare facilities, and other facilities where children congregate, and would subject these facilities to temporary severe noise impacts. This noise would result from demolition and loud construction activities such as jackhammering and pavement removal, heavy trucks and earthmoving equipment, and other power equipment. These impacts are discussed comprehensively in Section 3.4. Construction activities could increase ambient noise levels in exceedance of the FRA's construction noise guidelines and could generate vibration levels sufficient to cause human annoyance. Construction generally would be limited to the hours between 7:00 a.m. and 7:00 p.m. to avoid noise impacts during nighttime periods; however, this period is when children are likely to be at home, in childcare, or at parks, schools and childcare facilities, and other facilities that could be near construction sites. For example, Garfield Elementary School and Palo Alto High School are adjacent to the project in the San Mateo to Palo Alto Subsection. In total, 117 schools and childcare facilities are within 1,000 feet of construction for Alternative A, and 122 schools and childcare facilities are within 1,000 feet for Alternative B, as shown in Table 3.12-10. Severe construction noise could temporarily disrupt children's learning ability and lead to increased stress, which could, in turn, affect children's health. Those schools and childcare facilities within 1,000 feet of construction would be exposed to greater levels of construction noise.

The Authority would implement a CMP (SOCIO-IAMF#1) prior to construction that includes actions pertaining to noise controls such as noise barriers between noisy activities and noise-sensitive receptors; combining noisy operations so they occur in the same period; avoiding impact pile driving where possible in vibration-sensitive areas; and phasing demolition, earthmoving, and ground-impacting operations to be conducted in nonstandard time periods, to minimize impacts on children's health and safety and community facilities (NV-IAMF#1, SOCIO-IAMF#1). Mitigation to reduce noise and vibration during construction is discussed in Section 3.4.7 of this Draft EIR/EIS.

EMF/EMI

Construction activities would not result in increased exposure of EMF/EMI to children. Construction equipment generates low levels of EMF, and the only EMI that might be generated during construction would be licensed radio transmissions between construction vehicles. Such communications would only affect construction workers working at the construction site. There would be no disproportionate impacts related to children's health and safety because children would not be present at the construction sites, and levels of EMF/EMI outside the construction site would be below levels considered harmful to humans.

Hazardous Materials and Wastes

Construction of the project alternatives would involve transporting, using, and disposing of construction-related hazardous materials and wastes. Potentially, such construction could result in accidental spills or releases of hazardous materials and wastes and result in temporary hazards to children. Generally, only small quantities of hazardous materials are transported or used at any given time, and state and federal regulations include stringent precautions for the transport, handling, and disposal of hazardous materials. Project features (HMW-IAMF#1, HMW-IAMF#4, HMW-IAMF#5, HMW-IAMF#6, HMW-IAMF#7, HMW-IAMF#8, HMW-IAMF#9, HMW-IAMF#10) would prevent the use of extremely hazardous substances or mixtures thereof in a quantity equal to or greater than the state threshold within 0.25 mile of a school or childcare facility, which exceeds the RSA of 1,000 feet. In addition to these IAMFs, mitigation has been identified to reduce risks of exposure to hazardous materials near schools as discussed in Section 3.10.7, Mitigation Measures, of this Draft EIR/EIS. Therefore, there would be no disproportionate impacts on children's health and safety.

Safety and Security

The Authority has incorporated several additional safety measures as part of the design and construction of the project to reduce or avoid impacts on children's health and safety. The construction safety transportation management plan (SS-IAMF#1) would describe the contractor's coordination efforts with local jurisdictions for maintaining emergency vehicle access. The plan would also specify the contractor's procedures for implementing temporary road closures, such as maintaining access to residences and businesses during construction, lane closures, signage and flag persons, temporary detour provisions, alternative bus and delivery routes, emergency vehicle access, and alternative access locations. The Authority has adopted a safety and security management plan applicable to all HSR project sections (SS-IAMF#2) to guide the safety and security activities, processes, and responsibilities during construction to protect the safety and security of the public, further reducing the potential exposure of children to construction site safety hazards. The Authority would also implement a CTP (TR-IAMF#2) that would include minimization practices such as provisions for safe pedestrian and bicycle passage or detours. Avoiding conflicts with other modes of transit or pedestrians is discussed in greater detail in Section 3.2. Local access programs, such as Safe Routes to Schools, would be maintained or enhanced through review of existing or planned Safe Routes to Schools with school districts and emergency responders to incorporate roadway modifications that maintain existing traffic patterns and fulfill response route and access needs during project construction. The Authority would coordinate with affected school districts to minimize disruption in school operations for those schools adjacent to construction (SOCIO-IAMF#4).

Conclusion

There would be no disproportionate temporary construction impacts on children's health and safety from noise and vibration, air quality, EMF/EMI, hazardous materials and wastes, or safety and security. The project features discussed in the preceding sections would be implemented to minimize impacts on children's health and safety. Additionally, mitigation measures are proposed for circulation and access, air quality, and noise and vibration to address impacts related to all members of the population, including children. All of these project features would minimize the exposure of children to health and safety risks. There would be no disproportionate impacts on children's health and safety.

CEQA Conclusion

There is no specific requirement in California for an analysis of children's health impacts, separate from that of other individuals. Therefore, this section does not provide CEQA significance conclusions related to specific impacts on children.

Impact SOCIO#5: Permanent Impacts on Children's Health and Safety from Project Construction

Neither project alternative is expected to have an adverse impact on children's health and safety due to permanent construction effects from HSR infrastructure. Construction of Alternative A would not require the acquisition of any community facilities where children congregate. However, Alternative B would require the acquisition of the Universe of Colors Preschool in San Mateo and would require the acquisition of a storage building at Bellarmine College Preparatory in San Jose. It is anticipated that there are sufficient available properties to accommodate relocation of this preschool within its existing community (see Impact SOCIO#9), avoiding a long-term impact on children's health and safety. It is also anticipated that the storage building at Bellarmine College Preparatory could be replaced on-site because there is sufficient vacant space on the property. The Authority must comply with the Uniform Act, as amended, and as identified in SOCIO-IAMF#2 and develop a relocation mitigation plan, in consultation with affected cities and counties and property owners (SOCIO-IAMF#3). These project features are discussed in more detail under Impact SOCIO#7.

Both project alternatives would install safety improvements (e.g., four-quadrant gates, median barriers) at at-grade crossings—Alternatives A and B would modify 40 and 38 at-grade crossings, respectively. The Authority would also install fencing at the at-grade crossings and along the perimeter of the Caltrain corridor. Consistent with Caltrain's design standards, existing fencing would be extended to adjacent structures to close any gaps. These safety modifications would improve safety for children, particularly for those who walk or bike across the right-of-way. They would also aim to keep children from accessing the track area. Therefore, there would be no disproportionate impact on children's health and safety.

CEQA Conclusion

There is no specific requirement in California for an analysis of children's health impacts, separate from that of other individuals. Therefore, this section does not provide CEQA significance conclusions related to specific impacts on children.

Operations Impacts**Impact SOCIO#6: Permanent Impacts on Children's Health and Safety from Project Operations****Noise and Vibration**

Neither project alternative is expected to have an adverse impact on children's health and safety over the long term of the HSR operations. Both project alternatives would result in noticeable operational noise that could subject schools and childcare facilities, parks, and recreational facilities to noise and vibration from train operations, although the noise and vibration would be intermittent and of short duration as an HSR train passes by. This brief and intermittent exposure to severe and moderate noise and vibration impacts would not be expected to result in long-term health impacts on children.

Air Quality

Operation of the project, as a component of the overall HSR system, would have beneficial effects on regional air quality, thus providing a healthier environment for children. Long-term operation of the HSR system would reduce criteria pollutant emissions, relative to No Project conditions, resulting in a regional and local air quality benefit. Increased station traffic would not result in localized carbon monoxide (CO) hot spots or exceedances of the CO national or state standards. In addition, an operational health risk assessment (HRA) was performed, as discussed in Section 3.3. The HRA determined that the track modifications that would shift freight operations would generally result in decreased cancer and noncancer health risks, relative to existing conditions, because in the future, freight would operate more to the interior of the right-of-way.

These decreases occur primarily because of advancements in locomotive emissions control technology and the retirement of older, higher-emitting engines, which would reduce future diesel particulate matter emission rates. The reduction in future locomotive emission rates are sufficient to offset the increased risk associated with relocating freight service closer to existing receptors, compared to existing conditions. Thus, children's health and safety would not be compromised by project operations.

EMF/EMI

HSR operations would result in permanent, but intermittent, EMF exposure to passengers (general public, including children) on the HSR train station platforms or on trains. However, EMFs generated during operations of the HSR system would fall well below the applicable maximum permissible exposure limits; consequently, children would not be exposed to a documented EMF health risk. Exposure of children outside of the HSR system (e.g., nearby adjacent businesses, residences, hospitals, schools and childcare facilities, parks, other facilities) to magnetic and electric fields from HSR operations would also not exceed the maximum permissible exposure limits, avoiding impacts on children's health and safety.

Hazardous Materials and Wastes

Operations of the project alternatives would require the use of hazardous materials, which could affect children's health and safety. Along most of the corridor, the use of hazardous materials would be limited to the periodic use of herbicides in the right-of-way to control weeds and the use of greases to lubricate switching equipment along the trackway. However, under both alternatives at the Brisbane LMF, maintenance of trains would use materials and chemicals during operations. The quantities of hazardous materials used and wastes generated by the HSR operations would be small compared to wastes generated by other transportation services (e.g., conventional passenger automobiles or air travel, which use petroleum-based vehicle fuel as the primary means of power) and commercial or industrial facilities. However, the potential exists for improper handling of hazardous materials and wastes to result in routine and accidental releases during the transport of hazardous materials and wastes during HSR operations, affecting children's health and safety. Such potential risk to children's health and safety would occur intermittently as hazardous materials or wastes are used or generated.

Prior to operations, the Authority would require hazardous materials plans (HMW-IAMF#10). Preparation of and compliance with these plans would minimize the potential for impacts from hazardous materials and wastes used during HSR operations. During operations, contractors and HSR personnel would comply with applicable state and federal regulations, such as the Resource Conservation and Recovery Act; the Comprehensive Environmental Response, Compensation, and Liability Act; the Hazardous Materials Release Response Plans and Inventory Law; and the Hazardous Waste Control Act (HMW-IAMF#7, HMW-IAMF#8, HMW-IAMF#9). These regulations would apply throughout the Project Section to avoid and prevent accidental release of hazardous materials or wastes during transport, use, or disposal, minimizing the risks to children's health and safety.

Safety and Security

Prior to the start of operations, the Authority would develop the safety and security management plan (SS-IAMF#2), which includes system safety program plans, rail safety standards, worker safety standards, crime prevention design guidelines, safety and health plans, fire/life safety programs, security plans, and emergency procedures that would be followed to maintain the safety and security of all members of the public, including children. While train accidents that could pose a risk to children could still occur, where at-grade crossings would remain, four-quadrant gates would be installed to create a "sealed corridor." These gates would extend across all lanes of travel, and median separators would channelize and regulate paths of travel. These types of improvements would block all lanes of travel and prevent vehicles from going around the lowered gate arms by traveling in opposing lanes, which would protect children inside the vehicles and children walking or bicycling across the right-of-way. In addition, pedestrian crossing gates would be constructed parallel to the tracks, and aligned with the vehicular gates on either side of the roadway. These measures would be effective in reducing conflicts with pedestrians and automobiles, minimizing the risk to children's health and safety. The Authority would also

install fencing at the at-grade crossings and along the perimeter of the Caltrain corridor. Consistent with Caltrain's design standards, existing fencing would be extended to adjacent structures to close any gaps. These safety modifications would improve safety for children, particularly for those who walk or bike across the right-of-way. They would also aim to keep children from accessing the track area. There would be no disproportionate impact on children's health and safety. These safety improvements would also improve the safety of the designated walking routes to schools that are in the RSA and that cross the right-of-way. This would result in a long-term safety benefit for children in the RSA.

Conclusion

There would be no disproportionate impacts on children's health and safety from noise and vibration, air quality, EMF/EMI, hazardous materials and wastes, or safety and security. The project features discussed in the preceding sections would be implemented to minimize impacts on children's health and safety. Additionally, mitigation measures described in Section 3.12.7, Mitigation Measures, would be proposed to address impacts related to all members of the population, including children. All the aforementioned project features would minimize the exposure of children to health and safety risks during operations.

CEQA Conclusion

There is no specific requirement in California for an analysis of children's health impacts, separate from that of other individuals. Therefore, this section does not provide CEQA significance conclusions related to specific impacts on children.

3.12.6.4 Property Displacements and Relocations Impacts

The Authority would need to acquire property that would result in the permanent acquisition of a portion or the entirety of a parcel of land to build the project alternatives. This acquisition may affect both land uses and buildings or structures on the property. This section summarizes the displacements that would occur for construction of the project alternatives and presents the relocation capacity within the property displacements and relocations RSA. The Draft Relocation Impact Reports (Authority 2019c, 2019d) provide complete information on displacements and relocation.

No Project Impacts

Development in the region to accommodate the population and employment growth would continue under the No Project Alternative, resulting in associated direct and indirect impacts on existing residences, commercial and industrial businesses, and community facilities. Other future development would occur on currently vacant land or as infill development on purchased private land. Section 3.18 identifies planned and other reasonably foreseeable future projects anticipated to be built in the region to accommodate projected growth. This future development includes shopping centers, industrial parks, transportation projects, and residential projects. All future public development projects under the No Project Alternative would be required to conform to state and federal relocation statutes to provide assistance for displaced residents, commercial and industrial businesses, and community and public facilities to address and minimize these impacts.

Project Impacts

Construction Impacts

This section summarizes the residential, commercial and industrial, and community and public facility displacements that would result from the construction of the project alternatives and presents the relocation capacity in the RSA. The Draft Relocation Impact Reports (Authority 2019c, 2019d) provide complete information on property displacements and relocations. All displacements and relocations would occur as a result of project construction; operation would not require further displacements of any residences, commercial and industrial businesses, or community and public facilities, and the topic is not discussed further.

Table 3.12-11 shows the number and type of property displacements that would occur under each of the project alternatives. Construction of Alternative B would result in greater numbers of displacements of all property types due to a wider footprint associated with the passing track.

Table 3.12-11 Estimated Displacements

Property Type	Alternative A	Alternative B ¹
Residential units	14	42/62
Commercial and industrial businesses	48	171/202
Community and public facilities	3	6/7
Total property displacements	65	219/271

Sources: Authority 2019c, 2019d

¹ Values are presented for Alternative B (Viaduct to I-880) first, followed by Alternative B (Viaduct to Scott Boulevard).

Impact SOCIO#7: Displacements and Relocations of Residences from Project Construction

Table 3.12-12 shows the estimated number of displaced residential units by alternative, location, and housing type. While this analysis was conducted using the displacement RSA, for simplicity only the cities and communities where displacements would occur are included in these tables. Alternative A would displace 14 residential units on 11 properties, Alternative B (Viaduct to I-880) would displace 42 residential units on 32 properties, and Alternative B (Viaduct to Scott Boulevard) would displace 62 residential units on 29 properties. The residential displacements under Alternatives A and B would be a combination of single-family and multifamily residential. Neither alternative would displace mobile homes, while neither Alternative A nor Alternative B (Viaduct to I-880) would displace affordable housing.

Table 3.12-12 Estimated Number of Displaced Residential Units by Housing Type and Alternative

Location	Residential Properties Acquired	Single-Family Residences	Multifamily Residences	Total Residential Units
Alternative A				
San Bruno	4	1	6	7
Millbrae	1	1	0	1
Belmont	1	1	0	1
Palo Alto	1	1	0	1
San Jose	4	4	0	4
Totals	11	8	6	14
Percent displacements by type	N/A	57%	43%	100%
Alternative B¹				
San Bruno	4	1	6	7
Millbrae	1	1	0	1
San Mateo	2	2	0	2
Belmont	6	4	4	8

Location	Residential Properties Acquired	Single-Family Residences	Multifamily Residences	Total Residential Units
Palo Alto	1	1	0	1
Santa Clara	0/1	0	0/25	0/25
San Jose	18/14	21/18	2/0	23/18
Totals	32/29	30/27	12/35	42/62
Percent displacements by type	N/A	71%/43%	29%/57%	100%

Source: Authority 2019c, 2019d

I- = Interstate

N/A = not applicable

¹ Values are presented for Alternative B (Viaduct to I-880) first, followed by Alternative B (Viaduct to Scott Boulevard).

Table 3.12-13 shows the estimated number of displaced residential units and estimated number of residents by geographic locations for each project alternative. Alternative A would displace 14 residential units and approximately 41 residents, Alternative B (Viaduct to I-880) would displace 42 residential units and approximately 121 residents, and Alternative B (Viaduct to Scott Boulevard) would displace 62 residential units and approximately 181 residents (Authority 2019c, 2019d). The average size of the displaced residential units is 1,656 square feet per unit under Alternative A, 1,601 square feet per unit under Alternative B (Viaduct to I-880), and 1,726 square feet per unit under Alternative B (Viaduct to Scott Boulevard). The most residential unit displacements would occur in San Bruno under Alternative A, and in San Bruno, Belmont, Santa Clara, and San Jose under Alternative B. The text following the table describes the residential displacements by city/community under the project alternatives.

Table 3.12-13 Estimated Number of Residential Displacements by Alternative

Alternative/Geographic Area	Residential Units Displaced		Estimated Number of Residents to Be Relocated ¹	
	Number	Percent	Number	Percent
Alternative A				
San Bruno	7	50	20	50
Millbrae	1	7	3	7
San Mateo	0	0	0	0
Belmont	1	7	3	7
Palo Alto	1	7	3	7
San Jose	4	29	12	29
Total	14	100	41	100
Alternative B²				
San Bruno	7	17/11	20	17/11
Millbrae	1	2	3	2
San Mateo	2	5/3	6	5/3
Belmont	8	19/13	20	17/11
Palo Alto	1	2	3	2

Alternative/Geographic Area	Residential Units Displaced		Estimated Number of Residents to Be Relocated ¹	
	Number	Percent	Number	Percent
Santa Clara	0/25	0/40	0/75	0/41
San Jose	23/18	55/29	69/54	57/30
Total	42/62	100	121/181	100

Sources: Authority 2019c, 2019d

The numbers of displaced persons are approximate and have been rounded.

¹ The numbers of displaced persons are estimated based on 2010 U.S. Census data averages of number of people per household for each county, city, and community of the resource study area (shown in Tables 5-9 and 5-11 in the San Francisco to San Jose Community Impact Assessment [Authority 2019a] and Tables 5-9 and 5-11 in the San Jose to Merced Community Impact Assessment [Authority 2019b]).

² Values are presented for Alternative B (Viaduct to I-880) first, followed by Alternative B (Viaduct to Scott Boulevard). These two viaduct options are only applicable to Santa Clara and San Jose. Therefore, only one number is shown for other cities.

Residential displacements in San Bruno would occur under both alternatives. Both project alternatives would require acquisition of additional rights-of-way in San Bruno for track modifications. Due to the proximity of existing development, this right-of-way acquisition would displace the same three duplexes and one single-family home east of the right-of-way and south of I-380 near the intersection of Walnut Street and Montgomery Avenue under both alternatives. In Millbrae, both alternatives would result in one single-family residential displacement west of the station on Serra Avenue.

Two single-family residences would be displaced in San Mateo under Alternative B. They would be in the Hayward Park neighborhood west of the right-of-way where additional right-of-way acquisition would be required to build the new four-track passing track. Alternative A would not displace any residential units in San Mateo.

In Belmont, one single-family unit would be displaced along Old County Road south of Ralston Street under Alternative A at the location of a communication radio tower. Alternative B would displace four single-family residences and two multifamily units in Belmont. These displacements would occur along Old County Road, east of the right-of-way (one of which is the same single-family unit affected under Alternative A), where additional right-of-way acquisition would be required to build the passing track. Lastly, one single-family residence would be displaced in Palo Alto under both project alternatives. This house is west of the alignment on Park Boulevard, next to Robles Park, and acquisition may be required for a communication radio tower.

Alternative B (Viaduct to Scott Boulevard) would displace a 25-unit multifamily residential property adjacent to the south side of the existing Caltrain tracks and south of De La Cruz Boulevard in Santa Clara. These multifamily residential buildings are managed by Charities Housing, and provide subsidized, affordable housing and on-site childcare for survivors of domestic abuse and their children. Alternatives A and B (Viaduct to I-880) would have no residential displacements in Santa Clara. In San Jose, residential displacements under both project alternatives predominantly consist of single-family residences close to the existing San Jose Diridon Station and in the neighborhood of Auzerais/Josefa.

Some of the displaced residents could be members of sensitive populations, such as elderly, disabled, or LEP groups. These sensitive populations would require additional relocation assistance.

Availability of Replacement Properties

The Authority performed a gap analysis to determine if replacement properties would likely be available to displaced residents. The Authority used real estate listings in October 2018 to identify 763 available residential units for sale and 1,382 for rent in the relocation RSA for Alternative A, and 975 available residential units for sale and 1,899 for rent in the relocation RSA for Alternative B. The relocation RSA for Alternative A includes the cities of San Bruno, Millbrae, Belmont, Palo Alto, and San Jose, while the relocation RSA for Alternative B also includes San Mateo and Santa Clara. The likely available relocation properties identified were a combination of single-

family and multifamily residences. In addition, a number of characteristics of the likely available properties were analyzed, including the number of units, average price per month for rentals, average residence size, average lot size, average bed/bath, and average year built. Based on this analysis, the characteristics of the likely available properties are sufficiently broad to cover the needs of displaced property owners. Further discussion of availability of replacement housing that considers these additional characteristics of the acquired property (e.g., parcel size, assessed value, parcel acreage, type of property) is included in Chapter 6, Relocation Resources and Relocation Plan, of the Draft Relocation Impact Reports (Authority 2019c, 2019d).

The overall number of available residential units for sale and for rent under Alternative A and B (2,145 and 2,874, respectively) substantially exceeds the 14 displaced residential units under Alternative A, the 42 displaced residential units under Alternative B (Viaduct to I-880), and the 62 displaced residential units under Alternative B (Viaduct to Scott Boulevard). This analysis supports that there would likely be sufficient relocation resources in the relocation RSA and in the specific cities where displacements would occur for displaced residents to relocate within the same city.

The Authority must comply with the Uniform Act, as amended, as identified in SOCIO-IAMF#2. The Uniform Act requires that an agency provide notification to all affected property owners of the agency's intent to acquire an interest in their property. This notification includes a written offer of just compensation. A right-of-way specialist is assigned to each property owner to assist him or her through the acquisition process. The Uniform Act also provides benefits to displaced individuals to assist them financially and with advisory services related to relocating their residence or business operation. Benefits are available to both owner occupants and tenants of either residential or business properties. Owners of private property have federal and state constitutional guarantees that their property would not be acquired or damaged for public use unless owners first receive just compensation. Just compensation is measured by the "fair market value," where the property value is considered to be the highest price that would be negotiated on the date of valuation. The value must be agreed upon by a seller who is willing, not obliged, to sell, but under no particular or urgent necessity and by a buyer who is ready, willing, and able to buy but under no particular necessity. Both the owner and the buyer must deal with the other with the full knowledge of all the uses and purposes for which the property is reasonably adaptable and available (Code of Civil Procedure § 1263.320a).

In addition, before any acquisitions occur, the Authority would develop a relocation mitigation plan, in consultation with affected cities, counties, and property owners (SOCIO-IAMF#3). In addition to establishing a program to minimize the economic disruption of relocation, the relocation mitigation plan would be written in a style that also enables it to be used as a public-information document. The relocation mitigation plan would provide affected property and business owners and tenants a high level of individualized assistance when acquisition is necessary and the property owner desires to relocate.

CEQA Conclusion

The impact under CEQA would be less than significant because construction of the project alternatives would not result in the displacement of a substantial number of existing housing units or necessitate the construction of replacement housing elsewhere. There would likely be sufficient available residential properties in the RSA to accommodate displaced residents within the same community. Displaced residents would be supported in their efforts to find replacement housing in accordance with the Uniform Act, which provides benefits to displaced individuals to assist them financially and with advisory services related to relocating their residence. The Authority would develop a relocation mitigation plan for all displaced properties in consultation with affected cities and counties. Therefore, CEQA does not require any mitigation.

Impact SOCIO#8: Displacements and Relocations of Commercial and Industrial Businesses from Project Construction

For the purpose of this analysis, commercial and industrial businesses include facilities used for retail, offices, manufacturing, and warehouses; and other types of businesses. This section

summarizes the estimated number of displaced commercial and industrial facilities as a result of the project alternatives.

Table 3.12-14 shows estimated numbers of displaced commercial and industrial businesses by alternative. While this analysis was conducted using the property displacements and relocations RSA, for simplicity only the cities and communities in which displacements would occur are included in the table. In the RSA, the number of commercial and industrial displacements include 48 displacements on 46 properties under Alternative A, 171 displacements on 133 properties under Alternative B (Viaduct to I-880), and 202 displacements on 154 properties under Alternative B (Viaduct to Scott Boulevard). Alternative B (both options) would displace more commercial and industrial businesses than Alternative A. The median size of the 34 displaced commercial buildings is 6,810 square feet under Alternative A, ranging from 590 to 35,228 square feet per unit. The median size of the 14 industrial businesses displaced under Alternative A is 35,608 square feet, ranging in size from 135 square feet to 209,455 square feet. Under Alternative B (both viaduct options), the median size of the displaced commercial buildings is 6,699 square feet, ranging from 398 to 192,505 square feet per unit. The 37 industrial businesses displaced under Alternative B (both viaduct options) range from 112 to 108,213 square feet, with a median size of 11,355 square feet.

Table 3.12-14 Estimated Number of Displaced Commercial and Industrial Businesses

Location	Commercial/Industrial Properties Acquired	Commercial Businesses	Industrial Businesses	Total
Alternative A				
Brisbane	3	1	2	3
Millbrae	13	14	0	14
San Mateo	1	1	0	1
Belmont	9	10	0	10
Palo Alto	1	1	0	1
San Jose	19	7	12	19
Total	46	34	14	48
Alternative B¹				
Brisbane	3	1	2	3
Millbrae	13	14	0	14
San Mateo	10	21	2	23
Belmont	50	52	13	65
San Carlos	2	2	0	2
Palo Alto	1	1	0	1
Santa Clara	2/28	2/34	0/2	2/36
San Jose	52/47	41/40	20/18	61/58
Total	133/154	134/165	37/37	171/202

Sources: Authority 2019c, 2019d

¹ Values are presented for Alternative B (Viaduct to I-880) first, followed by Alternative B (Viaduct to Scott Boulevard).

Under Alternative A, the greatest number of commercial and industrial displacements would occur in San Jose (19 of the 48 displacements) and Millbrae (14 of the 48 displacements). The types of businesses most affected by displacement under Alternative A are those categorized as “retail trade.” This category covers a number of different types of businesses, including automobile-related businesses, building material supply stores, home furnishing stores, miscellaneous store retailers, and nonstore retailers (OMB 2017).

Alternative B would have more commercial and industrial business displacements than Alternative A. Under Alternative B (Viaduct to I-880), the greatest number of businesses would be displaced in Belmont (65 of the 171 displacements), followed by San Jose (61 of the 171 displacements) and San Mateo (23 of the 171 displacements). Under Alternative B (Viaduct to Scott Boulevard), the greatest number of businesses would be displaced in Belmont (65 of the 202 displacements), followed by San Jose (58 of the 202 displacements) and Santa Clara (36 of the 202 displacements). The types of businesses most affected by this alternative are “retail trade,” “transportation and warehousing,” and “accommodation and food services,” which includes lodging, food services, and drinking places (OMB 2017).

Business displacements in Brisbane would occur under both project alternatives. Alternative A would displace two industrial businesses and one commercial business east and west of the existing Caltrain corridor near Tunnel Avenue; these displacements would be associated with the East Brisbane LMF and the realigned Tunnel Avenue overpass. Alternative B would displace two industrial businesses and one commercial business, which would be along Bayshore Boulevard and adjacent to the existing Caltrain corridor near Tunnel Avenue; these displacements would be associated with the West Brisbane LMF and the realigned Tunnel Avenue overpass. One of the industrial businesses and the commercial business displaced under Alternative A would also be displaced under Alternative B. The displaced businesses in Brisbane are generally warehouses and various outbuildings with the exception of one retail greenhouse.

In Millbrae, Alternatives A and B would both displace 14 businesses, all of which are commercial businesses. Most of these businesses are along El Camino Real west of the Millbrae Station and include a range of businesses, including home renovation, auto body repair, restaurants, dental care, art shops, rehabilitation facilities, and real estate offices. One of these displaced businesses under both project alternatives includes the Millbrae Serra Convalescent Hospital in Millbrae. Although this is categorized as a commercial business, the facility has 125 beds and provides extended-stay nursing care to seniors with varying levels of disabilities.

Alternative A would displace one business, an auto body shop, in San Mateo to accommodate a communication radio tower east of the San Mateo Caltrain Station. Alternative B would displace 23 businesses in San Mateo, including auto repair shops, restaurants, offices, retail shops, shopping center, and two industrial businesses, including the same business that Alternative A would displace. Most of these displaced businesses are west of the right-of-way and are either clustered just north of SR 92 in the Hayward Park neighborhood, or scattered along El Camino Real south of Hillsdale Boulevard in the southern portion of San Mateo. These business displacements would result from additional right-of-way acquisition required to build the passing track.

In Belmont, Alternative A would displace 10 businesses, most of them auto-related businesses east of the right-of-way along Old County Road between Ralston Avenue and Harbor Boulevard. Under Alternative B there would be 65 displaced businesses due to additional right-of-way acquisition required to build the passing track. These displacements would include the same auto-related businesses displaced by Alternative A, along with others such as warehouses, outbuildings, home renovation stores, print shops, offices, restaurants, and a dance studio. Business displacements under Alternative B in Belmont would be primarily on the east side of the right-of-way, and would affect a narrow strip of businesses between the right-of-way and Old Country Road.

Alternative B would displace two automobile shops in San Carlos at the intersection of El Camino Real and Saint Francis Way, and an interior design business in Palo Alto east of the right-of-way

and just north of Lincoln Avenue. Alternative A would not displace any businesses in San Carlos, but would displace the same interior design business in Palo Alto.

Business displacements in Santa Clara would occur under Alternative B but not under Alternative A. The greatest number would occur under Alternative B (Viaduct to Scott Boulevard). Most of the displaced businesses are adjacent to the east side of the existing Caltrain tracks between Scott Boulevard and De La Cruz Boulevard, and include mixed-use commercial and industrial buildings, automotive sales and services, and a manufacturing facility.

Business displacements in San Jose under both project alternatives are generally east of the existing Caltrain tracks and concentrated between the alignment's crossing of I-880 and I-280. Alternative A would displace 19 businesses, while Alternative B (Viaduct to I-880) would displace 61 businesses and Alternative B (Viaduct to Scott Boulevard) would displace 58 businesses. The types of businesses displaced in San Jose include automotive sales and services, food and drink, retail stores and shopping centers, wholesale distributors, storage facilities, and gas stations.

The number of displaced employees was estimated by a review of the U.S. Bureau of Labor Statistics data on employment and number of businesses within each subsector. Alternative A would affect an estimated 862 employees, compared to 2,782 employees under Alternative B (Viaduct to I-880), and 3,062 employees under Alternative B (Viaduct to Scott Boulevard). These employees represent a range of skill levels, from lower-skilled workers (e.g., accommodations, food services) to higher-skilled workers (e.g., manufacturing, construction, finance, insurance). Lower-skilled workers are more unlikely to follow the company to a new location if that new location is outside the original city, due to inability to commute farther, or a desire to not to. These workers may instead choose to seek other employment in their immediate location.

Availability of Replacement Properties

The Authority performed a gap analysis to determine if replacement properties would likely be available to displaced commercial and industrial businesses. A review of available properties as potential relocation sites for commercial and industrial facilities identified 666 commercial or industrial buildings for sale or rent in the relocation RSA for Alternative A, and 784 commercial or industrial buildings for sale or rent in the relocation RSA for Alternative B, including two parcels of land zoned for commercial or industrial use for sale or for rent (Authority 2019c, 2019d). These potential relocation properties included industrial facilities, offices, retail spaces, health care assisted living facilities, and flex properties that could be used for offices, retail, or other uses. Approximately 93 percent of these facilities were concentrated in San Mateo, Palo Alto, Santa Clara, and San Jose, with the remaining 7 percent distributed in Brisbane, Millbrae, Belmont, and San Carlos. Further discussion of availability of replacement businesses based on additional characteristics of the acquired property is included in the Draft Relocation Impact Reports (Authority 2019c, 2019d).

The 568 available commercial facilities for sale or for lease in the relocation RSA for Alternative A exceed the 34 displaced commercial facilities under Alternative A. The 677 commercial facilities for sale or lease in the relocation RSA for Alternative B exceed the 134 displaced commercial facilities under Alternative B (Viaduct to I-880) as well as the 165 displaced commercial facilities under Alternative B (Viaduct to Scott Boulevard). There would likely be sufficient commercial relocation resources in the relocation RSA. However, at the community level, displaced commercial businesses, including auto-related businesses, may be unable to relocate within the same community because the available commercial facilities might not be in proximity to the displaced businesses. Insufficient commercial relocation resources were available in Millbrae and Belmont under both project alternatives. Displaced commercial businesses in these communities may need to relocate to a neighboring community, where more commercial facilities are available for sale or lease.

The number of available industrial facilities for sale or for lease (98) exceeds the number of industrial displacements under Alternative A (14). Under Alternative B (both options), the number of available industrial facilities for sale or for lease (107) exceeds the total number of industrial displacements (37). There would likely be sufficient industrial relocation resources in the relocation RSA. However, at the community level, displaced industrial businesses may be unable

to relocate within the same community because the available facilities might not be close to the displaced businesses. Insufficient industrial relocation resources would be available in Brisbane under both alternatives and in Belmont under Alternative B. Displaced industrial businesses in these cities may need to relocate to a neighboring city, where more industrial facilities are available for sale or lease.

As described in detail under Impact SOCIO#7, the Authority must comply with the Uniform Act, as amended, as identified in SOCIO-IAMF#2. The Uniform Act requires that an agency provide notification to all affected property owners of the agency's intent to acquire an interest in their property. In addition, before any acquisitions occur, the Authority would develop a relocation mitigation plan, in consultation with affected cities and counties and property owners (SOCIO-IAMF#3). The relocation mitigation plan would provide affected property and business owners and tenants a high level of individualized assistance when acquisition is necessary and the property owner desires to relocate.

CEQA Conclusion

In accordance with Section 15064(e) of the CEQA Guidelines, "economic and social changes resulting from a project shall not be treated as significant effects on the environment." Therefore, no CEQA conclusions are made related to commercial and industrial business displacements and relocations.

Impact SOCIO#9: Displacements and Relocation of Community and Public Facilities from Project Construction

Community and public facilities include services and institutions the local populations rely on for their health and welfare and as a means to interact with other members of the community. This section summarizes the estimated number of displaced community and public facilities as a result of the project alternatives. Within the property displacements and relocations RSA, Alternative A would displace three community and public facilities, Alternative B (Viaduct to I-880) would displace six, and Alternative B (Viaduct to Scott Boulevard) would displace seven. All of these community and public facilities are in San Mateo and Santa Clara Counties.

Table 3.12-15 shows the community and public facilities that have the potential to be displaced by the project alternatives, and describes the nature of the impacts. Some of the affected community and public facilities would be fully displaced and require relocation, while other properties would likely have enough land on the current parcel to be reconfigured on their current sites and avoid relocation.

Table 3.12-15 Community and Public Facility Displacements by Alternative

Facility and Location	Type	Description	Alternative		Impact
			A	B	
Brisbane Fire Station 3455 Bayshore Boulevard, Brisbane	Public safety	The Brisbane Fire Station on Bayshore Boulevard is operated by the North County Fire Authority, which serves an approximately 60-square-mile area and over 185,000 residents in Daly City, Brisbane, and Pacifica. The site includes parking, a fire station building, and a storage facility.	X	X	Construction of the Tunnel Avenue overpass under Alternatives A and B would require relocation of the Brisbane Fire Station. It is anticipated that the fire station and the parking area could be reconfigured south of the existing location.

Facility and Location	Type	Description	Alternative		Impact
			A	B	
Millbrae Station Historic Depot 108 California Drive, Millbrae	Other	The Millbrae Station Historic Depot, also called the Millbrae Train Museum, is adjacent to the Millbrae BART/Caltrain Intermodal Station and is operated by the Millbrae Historical Society.	X	X	For both Alternatives A and B, the track modifications that would require acquisition of additional rights-of-way through Millbrae would involve the relocation of the Millbrae Station Historic Depot. It is anticipated that the depot would be reconfigured on the same property.
Universe of Colors Preschool 178 South Boulevard, San Mateo	School	The Universe of Colors Preschool is on South Boulevard in Hayward Park. This preschool offers a Spanish immersion experience with the option of French enrichment classes, after-school services, and summer camps. The site includes a school building and associated outdoor areas.		X	Right-of-way acquisition for construction of the passing track under Alternative B would require full acquisition of the building. The school could not remain on the current property and would require relocation.
Homeless Cat Network 856 Old County Road, Belmont	Other	The Homeless Cat Network just north of the Belmont Caltrain Station on Old County Road is a nonprofit, no-kill cat rescue organization serving the San Mateo County area.		X	Right-of-way acquisition for construction of the passing track under Alternative B would require full acquisition of the building. The shelter could not remain on the current property and would require relocation.
Templo La Hermosa 56 South Montgomery Street, San Jose	Religious facility	The Templo La Hermosa is just east of the San Jose Diridon Caltrain Station on South Montgomery Street and is a Spanish-speaking church that offers Mass and Sunday School.	X	X	Requires full acquisition.
San Jose Taiko Conservatory 565 North 5 th Street, San Jose	Other (cultural facility)	The San Jose Taiko Conservatory is east of the College Park Caltrain Station on North 5th Street and is a cultural center. The Conservatory offers nationally recognized programs, like tour residencies, the Junior Taiko program, adult recreational class, public and corporate workshops, school outreach programs, Taiko Intensives, and Master Classes.		X	Requires full acquisition.

Facility and Location	Type	Description	Alternative		Impact
			A	B	
Bellarmine College Preparatory 960 West Hedding Street, San Jose	School	The Bellarmine College Preparatory is just west of the College Park Caltrain Station on West Hedding Street and is an all-boys private Catholic school. The site includes several school buildings, associated outdoor areas, a pool, and baseball and football fields.		X ¹	Alternative B (Viaduct to Scott Boulevard) requires acquisition and demolition of a storage building adjacent to the athletic fields on Hedding Street. The primary buildings would be unaffected. It is anticipated that the site could be reconfigured to replace the storage buildings.

Source: Authority 2019c, 2019d

BART = Bay Area Rapid Transit

HSR = high-speed rail

¹ Impacts on Bellarmine College Preparatory would be limited to Alternative B (Viaduct to Scott Boulevard).

Both project alternatives would affect the Brisbane Fire Station on Bayshore Boulevard across from Valley Drive due to construction of the realigned Tunnel Avenue overpass. For Alternative A, the fire station and parking area would be relocated 600 feet to the south of the existing fire station on an adjoining vacant property, with two driveways connecting to Bayshore Boulevard. For Alternative B, the fire station and parking area would be relocated 150 feet to the south of the existing fire station on the same property but would remove the Brisbane Fire Station's direct and exclusive access to the signalized Bayshore Boulevard/Valley Drive intersection. Both alternatives would also affect the Millbrae Station Historic Depot, also known as the Millbrae Train Museum. The museum would be relocated approximately 100 feet north and 40 feet west of its current location. The relocation of the Millbrae Station Historic Depot is part of the project and would be required to accommodate track modifications at Millbrae Station. The Templo La Hermosa, a church, would also require full acquisition under both alternatives.

In addition to the Brisbane Fire Station, the Millbrae Station Historic Depot, and Templo La Hermosa, Alternative B would displace four other community and public facilities—a preschool in San Mateo, a nonprofit animal shelter in Belmont, a cultural center in San Jose, and partial acquisition of a high school in San Jose. These facilities would be affected by the additional right-of-way acquisition required to build the passing track through San Mateo and Belmont and viaduct through San Jose. The Authority would coordinate with the relevant service providers to support the continued provision of services through either temporary or permanent relocation, and the provision of technical and financial assistance.

It is anticipated that the preschool and animal shelter could be relocated to available commercial properties identified under Impact SOCIO#8 because the types of buildings needed for these community facilities are substantially similar to commercial property buildings. The Templo La Hermosa and San Jose Taiko Conservatory could also be relocated to available commercial properties, but the available commercial buildings would likely require additional modifications to be usable as a church and Taiko Conservatory. Approximately 93 percent of these potentially available facilities are in San Mateo, Palo Alto, Santa Clara, and San Jose, with the remaining 7 percent located in Brisbane, Millbrae, Belmont, and San Carlos. There would likely be sufficient relocation resources for community and public facilities in the relocation RSA.

CEQA Conclusion

The impact under CEQA would be less than significant because relocation of these community and public facilities would not result in substantial physical impacts associated with the provision of new or physically altered governmental facilities. In addition, there would be no need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times, or other performance objectives for any of the public services, including fire protection, police protection, schools, parks, and other public facilities. Each affected facility would either be relocated or

reconfigured to support continued use of the facility. Therefore, CEQA does not require any mitigation.

3.12.6.5 Economic Impacts

The following discussions address possible economic impacts from the construction of the project alternatives. Potential impacts include changes to employment and population, school district funding, and property and sales tax revenues.

No Project Impacts

Development in the three-county region to accommodate the population and employment increase would continue under the No Project Alternative. Section 3.18 identifies planned and other reasonably foreseeable future projects anticipated to be built in the region to accommodate projected growth, including shopping centers, industrial parks, transportation projects, and residential developments. These projects would further encourage population, housing, and job growth, resulting in direct and indirect impacts on the local and regional economy. These projects would result in changes to property tax revenues, sales tax revenues, school funding and enrollment, employment opportunities, and government services to support planned population growth. Whether these projects contribute to increasing or decreasing property tax revenues, sales tax revenues, or school district funding or enrollment depends on the individual project and whether it increases the value of the property, the degree to which construction and operation of the project would generate temporary or permanent employment, and whether property displacements would be required for project construction. It is likely though that these projects would increase employment opportunities and would contribute to increased government services to support planned population growth. All development projects under the No Project Alternative would be required to conform to federal and state relocation statutes to provide assistance for displaced properties to address and minimize these impacts.

Project Impacts

Construction Impacts

Impact SOCIO#10: Temporary Impacts on Employment from Project Construction

Temporary impacts on employment could result from project construction. Section 3.17 and Volume 2, Appendix 3.17-A present the range of capital and construction cost estimates for both project alternatives. Alternative A is estimated to have lower capital costs and local construction costs than Alternative B. Local construction costs⁵ range from \$765 to \$1,345 million. Both project alternatives are expected to increase local and regional employment beyond what would be experienced under the No Project Alternative, and the scale of the impact is comparable for both project alternatives.

The construction of either of the project alternatives would result in new near-term construction and construction-related employment. The contractor would hire firms to provide services for project construction, as well as hire workers directly, most of whom would be from the three-county region. Some workers with very specialized skills may be hired from outside the region and work at the construction site for short periods. Purchases in local cities and communities by the contractor and expenditures by construction workers also would indirectly increase the demand for workers in the region.

The demand for construction workers would also create a demand for additional indirect and induced workers to fill jobs in other sectors of the economy. This would result in an increased demand for 1,708 annual job-years for Alternative A, 2,690 annual job-years for Alternative B (Viaduct to I-880), and 3,140 annual job-years for Alternative B (Viaduct to Scott Boulevard). Added to the demand for construction workers, the project employment impacts would total an estimated 4,620 annual job-years for Alternative A, 6,950 annual job-years for Alternative B

⁵ For the purposes of this analysis, local construction costs are defined as those spent in San Francisco, San Mateo, and Santa Clara Counties.

(Viaduct to I-880), and 8,110 annual job-years for Alternative B (Viaduct to Scott Boulevard). If added to the three-county region's projected total construction employment for 2024 (about 2,325,600), these peak year direct construction jobs would add only about 0.05, 0.07, or 0.09 percent, respectively, to the total projected construction industry employment in the region, which is not substantial in the context of the three-county region's overall economy.

CEQA Conclusion

In accordance with Section 15064(e) of the CEQA Guidelines, "economic and social changes resulting from a project shall not be treated as significant effects on the environment." Therefore, no CEQA conclusions are made related to temporary construction employment changes.

Impact SOCIO#11: Permanent Impacts on School District Funding from Project Construction

Construction of the project could affect school district funding in the economic impacts RSA. These impacts include: school district funding decreases resulting from student relocations, decreased school district funding resulting from reduced property tax revenue, and potentially increased school district costs for operation of bus routes. The following subsections analyze each of these topics. The details of this analysis and complete results by school district can be found in the Community Impact Assessments (Authority 2019a, 2019b).

Student Relocations

The potential impact of residential unit displacements on school district funding was evaluated based on estimated reductions in student populations in school districts. School district funding is partially dependent on student attendance, and the relocation of large populations of students outside their current school districts could therefore reduce funding for the affected school districts.

The locations of residential displacements were examined in relation to elementary, secondary, and unified school district boundaries in San Francisco, San Mateo, and Santa Clara Counties to determine the estimated student relocations due to residential displacements in each school district. The boundaries of these school districts overlap, because secondary school districts often serve an aggregation of elementary school districts. To be conservative, the Authority counted residential displacements where school districts overlap in both districts.

The number of affected students in each school district was estimated by first multiplying the percentage of school-age children (ages 5 to 18 years) in each county by the average household size in the corresponding location (U.S. Census Bureau ACS 2010–2014a, 2010–2014c) to obtain the average number of school-aged children per household. This factor was then multiplied by the number of residential displacements to estimate the number of students that could be displaced in each school district. The number of enrolled students in each school district was obtained from the California Department of Education for the 2015–2016 school year (California Department of Education 2018). Only the school districts in which residential units would be displaced were included in the analysis, which only includes schools in San Mateo and Santa Clara Counties. It is estimated that a total of 15 school-aged children (grades K–12) would be displaced under Alternative A, 30 would be displaced under Alternative B (Viaduct to I-880), and 40 would be displaced under Alternative B (Viaduct to Scott Boulevard).

The number of students displaced as a result of the project would represent less than 0.1 percent of the total enrollment overall under Alternatives A and B. The greatest percentage of total enrollment that would be relocated would occur in the San Bruno Park Elementary School District in San Mateo County under both project alternatives (0.1 percent) and in the Belmont-Redwood Shores Elementary School District in San Mateo County under Alternative B (0.1 percent), but this would not materially affect school district funding. As described in the residential displacement analysis in Impact SOCIO#7, a suitable amount of replacement housing is likely available in the cities with the anticipated property displacements, and a large number of students would likely have the opportunity to remain in their current school districts. Even if all displaced students changed school districts, the number of students displaced as a result of the project

would represent less than 0.1 percent of the total enrollment of affected school districts under Alternatives A and B.

Reduced Property Tax Revenues

Construction of the project would result in the acquisition and displacement of land uses, which would remove some private property from the local property tax rolls. Because school districts are funded, in part, from property taxes, the removal of some private properties would result in a net reduction in the local property tax revenues to school districts.

Property tax revenues would decrease regardless of whether a residential property owner or business owner relocates within the same jurisdiction because construction of the project would result in a net decrease in the number of properties on the tax rolls of San Mateo and Santa Clara Counties under both project alternatives (San Francisco County would not be affected because no displacements would occur in the county). Revenue reductions were calculated based on the acquired properties only. The potential reductions in property tax revenues allocated for school districts as a result of the project are shown in Table 3.12-16.

Property tax revenue losses from acquisitions are estimated at \$2,391,200 under Alternative A, \$5,566,298 under Alternative B (Viaduct to I-880), and \$7,541,564 under Alternative B (Viaduct to Scott Boulevard) annually across the region. Calculating 63 percent in San Mateo County and 62 percent in Santa Clara County of the property tax revenue yields the estimated reduction in school district funding, with a \$1,492,998 reduction in revenues for Alternative A, \$3,472,803 for Alternative B (Viaduct to I-880), and \$4,696,399 for Alternative B (Viaduct to Scott Boulevard). The combined estimated amount represents 0.128, 0.299, and 0.404 percent, respectively, of the total FY 2015/2016 funding for all affected school districts in the RSA. The Bayshore Elementary School District would experience the greatest reduction in funding under both alternatives, followed by the Belmont-Redwood Shores Elementary School District under Alternative A and the Santa Clara Unified School District under Alternative B (Viaduct to Scott Boulevard), while the Palo Alto Unified School District would experience the least reduction.

Table 3.12-16 Estimated Annual School District Funding Losses from Acquisitions

	School District 2015–2016 Funding	Property Tax Revenue Loss from Acquisitions (\$2015)		Estimated School District Funding Loss from Acquisitions (Annual \$) ¹	
		Alternative A	Alternative B ²	Alternative A	Alternative B ²
Bayshore Elementary School District (Brisbane)	\$3,196,837	\$194,373	\$106,879	\$122,455	\$67,334
Jefferson Union High School District (Brisbane)	\$39,068,885	\$194,373	\$106,879	\$122,455	\$67,334
San Bruno Park Elementary School District	\$19,931,625	\$9,529	\$9,529	\$6,003	\$6,003
Millbrae Elementary School District	\$17,694,808	\$234,567	\$234,567	\$147,777	\$147,777
San Mateo Foster City Elementary School District	\$117,143,731	–	\$321,077	–	\$202,279
San Mateo Union High School District	\$86,414,190	\$247,101	\$565,173	\$155,674	\$356,059

	School District 2015–2016 Funding	Property Tax Revenue Loss from Acquisitions (\$2015)		Estimated School District Funding Loss from Acquisitions (Annual \$) ¹	
		Alternative A	Alternative B ²	Alternative A	Alternative B ²
Belmont-Redwood Shores Elementary School District	\$27,585,216	\$82,745	\$412,873	\$52,129	\$260,110
Sequoia Union High School District	\$110,567,554	\$82,745	\$412,873	\$52,129	\$260,110
Palo Alto Unified School District	\$157,554,329	\$3,045	\$3,045	\$1,888	\$1,888
Santa Clara Unified School District	\$153,361,022	–	\$822,048/ \$3,075,989	–	\$509,670/ \$1,907,113
San Jose Unified School District	\$430,311,581	\$1,342,722	\$2,571,355/ \$2,399,559	\$832,488	\$1,594,240/ \$1,487,727
Total	\$1,162,829,778	\$2,391,200	\$5,566,298/ \$7,541,564	\$1,492,998	\$3,472,803/ \$4,696,399
% of total funding	–	–	–	0.128%	0.299%/0.404%

Sources: County of Santa Clara, Office of the Assessor 2016; County of San Mateo, Treasurer-Tax Collector 2018

¹ Property tax reductions in San Mateo and Santa Clara Counties are calculated based on value of land and improvements of all acquired parcels multiplied by the 2014/2015 tax revenue allocation to schools in the county affected (63 percent in San Mateo County and 62 percent in Santa Clara County).

² Values are presented for Alternative B (Viaduct to I-880) first, followed by Alternative B (Viaduct to Scott Boulevard).

School Bus Transportation Costs

Operating school buses to take children to and from school every day is a key expense for school districts. Fuel costs are directly related to the distance traveled by the buses on their routes. In the northern four subsections (i.e., San Francisco to Scott Boulevard), construction of the project would not require the permanent closure of any major roads or the construction of any new overcrossings or undercrossings that would result in changes to the routing of school buses. In the San Jose Diridon Station Approach Subsection, permanent road closures would occur at Stockton Avenue, University Avenue, and Emory Street in San Jose for Alternative B (either viaduct option) and additionally at Chestnut Street under Alternative B (Viaduct to I-880). These permanent road closures would result in localized changes in circulation and access, but these changes would be limited to minor roadways in a mostly industrial area east of the Caltrain corridor and south of I-880. The permanent roadway modifications associated with the project are not anticipated to result in out-of-direction travel for school buses, and, as a result, no impacts on fuel costs for school districts would be anticipated.

CEQA Conclusion

In accordance with Section 15064(e) of the CEQA Guidelines, “economic and social changes resulting from a project shall not be treated as significant impacts on the environment.” No determination under CEQA is required.

Impact SOCIO#12: Permanent Impacts on Property Tax Revenues from Property Acquisition from Project Construction

The potential impacts of the project on property tax revenues collected by county jurisdictions were estimated based on permanent property acquisitions. These potential impacts were estimated quantitatively as the reduction in property tax revenue for county budgets resulting from the permanent removal of properties from the tax rolls.

The property tax rates for the county general fund were applied to the total assessed value of all the full property acquisitions for each county. These property tax revenues were then compared to each county’s FY 2015/2016 general fund property tax revenues. Table 3.12-17 shows property tax revenue loss for San Francisco, San Mateo, and Santa Clara Counties (based on data from the County Assessor for each county). The project alternatives would affect tax revenues for San Mateo and Santa Clara Counties, with the greater impact on San Mateo County. Tax revenues in San Francisco County would not be affected because there would be no property displacements in the county. Overall, the loss of property tax revenue from acquisitions would be small when compared to the total property tax revenues collected by the counties; the estimated lost property tax revenue accounts for less than 0.1 percent of the county general fund property tax revenues, as shown in Table 3.12-17.

Table 3.12-17 Annual Lost Property Tax Revenue (FY 2015/2016)

Location	Net Taxable Assessed Value (\$ FY 2015/2016)	Reduction in Property Tax Revenues ¹	
		Alternative A	Alternative B ²
San Francisco County	\$181,810,000,000	–	–
San Mateo County	\$166,387,000,000	\$524,220	\$1,084,926
Santa Clara County	\$358,542,000,000	\$1,349,965	\$3,396,448/\$5,478,593
Total Region	\$706,739,000,000	\$1,874,185	\$4,481,374/\$6,563,519
% of FY 2015/2016 County General Fund Property Tax Revenues	–	0.0003%	0.0006%/0.0009%

Sources: Authority 2019a, 2019b
FY = fiscal year

¹Reduction in property tax revenues is based on the total amount of property taxes a property pays in a given year. Property taxes in California are limited by Proposition 13, which was passed in 1978. Proposition 13 decreased property taxes by assessing values at their 1976 value and restricting annual increases of assessed value of real property to an inflation factor, not to exceed 2 percent per year. It also prohibited reassessment of a new base year value except in cases of (a) change in ownership, or (b) completion of new construction. These rules apply equally to all real estate, residential and commercial—whether owned by individuals or corporations. This means that some properties, if they have been owned by the same owner for many years, would have a much lower property tax bill than properties recently sold at current market-value.

² Values are presented for Alternative B (Viaduct to I-880) first, followed by Alternative B (Viaduct to Scott Boulevard).

Under Alternative A, displacement of residences and businesses would result in estimated annual losses of approximately \$1,874,185 in property tax revenue to the three counties. These estimated amounts are equivalent to approximately 0.0003 percent of the total FY 2015/2016 property tax revenue for the three-county region.

Under Alternative B (Viaduct to I-880), displacement of residences and businesses would result in estimated annual losses of approximately \$4,481,374 in property tax revenue to the three counties. Alternative B (Viaduct to Scott Boulevard) would result in estimated annual losses of approximately \$6,563,519. These estimated amounts are equivalent to approximately 0.0006 percent for Alternative B (Viaduct to I-880) and 0.0009 percent for Alternative B (Viaduct to Scott Boulevard) of the total FY 2015/2016 property tax revenue for the three-county region.

Long-term reductions in property tax revenues also could occur as a result of perceived lower property values caused by nearby construction activities. Sales prices of properties that change ownership in advance of planned construction or during construction may be lower than pre-construction market values and may result in somewhat lower property tax revenues. Although this impact cannot be quantified, it would likely affect only areas adjacent to project construction activities but would still be higher than property tax revenues prior to the sale due to Proposition 13 restrictions on annual increases in assessed value. Lower property sales prices could also affect properties where vehicular access is disrupted because of construction or temporary road or lane closures, particularly around larger construction areas (e.g., Brisbane LMF, Millbrae Station, San Jose Diridon Station).

Other aspects of construction may result in reduction in property values that cannot be quantified. For example, a perceived negative change in the visual environment could lower property values near some portions of the project. This would be most likely to occur in the more suburban areas where the introduction of HSR structures would represent a greater change in the existing visual character of the community. Change in visual character would be greater for Alternative B because of the introduction of passing tracks.

Conversely, in the more dense, urban portions of the economic impacts RSA, particularly around existing rail stations, construction of the project would likely lead to increased TOD for both project alternatives around the HSR stations, which would be expected to increase property values, given the desirability of living and working near available transit. TOD in the station areas would be dependent upon the cities to adopt new station area plans or other land use plans that would allow TOD to occur. This TOD would occur after these plans are adopted, but could precede HSR construction, be concurrent with HSR construction, or occur during operations.

CEQA Conclusion

In accordance with Section 15064(e) of the CEQA Guidelines, “economic and social changes resulting from a project shall not be treated as significant impacts on the environment.” No determination under CEQA is required.

Impact SOCIO#13: Temporary Impacts on Sales Tax Revenues

Construction expenditures would increase local government sales tax revenues during the construction period in the three counties and the communities in the region. This increase would be a result of spending on construction equipment and materials.

Table 3.12-18 shows estimates of taxable local expenditures projected to be generated by the project alternatives over the construction period. These estimates were generated using capital cost estimates, total and local construction cost estimates from the Authority (Authority 2019e), and estimates of spending within the economic impacts RSA for materials and equipment. The percentage of total spending by section for taxable equipment and materials was determined by referencing transportation cost studies and also through discussions with rail construction experts (Authority 2011). These sources provided the following percentage breakdown across sectors: 15 percent for equipment, 50 percent for materials, and 35 percent for labor.⁶ Materials were broken down further into nonmetallic (stone, gravel, concrete) (37.5 percent) and primary metal (steel) components (12.5 percent).

Table 3.12-18 Construction Spending within the Region, by Alternative and Economic Sector (2018\$, in millions)

Economic Sector	Percentage of Total Spending by Sector	Alternative A Construction Expenditures	Alternative B ¹ Construction Expenditures
Construction equipment	15%	\$327.9	\$493.8/\$576.3
Materials—nonmetallic	37.5%	\$819.7	\$1,234.4/\$1,440.8
Materials—primary metal	12.5%	\$273.2	\$411.5/\$480.8
Transportation ²	N/A	\$0.0	\$0.0
Wholesale margin ²	N/A	\$0.0	\$0.0

⁶ Construction labor as defined for estimation of spending subject to sales tax differs from local percentage capture ratio of direct, indirect, and induced employment full-time equivalents related to the construction phase of the project.

Economic Sector	Percentage of Total Spending by Sector	Alternative A Construction Expenditures	Alternative B ¹ Construction Expenditures
Construction labor ³	35%	\$765.1	\$1,152.1/\$1,344.7
Construction Phase Total	100%	\$2,185,900,000	\$3,291,800,000/ \$3,842,000,000

Sources: Authority 2011, 2018

N/A = not applicable

¹ Expenditures are presented for Alternative B (Viaduct to I-880) first, followed by Alternative B (Viaduct to Scott Boulevard).

² Percentage of spending by sector is not relevant to transportation and wholesale margins because these values are a function of the conversion of purchaser to producer value.

³ Construction labor as defined for estimation of spending subject to sales tax differs from local percentage capture ratio of direct, indirect, and induced employment full-time equivalents related to the construction phase of the project.

Sales tax revenues during construction were derived using the sales tax rates specific to each county and local jurisdiction with the RSA (as of April 1, 2017) and the estimated local expenditures on materials and supplies for construction. The projected expenditures subject to sales taxation with the region are shown in Table 3.12-19.

The sales tax revenues that would be realized during construction for San Francisco, San Mateo and Santa Clara Counties under both project alternatives would result in beneficial economic effects, as shown in Table 3.12-20. These projections assume local taxable sales from HSR construction activities are distributed and taxed proportional to population distribution across the RSA. Sales tax rates vary among regional jurisdictions, so that actual points of sale and the amounts of taxable spending that differ from the general distribution of population within the region would result in higher or lower total sales tax revenues to the local jurisdictions.

Table 3.12-19 Taxable Sales within the Region, by Alternative and Economic Sector (2018\$, in millions)

Economic Sector	Percent Spent within the Region	Percent that is Producer Value	Percent that is Subject to Sales Tax	Alternative A	Alternative B ¹
Construction equipment	20%	100%	100%	\$65.6	\$98.8/\$115.3
Materials—nonmetallic	30%	81.5%	100%	\$200.4	\$301.8/\$352.3
Materials—primary metal	10%	65.4%	100%	\$17.9	\$26.9/\$31.4
Transportation ¹	100%	6.6%	0.0%	\$0.0	\$0.0
Wholesale margin ¹	100%	18.1%	0.0%	\$0.0	\$0.0
Construction labor ²	50%	100%	0.0%	\$0.0	\$0.0
Construction Phase Total				\$283.9	\$427.5/\$498.9

Sources: Table 3.18-ST2; Authority 2011

¹ Taxable sales is presented for Alternative B (Viaduct to I-880) first, followed by Alternative B (Viaduct to Scott Boulevard).

² Percentage of spending by sector is not relevant to transportation and wholesale margins because these values are a function of the conversion of purchaser to producer value.

³ Construction labor as defined for estimation of spending subject to sales tax differs from local percentage capture ratio of direct, indirect, and induced employment full-time equivalents related to construction phases of the project.

Table 3.12-20 Projected Sales Tax Revenues Generated During Construction (2018\$, in millions)

Geographic Area	Alternative A Estimated Local Sales Tax Revenues ¹	Alternative B ² Estimated Local Sales Tax Revenues ¹
San Francisco County	\$1.7	\$2.6/\$3.1
San Mateo County	\$1.7	\$2.6/\$3.1
Santa Clara County	\$4.8	\$7.3/\$8.5
Region²	\$8.3	\$12.5/\$14.6

Sources: Table 3.18-ST3; CDTFA 2018a, 2018b; CDOF 2019

¹ Projections assume local taxable sales from HSR construction activities are distributed and taxed proportional to population distribution across the region. Sales tax rates vary among regional jurisdictions.

² Projected sales tax revenue is presented for Alternative B (Viaduct to I-880) first, followed by Alternative B (Viaduct to Scott Boulevard).

³ Region is composed of San Francisco, San Mateo, and Santa Clara Counties.

This analysis suggests that the great majority of sales tax revenues would be generated in Santa Clara County because of the relative size of its economic base of industries that can supply equipment and materials to the project. The analysis also indicates that Alternative B would yield the highest total sales taxes because it is projected to have a higher cost than Alternative A, and sales tax generation is directly proportionate to the cost of materials for the project alternative.

The sales tax revenue generated from construction activities would increase local government revenues during the construction period. However, some short-term reductions in sales tax revenues could occur because the need to acquire land would necessitate the relocation of businesses along the project right-of-way. While not noticeable at the regional level, this interruption in sales could lead to some potential short-term losses for communities adjacent to the project, particularly in Belmont with the displacements of 65 businesses under Alternative B. As discussed in the examination of suitable replacement properties for relocated businesses, the analysis indicates that most businesses would likely have the opportunity to relocate within the same tax jurisdiction. As such, the duration of business disruptions would be expected to be minimal, less than 2 years.

However, the potential for temporary sales tax loss would remain, either because businesses would temporarily close during these relocations or because some might choose to close down rather than relocate. Although other businesses would eventually replace those that close, temporary revenue losses could nevertheless occur. Any potential sales tax losses would be more than offset by the estimated sales tax revenues generated during construction, which would be between \$8.3 and \$14.6 million.

CEQA Conclusion

In accordance with Section 15064(e) of the CEQA Guidelines, “economic and social changes resulting from a project shall not be treated as significant impacts on the environment.” No determination under CEQA is required.

Operations Impacts

Operation of the project would involve scheduled train travel along the HSR line through the Bay Area, as well as inspection and maintenance along the track and railroad right-of-way and at stations, and on structures, fencing, power systems, positive train control, and communications. Operation of the project would generate permanent employment opportunities and cause changes in property and sales tax revenues. O&M activities are described in Chapter 2.

Impact SOCIO#14: Permanent Impacts on Regional Employment

O&M employment associated with the HSR system is based on particular elements of the project—train cars, rail tracks, stations, and ancillary facilities such as those for power and communications. Most workers would be based at the two stations and the LMF. Workers would

spend minor amounts of money for such items as gasoline, food, or other small personal items when on location maintaining and repairing the track associated with the project.

As described in Section 3.17, approximately 380 O&M jobs are estimated to be direct impacts of the project as part of the operation of Phase 1 of the HSR system in the RSA, which is forecast to create over 3,100 permanent O&M jobs systemwide by 2040. The direct O&M jobs would include train operations, infrastructure and equipment maintenance, station and train cleaning, ticketing and other commercial activities, and administration. Approximately 530 additional permanent jobs are estimated for the economic impacts RSA, as indirect and induced impacts of the O&M employment and expenditures. The total employment impact, direct and indirect/induced, is 910 jobs per year associated with HSR operations of the project. This figure represents well below 0.1 percent of the three-county region's projected total employment in 2040 under the No Project Alternative, and is not a substantial impact on the local and regional economy and is not expected to draw workers from outside the region.

Additional jobs can also be expected to come to the region from improved connectivity and growth in the overall regional economy as a result of the HSR system. HSR service would enhance access among cities in the region and between the Bay Area and the Los Angeles Basin, and "can result in long-term dynamic economic impacts such as enhanced labor market accessibility, increased business travel and transactions, direct transport cost savings, improved business and worker productivity, support of tourism and other important service sectors requiring patron accessibility, etc.," relative to the No Project Alternative (Authority and FRA 2017). The Authority conservatively estimates that the HSR system statewide could support approximately 102,000 jobs more than under the No Project Alternative through 2040 by improving connectivity between employment centers. These jobs would be in all sectors of the economy. Just over 2,530 of these accessibility-based jobs would be in the three counties of the RSA. The growth attributable to the O&M of the HSR is very small compared to the expected conditions in the No Project Alternative. Also, in aggregate, the population and employment gains associated with increased accessibility represent small additions to the expected growth in the entire three-county region—less than 1 percent above the No Project Alternative.

CEQA Conclusion

There would be no impact under CEQA. The total employment impact, direct and indirect/induced, is 910 jobs per year associated with HSR operations of the project and represents well below 0.1 percent of the three-county region's projected total employment in 2040 and would not substantially affect the local and regional economy. The project would not require an expansion of government services or facilities in response to changes in employment. Therefore, CEQA does not require any mitigation.

Impact SOCIO#15: Permanent Impacts on Property Tax and Sales Tax Revenues

Property Taxes

HSR operations could affect property values near the stations and along the corridor. Operational noise and light and glare could affect suburban areas, depressing those property values, and alternately could increase property values by providing connectivity at the stations.

The alternatives have the same permanent noise impacts from 2029 Plus Conditions (zero moderate and severe impacts) and similar permanent noise impacts from 2040 Plus Project Conditions: 1,758 severe and 4,296 moderate impacts under Alternative A; 1,648 severe and 4,186 moderate impacts under Alternative B (Viaduct to I-880); and 1,628 severe and 4,141 moderate impacts under Alternative B (Viaduct to Scott Boulevard). For both project alternatives under 2040 Plus Project conditions, the greatest number of moderate to severe noise impacts on residential uses would occur in the San Mateo to Palo Alto Subsection, followed by the San Bruno to San Mateo Subsection.

Increased nighttime light and glare from the proposed LMF could also reduce adjacent property values if the use is sensitive to light and glare, such as a residential area. Industrial property values would not be expected to decrease and, in fact, would likely increase in the vicinity of the LMF because the LMF could spur additional light industrial development, including uses ancillary

to HSR operations. Both project alternatives would likely result in a beneficial effect for industrial land values, given the proposed location of the LMF in Brisbane, where adjacent land uses are primarily vacant or industrial. Operational noise would not be an issue around the LMF because of the industrial character of the area.

Conversely, HSR operations would be expected to increase long-term property values around the 4th and King Street, Millbrae, and San Jose Diridon Stations because of the TOD that is anticipated. The HSR would support city efforts to implement higher-density development. TOD in the station areas would be dependent upon the cities to adopt new station area plans or other land use plans that would allow TOD to occur. This TOD would occur after these plans are adopted, but could precede HSR construction, be concurrent with HSR construction, or occur during operation.

Sales Taxes

HSR operations would include inspection and maintenance along the track and railroad right-of-way, as well as for the structures, fencing, power system, automatic train control, and communications, and the operations of two stations and one LMF. Routine track maintenance would be intermittent and would not require large numbers of workers or materials, and it is not anticipated that there would be any noticeable sales tax impacts related to operations. However, operation of two stations and the LMF would require a larger number of workers and materials and track maintenance. Therefore, sales taxes would likely increase in the three-county region from purchases by HSR riders and employees near the two stations and LMF.

CEQA Conclusion

In accordance with Section 15064(e) of the CEQA Guidelines, “economic and social changes resulting from a project shall not be treated as significant impacts on the environment.” No determination under CEQA is required.

3.12.7 Mitigation Measures

There would be no significant impacts under CEQA related to socioeconomics and communities. Therefore, no mitigation measures are required. However, the following mitigation measures identified for other environmental resource topics would help to reduce impacts on socioeconomics and communities. Full descriptions of these mitigation measures can be found in Sections 3.2, 3.4, 3.10, 3.11, and 3.15.

- TR-MM#1: Potential Mitigation Measures Available to Address Traffic Delays (NEPA Effect Only)
- TR-MM#2: Install Transit Priority Treatments
- TR-MM#3: Implement Railway Disruption Control Plan
- TR-MM#4: Install San Carlos Station Pedestrian Improvements
- TR-MM#5: Contribute to 4th and King Street Station Pedestrian Improvements
- NV-MM#1: Construction Noise Mitigation Measures
- NV-MM#2: Construction Vibration Mitigation Measures
- NV-MM#3: Implement Proposed California High-Speed Rail Project Noise Mitigation Guidelines
- NV-MM#4: Support Potential Implementation of Quiet Zones by Local Jurisdictions
- NV-MM#5: Vehicle Noise Specification
- NV-MM#6: Special Trackwork at Crossovers, Turnouts, and Insulated Joints
- NV-MM#7: Additional Noise Analysis during Final Design
- NV-MM#8: Project Vibration Mitigation Measures

- HMW-MM#1: Limit Use of Extremely Hazardous Materials near Schools during Construction
- SS-MM#1: Construction Traffic Management for Passing Track Section
- SS-MM#2: Modify Driveway Access Control for Relocated Brisbane Fire Station
- SS-MM#3: Install Emergency Vehicle Priority Treatments near HSR Stations
- SS-MM#4: Install Emergency Vehicle Priority Treatments Related to Increased Gate-Down Time Impacts
- AVQ-MM#1: Minimize Visual Disruption from Construction Activities
- AVQ-MM#2: Minimize Light Disturbance during Construction
- AVQ-MM#3: Incorporate Design Aesthetic Preferences into Final Design and Construction of Non-Station Structures
- AVQ-MM#4: Provide Vegetation Screening along At-Grade and Elevated Guideways Adjacent to Residential Areas
- AVQ-MM#5: Replant Unused Portions of Lands Acquired for the HSR
- AVQ-MM#6: Provide Noise Barrier Treatment

3.12.8 Impact Summary for NEPA Comparison of Alternatives

As described in Section 3.1.5.4, the impacts of project actions under NEPA are compared to the No Project condition when evaluating the impact of the project on the resource. The determination of impact was based on the context, intensity, and duration of the change that would be generated by construction and operation of the project. Table 3.12-21 shows a comparison of the project impacts by alternative, and is followed by a summary of the impacts.

Table 3.12-21 Comparison of Project Alternative Impacts for Socioeconomics and Communities

Impact	Alternative A	Alternative B ¹
Communities and Neighborhoods		
Impact SOCIO#1: Temporary Disruption or Division of Established Communities from Project Construction	The construction transportation plan would maintain traffic flow on major roadways and intersections. Temporary roadway closures, lane closures, and detours would disrupt existing circulation and access patterns in all corridor subsections.	Similar to Alternative A, except disruption of existing circulation and access patterns would be slightly less in the San Francisco to South San Francisco Subsection and substantially greater in the San Mateo to Palo Alto and San Jose Diridon Station Approach Subsections due to construction of the passing track and viaduct.
	New temporary sources of noise and vibration during construction that could exceed established noise thresholds, which could restrict outdoor activities or interfere with student learning, as well as disrupt patients in health care facilities in the communities and neighborhoods RSA.	Similar to Alternative A, except in the: <ul style="list-style-type: none"> ▪ San Mateo to Palo Alto Subsection, where construction of the passing track under Alternative B would generate more temporary noise and vibration in the communities of San Mateo, Belmont, San Carlos, and Redwood City ▪ San Jose Diridon Station Approach Subsection, where pile driving for viaduct structures would expose more sensitive receptors to temporary noise and vibration impacts

Impact	Alternative A	Alternative B ¹
	<p>Construction activities could degrade residential views in some locations; however, because these activities would be temporary and would occur within an existing rail corridor, they would not affect visual unity and intactness to the extent that the sense of community character would be reduced or community interactions would be limited.</p>	<p>Similar to Alternative A, except in the:</p> <ul style="list-style-type: none"> ▪ San Mateo to Palo Alto Subsection where construction of the passing track under Alternative B would require greater levels of construction activity and an expansion of the existing right-of-way in San Mateo, Belmont, and San Carlos ▪ San Jose Diridon Station Approach Subsection, where viaduct construction would require more construction activities and an expansion of the existing right-of-way in Santa Clara and San Jose <p>These changes would not affect visual unity and intactness to the extent that the sense of community character would be reduced or community interactions would be limited.</p>
<p>Impact SOCIO#2: Permanent Disruption or Division of Established Communities from Project Construction</p>	<p>Permanent changes to circulation and access include:</p> <ul style="list-style-type: none"> ▪ Permanent closure of Serra Avenue ▪ Realignment of Tunnel Avenue for the East Brisbane LMF ▪ Reconfiguration of the Tunnel Avenue overpass and Lagoon Road ▪ Relocation of Bayshore Station ▪ Safety improvements at 41 at-grade crossings <p>The permanent transportation features associated with Alternative A would not physically divide an established community.</p>	<p>Permanent changes to circulation and access would be the same as Alternative A except:</p> <ul style="list-style-type: none"> ▪ No realignment of Tunnel Avenue ▪ Relocation of San Carlos Station ▪ Permanent closures of 4 roads ▪ Safety improvements at 39 at-grade crossings <p>The permanent transportation features associated with Alternative B would not physically divide an established community.</p>
	<p>Alternative A would displace 14 residential units, 48 businesses, and 3 community and public facilities. It is anticipated that there are sufficient residential relocation resources in the specific communities where displacements would occur for displaced residents to relocate within the same community, which would prevent the loss of community character and cohesion.</p>	<p>Alternative B (Viaduct to I-880) would displace 42 residential units, 171 businesses, and 6 community and public facilities and Alternative B (Viaduct to Scott Boulevard) would displace 62 residential units, 202 businesses, and 7 community and public facilities. Although there would be a greater number of residential relocations under Alternative B, it is anticipated that there are sufficient residential relocation resources in the specific communities where displacements would occur for displaced residents to relocate within the same community, which would prevent the loss of community character and cohesion.</p>
	<p>Alteration of the visual environment from new rail infrastructure would not affect visual unity and intactness to the extent that the sense of community character would be</p>	<p>Similar to Alternative A, except in the:</p> <ul style="list-style-type: none"> ▪ San Mateo to Palo Alto Subsection where construction of the passing track under Alternative B would require an

Impact	Alternative A	Alternative B ¹
	<p>reduced or community interactions would be limited.</p>	<p>expansion of the existing right-of-way, resulting in the acquisition and demolition of residences and businesses in San Mateo, Belmont, and San Carlos</p> <ul style="list-style-type: none"> ▪ San Jose Diridon Station Approach Subsection, where viaduct construction would require an expansion of the existing right-of-way, resulting in the acquisition and demolition of residences and businesses in Santa Clara and San Jose <p>These changes would not affect visual unity and intactness to the extent that the sense of community character would be reduced or community interactions would be limited.</p>
<p>Impact SOCIO#3: Permanent Disruption or Division of Established Communities from Project Operations</p>	<p>Overall, the HSR system in the long term would:</p> <ul style="list-style-type: none"> ▪ Improve regional access, reduce travel times and VMT, and could reduce interregional traffic on regional roadways ▪ Cause localized increases in vehicle congestion and delay at intersections within all five subsections from increased traffic generated by project trips at the 4th and King Street Station, Millbrae Station, San Jose Diridon Station, and Brisbane LMF and increased total duration of gate-down events at at-grade crossings 	<p>Same as Alternative A</p>
	<p>Operation of the project in existing transportation corridors would result in:</p> <ul style="list-style-type: none"> ▪ 1,758 severe and 4,296 moderate impacts in 2040, which would weaken community cohesion ▪ Some additional noise from parking facilities at HSR stations (Millbrae and San Jose Diridon), but it would be substantially lower than noise from HSR trains. 	<p>Similar to Alternative A, except:</p> <ul style="list-style-type: none"> ▪ 1,648 severe and 4,186 moderate impacts in 2040 under Alternative B (Viaduct to I-880) ▪ 1,628 severe and 4,141 moderate impacts in 2040 under Alternative B (Viaduct to Scott Boulevard)
	<p>Operations would not degrade the visual environment because the project alternatives would operate in an existing rail corridor.</p>	<p>Similar to Alternative A, except:</p> <ul style="list-style-type: none"> ▪ Different site of the LMF and passing track ▪ Operation of the viaduct through urban areas

Impact	Alternative A	Alternative B ¹
Children’s Health and Safety		
<p>Impact SOCIO#4: Temporary Impacts on Children’s Health and Safety from Project Construction</p>	<p>Construction of the project would:</p> <ul style="list-style-type: none"> ▪ Expose the 117 schools/childcare facilities within 1,000 feet of project construction activities for Alternative A to construction-related noise, vibration, and construction emissions ▪ Result in construction emissions below local air district health risk thresholds and therefore would not pose increased risks to sensitive receptors, including children ▪ Generate electromagnetic interference during construction that would not result in exposure of children to a documented health risk ▪ Use hazardous materials in a manner that would comply with state and federal regulations that would prevent the use of extremely hazardous substances in a quantity equal to or greater than the state threshold quantity within 0.25 mile of a school, which would minimize the risks of accidental spills or releases near schools <p>No disproportionate impacts on children’s health and safety would occur.</p>	<p>Similar to Alternative A, except:</p> <ul style="list-style-type: none"> ▪ Expose the 122 schools/childcare facilities within 1,000 feet of project construction activities for Alternative B to construction-related noise, vibration, and construction emissions ▪ Construction emissions would be somewhat greater under Alternative B due to the greater levels of construction required for the passing track and the viaduct, but emissions would remain below local air district health risk thresholds <p>No disproportionate impacts on children’s health and safety would occur.</p>
<p>Impact SOCIO#5: Permanent Impacts on Children’s Health and Safety from Project Construction</p>	<p>Project construction would:</p> <ul style="list-style-type: none"> ▪ Not require the acquisition of any community facilities where children congregate ▪ Modify 40 at-grade crossings for safety <p>No disproportionate impacts on children’s health and safety would occur.</p>	<p>Similar to Alternative A, except:</p> <ul style="list-style-type: none"> ▪ Would require the acquisition of the Universe of Colors Preschool in the City of San Mateo and a storage building at Bellarmine College Preparatory in San Jose ▪ Modify 38 at-grade crossings for safety improvements <p>No disproportionate impacts on children’s health and safety would occur.</p>
<p>Impact SOCIO#6: Permanent Impacts on Children’s Health and Safety from Project Operations</p>	<p>Project operations would:</p> <ul style="list-style-type: none"> ▪ Not result in adverse long-term impacts on children’s health and safety ▪ Subject facilities where children congregate to severe, intermittent noise effects of short duration ▪ Result in beneficial regional effects on air quality and would provide a safety benefit through the installation of four-quadrant gates to create a “sealed corridor” at at-grade crossings <p>No disproportionate impacts on children’s health and safety would occur.</p>	<p>Same as Alternative A</p>

Impact	Alternative A	Alternative B ¹
Property Displacements and Relocations		
Impacts SOCIO#7: Displacements and Relocations of Residences from Project Construction	<ul style="list-style-type: none"> ▪ 14 residential units displaced <p>Sufficient available relocation properties exist, so residents could relocate within same communities.</p>	<p>Similar to Alternative A, except:</p> <ul style="list-style-type: none"> ▪ 42 residential units displaced under Alternative B (Viaduct to I-880) ▪ 62 residential units displaced under Alternative B (Viaduct to Scott Boulevard) <p>Sufficient available relocation properties exist, so residents could relocate within same communities.</p>
Impact SOCIO#8: Displacements and Relocations of Commercial and Industrial Businesses from Project Construction	<ul style="list-style-type: none"> ▪ 48 commercial and industrial businesses displaced <p>Sufficient available relocation properties exist in the region, but some businesses in Millbrae and Belmont may be unable to relocate within same community.</p>	<p>Similar to Alternative A except:</p> <ul style="list-style-type: none"> ▪ 171 commercial and industrial businesses displaced under Alternative B (Viaduct to I-880) ▪ 202 commercial and industrial businesses displaced under Alternative B (Viaduct to Scott Boulevard) <p>Sufficient available relocation properties exist in the region, but some businesses in Millbrae and Belmont may be unable to relocate within same community.</p>
Impact SOCIO#9: Displacements and Relocation of Community and Public Facilities from Project Construction	<p>Community/public facilities displaced, including:</p> <ul style="list-style-type: none"> ▪ Brisbane Fire Station ▪ Millbrae Station Historic Depot ▪ Templo La Hermosa 	<p>Similar to Alternative A, except also:</p> <ul style="list-style-type: none"> ▪ Preschool in San Mateo ▪ Animal shelter in Belmont ▪ San Jose Taiko Conservatory ▪ Storage building at Bellarmine College Preparatory (Viaduct to Scott Boulevard only)
Economic Impacts		
Impact SOCIO#10: Temporary Impacts on Employment from Project Construction	4,620 direct and indirect jobs, representing a small increase in employment demand for the region	6,950 (Viaduct to I-880) or 8,110 (Viaduct to Scott Boulevard) direct and indirect jobs, representing a small increase in employment demand for the region
Impact SOCIO#11: Permanent Impacts on School District Funding from Project Construction	Approximately 15 school-aged children (ages 5–18) displaced under Alternative A, representing less than 0.1% of the total enrollment overall and would not materially affect school district funding	Approximately 30 (Viaduct to I-880) or 40 (Viaduct to Scott Boulevard) school-aged children (ages 5–18) displaced under Alternative B, representing less than 0.1% of the total enrollment overall and would not materially affect school district funding
	Decrease in property tax revenues from displacements and a maximum of 15 student relocations would represent 0.128% of total annual school funding sources	Decrease in property tax revenues from displacements and a maximum of 30 student relocations under Alternative B (Viaduct to I-880) and 40 student relocations under Alternative B (Viaduct to Scott Boulevard) would represent 0.299% of total annual school funding sources
	Permanent road closures could divert school buses to alternative routes; however,	Similar to Alternative A with regard to bus transportation costs

Impact	Alternative A	Alternative B ¹
	these diversions would not result in long detours that could substantially affect school bus transportation costs	
Impact SOCIO#12: Permanent Impacts on Property Tax Revenues from Property Acquisition from Project Construction	<ul style="list-style-type: none"> ▪ Property tax revenues reduced by 0.0003% ▪ Construction may reduce property values in areas near the Brisbane LMF but may increase property values in the station areas 	<ul style="list-style-type: none"> ▪ Property tax revenues reduced by 0.0006% under Alternative B (Viaduct to I-880) and 0.0009% under Alternative B (Viaduct to Scott Boulevard) ▪ Construction impacts similar to Alternative A, except it may also reduce property values near the passing track and viaduct construction
Impact SOCIO#13: Temporary Impacts on Sales Tax Revenues	\$8.3 million increase in sales tax revenues to the RSA	\$12.5 million (Viaduct to I-880) or \$14.6 million (Viaduct to Scott Boulevard) increase in sales tax revenues to the RSA
Impact SOCIO#14: Permanent Impacts on Regional Employment	<ul style="list-style-type: none"> ▪ 910 direct and indirect jobs annually would be provided ▪ 2,530 accessibility-based jobs would be in the RSA ▪ 3,440 total jobs during operations 	Same as Alternative A
Impact SOCIO#15: Permanent Impacts on Property Tax and Sales Tax Revenues	<ul style="list-style-type: none"> ▪ Property values could decrease in some locations, particularly the more suburban areas, and increase in the more dense urban areas, particularly around the existing rail stations, given cities' desire for TOD ▪ Residential areas, particularly in the vicinity of the LMF, could experience reduction in property values from increased light and noise and a perceived degradation of the visual character of the environment ▪ Industrial properties are not anticipated to experience impacts on property values from HSR operations 	Same as Alternative A
	Sales taxes would increase in the RSA from materials being purchased by HSR riders and employees.	Same as Alternative A

HSR = high-speed rail

I- = Interstate

LMF = light maintenance facility

RSA = resource study area

TOD = transit-oriented development

¹ Values are presented for Alternative B (Viaduct to I-880) first, followed by Alternative B (Viaduct to Scott Boulevard).

The impacts of the alternatives on communities and neighborhoods, children's health and safety, property displacements and relocations, and economics would be similar to one another, with some notable differences. The duration of construction would be longer at the Millbrae Station, Brisbane LMF, and passing track and viaduct in Santa Clara and San Jose (under Alternative B), resulting in temporary transportation and access impacts in communities and neighborhoods. Expansion of the 4th and King Street, Millbrae, and San Jose Diridon Stations would be the same under both project alternatives, and construction of the Brisbane LMF would be the same except for its physical location east or west of the Caltrain corridor. In the San Mateo to Palo Alto Subsection and San Jose Diridon Station Approach Subsection, additional right-of-way, air quality, and noise and vibration impacts would result due to construction of the passing track and viaduct under Alternative B, resulting in greater community impacts.

As described in Volume 2, Appendix 3.4-A, Noise and Vibration Technical Report, the residential nighttime 8-hour L_{eq} criterion of 70 dBA would potentially be exceeded up to 500 feet from the excavation construction activity, and as far away as 792 feet from the earthwork or retaining walls activity. For the construction scenarios at the stations and Brisbane LMF, the residential nighttime 8-hour L_{eq} criterion of 70 dBA could be exceeded up to 354 feet from the superstructure, building shell, and landscaping construction activity and as far away as 706 feet from the pile driving activity during the foundation work, or 446 feet from non-pile driving activity during foundation work. The greatest number of property displacements would occur under Alternative B, with the greatest number of displacements occurring in the San Bruno to San Mateo Subsection and San Jose Diridon Station Approach Subsection. Therefore, the perceived disruptive impacts on communities from project construction would be greatest in these subsections under Alternative B.

Construction impacts for both project alternatives would not individually be expected to affect community cohesion or physically divide the community. HSR infrastructure would not create a physical barrier in any of the communities along the corridor because it would follow an existing transportation corridor, which would maintain connectivity and cohesion between the cities and communities along the corridor. Construction impacts related to noise, dust, visual changes, and changes in traffic patterns would not affect overall community integrity, but would affect quality of life in the adjacent neighborhoods. Impacts from increased noise and vibration during construction would be localized and would occur only during the construction period and would not be expected to affect community cohesion. Existing views would be blocked in some areas along the corridor, which would likely decrease perceived quality of life in those communities, but would not affect community cohesion because these impacts would be temporary and localized. Residential and business relocations would be required, but it is anticipated that there would generally be adequate replacement properties available to accommodate residential and business displacements within the same cities.

There would be no disproportionate impacts on children's health and safety from noise and vibration, air quality, EMF/EMI, hazardous materials and wastes, or safety and security. Many of the mitigation measures identified in Section 3.12.7 would be available to address construction-related impacts related to all members of the population, including children.

Project construction would require the acquisition of land within the project footprint and the displacement of some residences, commercial and industrial businesses, and community facilities. There would be 14 residential displacements under Alternative A, 42 residential displacements under Alternative B (Viaduct to I-880), and 62 residential displacements under Alternative B (Viaduct to Scott Boulevard). There would be 48 commercial and industrial displacements under Alternative A, 171 under Alternative B (Viaduct to I-880), and 202 under Alternative B (Viaduct to Scott Boulevard). Construction of both project alternatives would also affect three public and community facilities—a fire station in Brisbane, the Millbrae Station Historic Depot, and a religious facility in San Jose—plus three (Viaduct to I-880) or four (Viaduct to Scott Boulevard) additional public and community facilities under Alternative B, including a preschool in San Mateo, an animal shelter in Belmont, and a cultural facility in San Jose. Alternative B (Viaduct to Scott Boulevard) would affect the same three community and public facilities, and also part of a school in San Jose. While some of these affected facilities would be

fully displaced and require relocation, other properties may be reconfigured with the same facilities and amenities. Preliminary research indicates there would likely be an adequate supply of available suitable replacement sites for displaced residents, businesses, and community and public facilities within the property displacements and relocations RSA, although there may not be an adequate supply to relocate certain businesses within the same community.

Project construction could result in short-term economic losses associated with school district funding and property tax revenue in the economic impacts RSA. However, any short-term economic losses are expected to be more than offset by the short-term and long-term economic benefits of HSR. The project is expected to create short-term construction jobs and long-term job opportunities across many sectors of the regional economy (910 direct and indirect jobs annually under both alternatives). Increases in sales tax revenues are expected from construction spending, and long-term increases in sales taxes would likely increase in the three-county region from purchases by HSR riders and employees near the three stations and LMF. As a result, the project is expected to have a beneficial effect on the local and regional economy.

Project features, including IAMFs, design standards, and compliance with the Authority's project design guideline technical memoranda, would avoid or minimize impacts on communities and neighborhoods. After consideration of these project features and design standards, the project would avoid or minimize construction and operations impacts on communities and neighborhoods under both project alternatives. However, the project could result in permanent construction impacts on communities and neighborhoods that could weaken community character and cohesion from property acquisitions, permanent increase in congestion and delay at intersections and ambient noise from operations, and reduction in annual property tax revenues.

3.12.9 CEQA Significance Conclusions

As described in Section 3.1.5.4, the impacts of project actions under CEQA are evaluated against thresholds to determine whether a project action would result in no impact, a less-than-significant impact, or a significant impact. Table 3.12-22 shows the CEQA significance conclusions for each impact discussed in Section 3.12.6.

Table 3.12-22 CEQA Significance Conclusions and Mitigation Measures for Socioeconomics and Communities

CEQA Impacts	Impact Description and CEQA Level of Significance before Mitigation	Mitigation Measure	CEQA Level of Significance after Mitigation
Communities and Neighborhoods			
Impact SOCIO#1: Temporary Disruption or Division of Established Communities from Project Construction	Less than significant for both project alternatives. Temporary changes in access, noise and vibration impacts, and visual changes would result, but these impacts would be temporary and intermittent and would not result in division of a community or permanent disruption to community cohesion.	No mitigation measures are required.	N/A
Impact SOCIO#2: Permanent Disruption or Division of Established Communities from Project Construction	Less than significant for both project alternatives. Permanent impacts on communities would not result in a physical division of an existing community or permanent disruption to community cohesion.	No mitigation measures are required.	N/A

CEQA Impacts	Impact Description and CEQA Level of Significance before Mitigation	Mitigation Measure	CEQA Level of Significance after Mitigation
Impact SOCIO#3: Permanent Disruption or Division of Established Communities from Project Operations	Less than significant for both project alternatives. HSR operations would not physically divide the communities along the project corridor, although a small weakening of community cohesion would result.	No mitigation measures are required.	N/A
Children's Health and Safety			
Impact SOCIO#4: Temporary Impacts on Children's Health and Safety from Project Construction	No CEQA significance conclusions are required related to this specific impact.	No CEQA significance conclusions are required related to this specific impact.	No CEQA significance conclusions are required related to this specific impact.
Impact SOCIO#5: Permanent Impacts on Children's Health and Safety from Project Construction	No CEQA significance conclusions are required related to this specific impact.	No CEQA significance conclusions are required related to this specific impact.	No CEQA significance conclusions are required related to this specific impact.
Impact SOCIO#6: Permanent Impacts on Children's Health and Safety from Project Operations	No CEQA significance conclusions are required related to this specific impact.	No CEQA significance conclusions are required related to this specific impact.	No CEQA significance conclusions are required related to this specific impact.
Property Displacements and Relocations			
Impact SOCIO#7: Displacements and Relocations of Residences from Project Construction	Less than significant for both project alternatives. While construction of the project alternatives would result in the displacement and relocation of residential properties, it would not result in the displacement of a substantial number of existing residential units or necessitate the construction of replacement housing elsewhere.	No mitigation measures are required.	N/A
Impact SOCIO#8: Displacements and Relocations of Commercial and Industrial Businesses from Project Construction	No CEQA significance conclusions are required related to this specific impact.	No CEQA significance conclusions are required related to this specific impact.	No CEQA significance conclusions are required related to this specific impact.

CEQA Impacts	Impact Description and CEQA Level of Significance before Mitigation	Mitigation Measure	CEQA Level of Significance after Mitigation
Impact SOCIO#9: Displacements and Relocations of Community and Public Facilities from Project Construction	Less than significant for both project alternatives. Relocation of these community and public facilities would not result in substantial physical impacts associated with the provision of new or physically altered governmental facilities. Nor would the project alternatives cause the need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services, including fire protection, police protection, schools, parks, and other public facilities.	No mitigation measures are required.	N/A
Economics			
Impact SOCIO#10: Temporary Impacts on Employment from Project Construction	No CEQA significance conclusions are required related to this specific impact.	No CEQA significance conclusions are required related to this specific impact.	No CEQA significance conclusions are required related to this specific impact.
Impact SOCIO#11: Permanent Impacts on School District Funding from Project Construction	No CEQA significance conclusions are required related to this specific impact.	No CEQA significance conclusions are required related to this specific impact.	No CEQA significance conclusions are required related to this specific impact.
Impact SOCIO#12: Permanent Impacts on Property Tax Revenues from Property Acquisition from Construction	No CEQA significance conclusions are required related to this specific impact.	No CEQA significance conclusions are required related to this specific impact.	No CEQA significance conclusions are required related to this specific impact.
Impact SOCIO#13: Temporary Impacts on Sales Tax Revenues	No CEQA significance conclusions are required related to this specific impact.	No CEQA significance conclusions are required related to this specific impact.	No CEQA significance conclusions are required related to this specific impact.

CEQA Impacts	Impact Description and CEQA Level of Significance before Mitigation	Mitigation Measure	CEQA Level of Significance after Mitigation
Impact SOCIO#14: Permanent Impacts on Regional Employment	Beneficial for all alternatives. Operation of the project would provide additional long-term job opportunities for the three-county region. The project would not require an expansion of government services or facilities in response to changes in employment.	No mitigation measures are required.	N/A
Impact SOCIO#15: Permanent Impacts on Property Tax and Sales Tax Revenues	No CEQA significance conclusions are required related to this specific impact.	No CEQA significance conclusions are required related to this specific impact.	No CEQA significance conclusions are required related to this specific impact.

CEQA = California Environmental Quality Act
 N/A = not applicable