

3.12 Socioeconomics and Communities

Since publication of the Draft Environmental Impact Report (EIR)/Environmental Impact Statement (EIS), the following substantive changes have been made to this section:

- Section 3.12.2.1, Federal, was updated regarding the Federal Railroad Administration (FRA)
 Procedures for Considering Environmental Impacts. Footnotes were added regarding FRA's
 Environmental Procedures and the updated Council on Environmental Quality (CEQ)
 regulations issued after release of the Draft EIR/EIS.
- Clarifying text was added throughout the section regarding the two design variants (Diridon
 design variant [DDV] and tunnel design variant [TDV]). Text and Tables 3.12-8, 3.12-10, and
 3.12-13 were updated to show impacts under Alternative 4 with the DDV on commercial and
 industrial and agricultural property displacements, property acquisition acreage in the SAP
 Center parking lot, and property and sales tax revenue, compared to Alternative 4 without the
 DDV.
- Section 3.12.3, Consistency with Plans and Laws, was revised to include the Communications Hill Specific Plan Area Development Policy (City of San Jose 2014).
- Section 3.12.4.2, Impact Avoidance and Minimization Features, was corrected to include TR-IAMF#10.
- Section 3.12.4.3, Methods for Impacts Analysis, was updated to reflect the revised hyperlink for the California Department of Transportation (Caltrans) guidance document on community impacts assessments.
- Section 3.12.5.2, Communities and Neighborhoods, was revised to remove the Eagle Ridge development from the discussion of neighborhoods and to clarify that within each of the cities and communities within the Morgan Hill and Gilroy Subsection, distinct neighborhoods have formed on each side of the Union Pacific Railroad (UPRR) corridor and U.S. Highway (US) 101 and are currently physically separated by these transportation corridors.
- Section 3.12.5.2, Communities and Neighborhoods, was revised to correct the community and public facilities identified within 0.5 mile of the project footprint in the Pacheco Pass Subsection.
- Section 3.12.5.4, Economic Setting; Figures 3.12-7 and 3.12-8; and the discussion in Impacts SOCIO#16 and SOCIO#19 were updated to reflect additional private hunting areas near the project alignment. Impact SOCIO#16 was updated to include an expanded discussion of impacts in the Grasslands Ecological Area (GEA).
- Impact SOCIO#1 was revised to remove the Eagle Ridge development from the discussion and to clarify the cities and communities in the Morgan Hill and Gilroy Subsection that would be affected by construction noise and vibration.
- Impact SOCIO#1 was also revised to correct the community facilities located in the Pacheco Pass Subsection.
- Impact SOCIO#2 was revised to disclose the number of roadway modifications, relocations, or realignments (in addition to the permanent road closures) that would occur under each alternative, consistent with the information provided in Chapter 2, Alternatives.
- Impact SOCIO#2 was also revised to incorporate minor updates to the noise and vibration calculated impacts and minor updates to the number of displaced commercial and industrial facilities, and to clarify that, under Alternative 4, four-quadrant gates would be installed at 6th Street and the road would remain open.
- Impact SOCIO#3 was revised to incorporate minor updates to the noise and vibration calculated impacts and to include noise impacts related to the DDV and TDV.



- Impact SOCIO#7 was revised to incorporate a minor update to the number of displaced commercial and industrial facilities.
- Impacts SOCIO#10 and SOCIO#17 were revised to update employment numbers consistent with Section 3.18, Regional Growth.
- Impact SOCIO#12 was revised to incorporate minor updates to the acreage of temporary use of Important Farmland under Alternatives 3 and 4.
- Impact SOCIO#13 was revised to incorporate minor updates to the acreage of remnant parcels rendered permanently nonviable for agricultural use under Alternative 4.
- Section 3.12.7, Mitigation Measures, was updated to include SO-MM#1, which would be implemented to reduce impacts under NEPA associated with residential displacement in certain areas.
- Section 3.12.8, Impact Summary for NEPA Comparison of Alternatives, was revised to reflect consistent numbers for displaced community and public facilities and updated with conclusions of insufficient relocation resources within certain cities and communities.
- Table 3.12-23 was updated to reflect the changes noted above.
- Where appropriate, the verb "would," when used specifically to describe impact avoidance and minimization features (IAMFs) or mitigation measures, as well as their directly related activities, was changed to "will," indicating their integration into project design.

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, agricultural operations, community facilities, and the local economy. The analysis addresses impacts on community cohesion and children's health and safety, effects of displacement and relocation, and economic effects. The socioeconomic data used in the analysis are derived from various sources, including the U.S. Census Bureau, California Department of Finance (CDOF), California Employment Development Department (CEDD), and the various county and city agencies.

The San Jose to Merced Project Section Community Impact Assessment (Community Impact Assessment) (Authority 2019a) provides additional technical details on the assessment of potential socioeconomic and community impacts. The San Jose to Merced Project Section Draft Relocation Impact Report (Draft Relocation Impact Report) (Authority 2019b) and Appendix 3.12-A, Relocation Assistance Documents, present additional detailed information on property displacements and relocation impacts. In addition, the following four appendices in Volume 2 of this Final EIR/EIS provide additional details on socioeconomics and communities:

- Appendix 2-D, Applicable Design Standards, describes the relevant design standards for this project.
- Appendix 2-E, Project Impact Avoidance and Minimization Features, provides the list of the IAMFs incorporated into the project.
- Appendix 2-J, Regional and Local Plans and Policies, provides a list by resource of applicable regional and local plans and policies.
- Appendix 2-K, Policy Consistency Analysis, provides a summary by resource of project inconsistencies and reconciliations with local plans and policies.

In addition to the analysis presented in this section and the relevant appendices, 12 other sections and 2 chapters of this EIR/EIS provide analyses of topics that are also relevant 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 impacts of the project 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
 electromagnetic fields (EMF) and electromagnetic interference (EMI) associated with the
 project on sensitive receptors and facilities.
- Section 3.7, Biological and Aquatic Resources, evaluates wetland and open-water habitat for waterfowl and shorebirds.
- Section 3.10, Hazardous Materials and Waste, evaluates project impacts associated with the transport, use, storage, disposal, and presence of hazardous materials and wastes.
- 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, Agricultural Farmland, evaluates project impacts on agricultural farmland, including Important Farmland.
- Section 3.15, Parks, Recreation, and Open Space, evaluates project impacts on parks, recreation, and open space.
- Section 3.16, Aesthetics and Visual Quality, evaluates project impacts on the visual environment.
- Section 3.18, Regional Growth, evaluates project impacts on employment and future urban development.
- Chapter 5, Environmental Justice, evaluates project impacts on low-income populations and minority populations.
- Chapter 6, Project Costs and Operations, presents cost estimates for construction, operation, and maintenance of the project.¹

3.12.1.1 Definition of Resources

The following are definitions of socioeconomic and community resources analyzed in this Final EIR/EIS. These definitions are the same as those used in the *Merced to Fresno Section California High-Speed Train Final EIR/EIS* (Merced to Fresno Final EIR/EIS) (Authority and FRA 2012).

- **Communities**—Refers to groups of people living in the same city, town, or neighborhood who exhibit behavior patterns expressed through daily social interactions, the use of local public facilities, participation in local organizations, and involvement in activities that satisfy the population's economic and social needs.
- Children's health and safety—Refers to potential environmental impacts that specifically affect children (i.e., people under 18 years of age). These environmental impacts include air

¹ The analysis in the Final EIR/EIS was conducted using 2018\$ and costs associated with the PEPD in the Draft EIR/EIS, which was published in April 2020. Capital costs in Chapter 6 and Appendix 6-A were updated in the Final EIR/EIS to reflect design changes in the PEPD and to reflect 2021 dollars. The analysis in this section uses the 2018\$ and costs from the Draft EIR/EIS. Although the costs in the Final EIR/EIS are different than in the Draft EIR/EIS, the differences overall are minor and the analysis in this section is still a reasonable representative of the effects of the project, although the effects would be expected to be slightly higher given the increase in costs reflected in the estimate in Chapter 6.



quality, noise impacts on health and learning, EMI exposure, hazardous materials risk, and potential health and safety risks to children.

- **Displacements—**Refers to the movement of people out of their residences, businesses, nonprofit organizations, or farms as a result of acquisition of private property for construction of a transportation project.
- Relocations—Refers to the placement of people into new homes, commercial properties, or farms 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 (including agricultural 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 California High-Speed Rail Authority (Authority) would implement the high-speed rail (HSR) project in compliance with federal and state regulations. The general National Environmental Policy Act (NEPA) and California Environmental Quality Act (CEQA) requirements for assessment and disclosure of environmental impacts are described in Section 3.1, Introduction, and are therefore not restated in this section.

3.12.2.1 Federal

Federal Railroad Administration, Procedures for Considering Environmental Impacts (64 Fed. Reg. 28545)

On May 26, 1999, FRA released *Procedures for Considering Environmental Impacts* (FRA 1999). These FRA procedures supplement the Council on Environmental Quality Regulations (40 C.F.R. Part 1500 et seq.) and describe the FRA's process for assessing the environmental impacts of actions and legislation proposed by the agency and for the preparation of associated documents (42 U.S. Code 4321 et seq.).^{2,3} The FRA *Procedures for Considering Environmental Impacts* states that "the EIS should identify any significant changes likely to occur in the natural environment and in the developed environment. The EIS should also discuss the consideration given to design quality, art, and architecture in project planning and development as required by U.S. Department of Transportation Order 5610.4." The 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 limited English proficiency (LEP) applicants and beneficiaries meaningful access to programs and activities.

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California High-Speed Rail Authority

² While this EIR/EIS was being prepared, FRA adopted new NEPA compliance regulations (23 C.F.R. 771). Those regulations only apply to actions initiated after November 28, 2018. See 23 C.F.R. 771.109(a)(4). Because this EIR/EIS was initiated prior to that date, it remains subject to FRA's Environmental Procedures rather than the Part 771 regulations.

³ The Council on Environmental Quality issued new regulations on July 14, 2020, effective September 14, 2020, updating the NEPA implementing procedures at 40 C.F.R. Parts 1500-1508. However, this project initiated NEPA before the effective date and is not subject to the new regulations, relying on the 1978 regulations as they existed prior to September 14, 2020. All subsequent citations to Council on Environmental Quality regulations in this environmental document refer to the 1978 regulations, pursuant to 40 C.F.R. 1506.13 (2020) and the preamble at 85 Fed. Reg. 43340.



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 (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) (42 U.S.C. § 61) 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 be followed to ensure that displaced persons receive fair and just compensation for any acquisition of property 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 at the site as 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 set in the USEPA guidelines when assessing the mitigation measures developed to minimize impacts on existing or planned schools near the HSR project footprint.

Farmland Protection Policy Act of 1981 (7 U.S.C. §§ 4201-4209 and 7 C.F.R. § 658)

The Farmland Protection Policy Act (FPPA) (7 U.S.C. §§ 4201 et seq.) is intended to protect farmland and requires federal agencies to coordinate with the U.S. Department of Agriculture Natural Resources Conservation Service (NRCS) if their activities may irreversibly convert farmland to nonagricultural use, either directly or indirectly. The stated purpose of the FPPA is to "minimize the extent to which federal programs contribute to the unnecessary conversion of farmland to nonagricultural uses." The FPPA requires federal agencies to examine potential direct and indirect impacts on farmland of a proposed action and its alternatives before approving any activity that would convert farmland to nonagricultural use. The U.S. Department of Agriculture issues regulations to implement the FPPA (7 Code of Federal Regulations [C.F.R.] § 658).

For the purpose of FPPA, *Important Farmland* includes Prime Farmland, Unique Farmland, and Farmland of Statewide or Local Importance, as defined by Section 1540(c)(1) of the FPPA. Classification standards differ from state to state, and each state may set its own criteria for classification of each category. Federal farmland classification criteria also may differ from those developed by the California Department of Conservation (DOC), which are described in Section 3.14. Lands subject to FPPA requirements include forestland, pastureland, cropland, or other land, but do not include water or urban built-up land.

The FPPA exempts the following land types:

Soil types not suitable for crops, such as rocky terrain or sand dunes.



- Sites where the project's right-of-way is entirely within a delineated urban area and the project requires no Prime or Unique Farmland, nor any Farmland of Statewide or Local Importance.
- Farmland that has already been converted to industrial, residential, or commercial uses or is used for recreational activity.

The FPPA applies to projects and programs sponsored or financed in whole or in part by the federal government. FPPA implementing regulations spell out requirements to make sure that federal programs, to the extent practical, are compatible with state, local, and private programs and policies to protect farmland. The FPPA requires a rating of farmland conversion impacts based on land evaluation and site assessment criteria identified in 7 C.F.R. Section 658.5. These criteria are addressed through completion of a Farmland Conversion Impact Rating for Corridor Type Projects (NRCS-CPA-106) form, which requires input from both the federal agency involved and the NRCS. Section 3.14.2.1 describes this process.

3.12.2.2 State

California Relocation Act (California Gov. 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 persons displaced as a result of projects undertaken by state or local governments that do not involve federal funds. However, because the HSR 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 to make sure that the California HSR System complies with Title VI of the Civil Rights Act of 1964 and related statutes (Title VI). The policy states:

- The Authority is committed to ensuring 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 the FRA to conform to Title VI. The Authority's sub-recipients and contractors also 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 would administer a Title VI Program in accordance with the spirit and intent of the nondiscrimination laws and regulations.

The Authority's 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 to make sure the HSR program complies with the requirements of USEO 13166. The policy states that:

- It is the policy of the Authority to communicate effectively and provide meaningful access for LEP individuals to all the Authority's programs, services, and activities. The Authority shall provide free language assistance services to LEP individuals whom we encounter 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, formal arrangements with local organizations providing interpretation or
 translation services, and telephonic interpreter services.

The LEP Policy and LEP Plan supplement the Title VI Plan (Approval of the Limited English Proficiency Policy and Plan, HSRA Resolution No. 12-15) (Authority 2012b).



California Land Conservation Act of 1965 (California Gov. Code §§ 51200 et seq.)

The California Land Conservation Act of 1965, commonly known as the Williamson Act, provides a property tax incentive for the voluntary enrollment of agricultural and open-space lands in contracts between local governments and landowners. The contract restricts the land to agricultural, open-space, and compatible uses defined in state law and local ordinances. Local government establishes an agricultural preserve defining the boundary within which a city or county would enter into contracts with landowners. Local governments calculate the property tax assessment based on the actual land use instead of the potential land value assuming full development, thereby providing a financial incentive to conserve agricultural or open-space uses.

Williamson Act contracts are for 10 years and longer. The contract is renewed automatically each year, maintaining a constant, 10-year contract, unless the landowner or local government files to initiate nonrenewal. Should that occur, the Williamson Act would terminate 9 years after the filing of a notice of nonrenewal. Only a landowner can petition for a contract cancellation. Tentative contract cancellations can be approved only after a local government approves, and the landowner pays a cancellation fee.

California has the following policies regarding public acquisition of and locating public improvements on lands in agricultural preserves and on lands under Williamson Act contracts (California Gov. Code §§ 51290–51295):

- Avoid locating federal, state, or local public improvements and improvements of public utilities, and the acquisition of land, in agricultural preserves.
- Locate public improvements that are in agricultural preserves on land that is not under Williamson Act contract.
- Any agency or entity proposing to locate such an improvement, in considering the relative
 costs of parcels of land and the development of improvements, must give consideration of the
 value to the public of land, particularly prime agricultural land, in an agricultural preserve.

3.12.2.3 Regional and Local

County and community plans, including general plans, downtown master plans, community plans, and specific plans, address socioeconomic and community issues. Policies and regulations include guidelines for community design, housing, transportation and circulation, economic development, and land use. Appendix 2-J in Volume 2 lists the 18 regional and local plans and describes the policies adopted by the cities and counties in the resource study area (RSA) that were identified and considered in the preparation of this analysis.

3.12.3 Consistency with Plans and Laws

As indicated in Section 3.1.6.3, Consistency with Plans and Laws, the CEQA and NEPA⁴ regulations require a discussion of inconsistencies or conflicts between a proposed undertaking and federal, state, regional, or local plans and laws. Accordingly, this Final EIR/EIS describes inconsistency of the project alternatives with federal, state, regional, and local plans and laws to provide planning context. Volume 2, Appendix 2-J, Table 12 describes all plans and policies relevant to socioeconomics and communities.

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, and racial and ethnic minorities. Several adopted federal and state

California High-Speed Rail Authority

⁴ NEPA regulations refer to the regulations issued by the Council for Environmental Quality at 40 C.F.R. Parts 1500 to 1508.



policies pertain to relocation of individuals and are applicable to this Final 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 Americans with Disabilities Act, California Government Code Section 65040.12(e), and the Authority's Title VI Policy.
- Federal and state laws and regulations, including the Uniform Relocation Assistance and Real Property Acquisition Policies Act and the California Relocation Assistance Act, that establish requirements for the treatment of persons displaced as a result of state or federal actions.
- 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 construct and operate 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 project. 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 compatible 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 18 plans and 204 goals, objectives, or policies and determined that the project alternatives were inconsistent with 24 policies, goals, and objectives from the following regional and local policies and plans:

- Santa Clara County General Plan (County of Santa Clara 1994, 2014)—Policy HG 21. The
 project would require the acquisition of land within the project footprint and would result in the
 demolition of some existing residences and businesses.
- Envision: San José 2040 General Plan and 2014–23 Housing Element (City of San Jose 2011, 2015)—Policies H-2.3 and H-3.4. The project would require the acquisition of land within the project footprint and would result in the demolition of some existing residences and businesses.
- Communications Hill Specific Plan (City of San Jose 1992)—Overall Goal: "Adopt site
 planning and architectural guidelines and noise attenuation techniques to protect
 Communications Hill residents and workers from excessive noise from arterials, freeways,
 the fairground activities, adjacent industrial activities and trains and planes traveling nearby."
 The project would introduce new sources of noise and vibration and would therefore be
 inconsistent with this goal.
- Communications Hill Specific Plan Area Development Policy (City of San Jose 2014)— Area Development Policy (ADP) Improvement 8: Capitol Caltrain Station Pedestrian/Bicycle Connection along Monterey Highway. Access from the Communications Hill development to the Capitol Caltrain Station on the east side of the railroad tracks adjacent to Monterey Road by trail and overcrossing is proposed using one of the three options. The first option assumes the overcrossing would be located north of the existing Capitol Caltrain Station. The other two options would be very similar, with the overcrossing adjacent to or very near the existing station. Project alternatives would introduce new tracks, permanent structures, and temporary construction staging where the policy proposes trail and crossing options. None of the project alternatives would preclude construction of a pedestrian and bicycle overcrossing at Capitol Caltrain Station. All options proposed in ADP Improvement 8 remain feasible but may require use of an undercrossing instead of an overcrossing.



- Morgan Hill 2035 General Plan and 2015–2023 Housing Element Update (City of Morgan Hill 2016, 2015)—Policies CNF-2.3, CNF-11.1, CNF-15.6, CNF-17.1, CNF-17.4, ED-3.1, ED-3.2, NRE-4.1, NRE-4.9, NRE-4.10, SSI-8.1. The project would require the acquisition of land within the project footprint, introduce new sources of noise and vibration, and result in the demolition of some existing residences and businesses.
- **Downtown Morgan Hill Specific Plan** (City of Morgan Hill 2009)—Land Use Policy: "Encourage the preservation of the small-scale residential neighborhoods west of Monterey Road and north of Fourth Street." Under Alternative 2, the alignment would travel through neighborhoods east of the UPRR alignment and would require the acquisition of land within the project footprint, introduce new sources of noise and vibration, and result in the demolition of some existing residences, all of which would be inconsistent with the objective to preserve small-scale residential neighborhoods.
- City of Gilroy 2020 General Plan and 2015–23 Housing Element (City of Gilroy 2002, 2014)—Policies H-4.1 and H-4.2. The project would require the acquisition of agricultural land within the project footprint that could result in reduced agricultural production revenues.
- San Benito County 2035 General Plan (County of San Benito 2015) Policies LU-3.2 and NCR-1.1. The project would introduce a large visual element into the existing rural landscape that would alter the rural character and natural beauty of the area. The project would also result in displacements of farm residences, acquisition of agricultural parcels, and splitting of some agricultural parcels along the alignment, resulting in the conversion of agricultural land, conflicts with the overall aim of the general plan policies, and short-term economic impacts.
- **2030 Merced County General Plan** (County of Merced 2013)—Policies AG-2.2, AG-2.8, and HS-7.4. The project would result in displacements of farm residences, acquisition of agricultural parcels, and splitting of some agricultural parcels along the alignment, resulting in the conversion of agricultural land, conflicts with the overall aim of the general plan policies, and short-term economic impacts. The project would also result in increased noise.

Appendix 2-K in Volume 2 discusses additional details and reconciliations. As a state agency, the Authority is not required to be consistent with these local government policies. Inconsistencies would be minimized, but they would not be entirely reconciled. The project would provide relocation assistance; maintain access to community services during construction; minimize disruption to individuals and community cohesion related to relocation; minimize noise, vibration, and visual impacts; and administer a farmland consolidation program. 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

The evaluation of impacts on socioeconomics and communities is a requirement of NEPA and CEQA. The following sections summarize the RSAs and the methods used to analyze the socioeconomic conditions and communities. Additional details on these methodologies can be found in the Community Impact Assessment (Authority 2019a) and the Draft Relocation Impact Report (Authority 2019b). As summarized in Section 3.12.1, Introduction, 12 other sections and two chapters describe methods used to analyze impacts on resources that are relevant to socioeconomics and communities.

3.12.4.1 Definition of the Resource Study Areas

As defined in Section 3.1 of this Final EIR/EIS, RSAs are the geographic boundaries in which the Authority made environmental investigations specific to each resource topic. Four RSAs for socioeconomics and communities have been defined: (1) communities and neighborhoods, (2) children's health and safety, (3) property displacements and relocations, and (4) economic impacts. Table 3.12-1 shows these RSAs with a general definition and boundary definition for each.



Table 3.12-1 Definition of Socioeconomic and Community Resource Study Areas

Туре	Boundary Definition							
Communities and Neighborhoods								
Direct—construction and operations	The RSA for direct impacts on communities and neighborhoods is defined as the project footprint of the project alternatives.							
	The direct impact area needed to construct, 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.							
Indirect—construction and operations	The RSA for indirect impacts on communities and neighborhoods is defined as areas within 0.5 mile of the centerline of the project footprint and within a 0.5-mile radius around station and maintenance facilities and affected public support facilities.							
	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.							
Children's Health and Safe	ety							
Construction health effects	The RSA for construction health effects on children's health and safety is defined as school and daycare facilities within 1,000 feet of construction footprint.							
	These effects would result from noise effects on health and learning, air quality, exposure to hazardous materials, and potential safety risks to children, including impacts on schools and recreation areas where children congregate.							
Operational health effects	The RSA for operational health effects on children's health and safety is defined as school and daycare facilities within 1,000 feet of stations, MOWFs, or the rail tracks.							
	These effects would result from exposure to hazardous materials, electromagnetic interference, and potential safety risks to children, including impacts on schools and recreation areas where children congregate.							
Property Displacements a	nd Relocations							
Property displacements	The RSA for property displacements comprises privately held residential, commercial, agricultural, and industrial properties and community and public facilities that fall within the project footprint.							
	Properties and facilities, including residential properties, commercial and industrial facilities (businesses), agricultural properties, and community and public facilities, that would be displaced as a result of project construction (both temporary displacements in temporary construction easements or permanent acquisition of property for construction of the project).							
Relocations	The RSA for relocations is defined as the three-county region of Santa Clara, San Benito, and Merced Counties.							
	Communities and unincorporated areas where properties and facilities, including residential properties, commercial and industrial facilities (businesses), agricultural properties, and community and public facilities, would likely be relocated as a result of displacements from project construction, and nearby cities and communities with similar characteristics where displaced residents and businesses could relocate.							



Туре	Boundary Definition					
Economic Impacts						
Overall economic impacts	The RSA for overall economic impacts is defined as the three-county region of Santa Clara, San Benito, and Merced 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.					
	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 as a result of project construction.					

Source: Authority and FRA 2017 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 this 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
- 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#10: Off Peak Hour Employee Work Shift Changes at HMF
- 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



- AQ-IAMF#6: Reduce the Potential Impact of Concrete Batch Plants
- SS-IAMF#1: Construction Safety Transportation Management Plan
- SS-IAMF#2: Safety and Security Management Plan
- NV-IAMF#1: Noise and Vibration
- AG-IAMF#1: Restoration of Important Farmland Used for Temporary Staging Areas
- AG-IAMF#2: Permit Assistance
- AG-IAMF#3: Farmland Consolidation Program
- AG-IAMF#4: Notification to Agricultural Property Owners
- AG-IAMF#5: Temporary Livestock and Equipment Crossings
- AG-IAMF#6: Equipment Crossings
- HMW-IAMF#1: Property Acquisition Phase 1 and Phase 2 Environmental Site Assessments
- HMW-IAMF#3: Work Barriers
- 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
- LU-IAMF#1: HSR Station Area Development: General Principles and Guidelines
- LU-IAMF#2: Station Area Planning and Local Agency Coordination
- LU-IAMF#3: Restoration of Land Used Temporarily During Construction
- PK-IAMF#1: Parks, Recreation, and Open Space
- PUE-IAMF#2: Irrigation Facility Relocation
- PUE-IAMF#3: Public Notifications
- PUE-IAMF#4: Utilities and Energy
- AVQ-IAMF#1: Aesthetic Options
- BIO-IAMF#1: Project Biologist
- BIO-IAMF#3: Construction Period WEAP Training
- BIO-IAMF#5: Prepare and Implement a Biological Resources Management Plan
- BIO-IAMF#8: Delineate Equipment Staging Areas and Traffic Routes

This environmental impact analysis considers these IAMFs as part of the project design. In 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 Impacts Analysis

This section describes the sources and methods the Authority used to analyze potential project impacts on communities, residents (including children), businesses, agricultural operations, community facilities, and the local economy. These methods apply to both NEPA and CEQA unless otherwise indicated. Refer to Section 3.1.6.4, 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 Caltrans *Standard Environmental Reference Environmental Handbook, Volume 4: Community Impacts Assessment* (Caltrans 2011). For the impact analysis methods also see Chapters 2 and 4 through 8 in the Caltrans guidance (https://dot.ca.gov/programs/environmental-analysis/standard-environmental-reference-ser/volume-4-community-impacts-assessment). The Authority evaluated construction and operations impacts, including direct and indirect, or secondary, impacts. The impacts analysis assumed that IAMFs will be incorporated into the project as it is described in Section 2.6.2, HSR Alternatives for the San Jose to Central Valley Wye Project Extent.

Analysts 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 footprint 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 to analyze potential impacts.

Communities—Disruption and Division

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. Cohesion refers to the degree of interaction among the individuals, groups, and institutions that make up the community" (Caltrans 2011). Community cohesion takes into consideration access and linkages, community facilities, and local businesses in the surrounding area that provide opportunities for residents to gather and interact. For this analysis, the evaluation of impacts related to community disruption and division considered changes in community cohesion through the potential for the project alternatives to create visual and functional barriers to community interactions. Much of the basis for the discussion of potential community disruption and division impacts in this section relates to impacts described in other sections of this Final EIR/EIS, such as impacts in Sections 3.2, 3.3, 3.4, 3.5, 3.10, 3.11, 3.13, 3.14, 3.15, 3.16, and 3.18. The data and analysis contained in Chapter 5 were also considered. Impacts on these resources do not necessarily constitute an impact on community cohesion; rather, these impacts are considered in making a determination whether there would be impacts pertaining to community division or disruption.

In addition to considering impacts described in other resource sections, the Authority collected and reviewed community data for the three-county region of Santa Clara, San Benito, and Merced Counties and the cities of San Jose, Morgan Hill, and Gilroy. The Authority used a variety of data sources to quantify current conditions and trends related to population and demographics, income, and housing. The Authority obtained information and data from the 2010–2014 U.S. Census Bureau American Community Survey (ACS), the CDOF, the Geographic Names Information System (USGS 2013), and county and city planning agencies. When available, 2010–2014 ACS data were used because the census is the most reliable source for some data. The ACS is an ongoing statistical survey done by the U.S. Census Bureau that publishes 5-year averages.

Information and data related to population age distribution, ethnicity, linguistic isolation, household characteristics, disability status, and household income are shown in Tables 5-3 through 5-19 of the Community Impact Assessment (Authority 2019a). Community data are presented in Section



3.12.5, Affected Environment, from north to south along the corridor. The data allow for an examination of community factors and comparison of communities within the RSA.

To evaluate potential impacts on communities, the Authority:

- 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 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 homes, businesses, or community facilities and services that would not be displaced by project construction or operations but that would be near the HSR alignment.
- Reviewed summary reports of HSR outreach efforts to communities and regional and local stakeholders (Chapter 9 includes a summary of all public involvement and outreach). Public involvement and outreach activities have been held since December 2008. These activities included informational and scoping meetings, town hall meetings, public and agency scoping meetings, meetings with individuals and groups, presentations, and briefings. A variety of informational materials, including fact sheets and translated versions, were distributed at these meetings. Public comments associated with socioeconomics and communities involved:
 - Equitable land acquisition
 - Concern from dairy owners about what would happen to their land and impacts on their operations
 - Safety at rail crossings
 - Aesthetics
 - Noise and air quality
 - Impacts on children's health and safety
 - Connectivity from the Los Altos Trail to Diridon Station (also known as Guadalupe River Trail)
 - Further division of the Gardner neighborhood, which is already divided by highways and train tracks
 - Impacts on quality of life
 - Job creation
- Reviewed comments received as part of project outreach for the San Jose to Merced Project Section during three public and agency scoping meetings held between March 18 and March 26, 2009 in Merced,⁵ San Jose, and Gilroy. The *Final Scoping Report: San Jose to Merced Project Section* (Authority and FRA 2009) summarizes comments received at the meetings.

As construction and operations impacts would typically be 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 from construction and operations of the project alternatives on children's health and safety by reviewing the construction impacts associated with other sections of

February 2022

California High-Speed Rail Authority

⁵ The Authority held a joint scoping meeting in Merced in conjunction with the Merced to Bakersfield Project Section.



this Final EIR/EIS (e.g., Sections 3.2, 3.3, 3.4, 3.5, 3.10, and 3.11). The Authority then determined whether there was a special risk to children's health and safety associated with these effects.

Property Displacements and Relocations

This analysis identifies the displacements—residential, commercial, agricultural, industrial, community and public facility—and relocations expected under each of the project alternatives and evaluates the availability of suitable replacement properties. The evaluation of displacements considers property acquisitions that result in the acquisition of a parcel or structure, while the evaluation of relocations considers the need to find new homes for residents or new locations for institutions, such as businesses, that occupy affected structures. A description of what constitutes a full or partial acquisition is provided in the Draft Relocation Impact Report, Section 4.2.2, Parcel Acquisitions by Land Use (Authority 2019b). The Authority evaluated the potential for relocations of households, students, businesses, and community facilities, and the potential to alter the physical shape, character, or function of communities or neighborhoods, including the perceived quality of life in the neighborhoods. Indirect impacts on homes, businesses, and community facilities and services that would not be displaced by the project alternatives but that would be near the HSR alignment were also evaluated. These indirect impacts included both temporary impacts during construction (e.g., exposure to noise, dust, and heavy vehicle traffic) and long-term impacts (e.g., exposure to light and glare and noise) during HSR operations.

The Draft Relocation Impact Report (Authority 2019b) provides the methodology for the assessment of property acquisition and resulting displacement and relocation impacts in detail. The methodology included an intensive review of Google Earth/KMZ file data to identify each parcel intersecting the project alternative footprints. The Community Impact Assessment (Authority 2019a) assesses how these displacements and relocations would disrupt communities and affect community cohesion.

Economic Impacts

The Authority evaluated project economic impacts by assessing changes in employment, school district funding, agricultural economy, property tax revenues, and sales tax revenues. For this analysis, the three-county region of Santa Clara, San Benito, and Merced Counties was considered because economic impacts of the project may pertain to this larger geographic region. The following sections describe the methodologies analysts used to evaluate the impacts of the project.

Employment

The project is anticipated to improve state and regional interconnectivity, while creating job opportunities across many sectors of the regional economy. This job creation would occur during both the short-term construction and the long-term operations of the project. The Authority evaluated impacts of the project on employment by assessing changes in the demand of employment related to construction and operations. This assessment was based on Regional Input-Output Modeling System (RIMS) II analysis conducted for the project. The RIMS II analysis provides a multiplier model of the economic RSA useful for estimating regional economic changes generated by changes in regional industries, including short-term (temporary) employment by year generated by project construction and long-term (permanent) employment generated by HSR operations. The assessment of potential employment gains also considered improved regional and statewide accessibility. Detailed methodologies are found in Section 3.18 and Appendix 3.18-A of this Final EIR/EIS.

Changes in School District Funding

Student Relocations

The Authority assessed financial impacts on school districts by evaluating the potential of project construction to result in the relocation of a substantial number of students outside affected school districts, potentially reducing district funding. To determine the potential impacts, the Authority compared the total number and type of housing units that would be displaced in a school district with the number of potentially available suitable replacement housing units within the district. The



results were used to determine if a substantial number of families with enrolled students might have to relocate outside the school district. School funding impacts would occur in areas where a large number of displaced students' families would need to relocate to homes in a different school district.

Bus Transportation Costs

The Authority evaluated the locations of potential roadway closures during construction and the proposed construction of new roadway overpasses and undercrossings in conjunction with the project alternatives' footprints to assess potential impacts on school district bus transportation routes and costs during project construction. The Authority evaluated road closures within 0.25 mile of existing schools to determine if alternative routes would be available that would not add substantial additional time to school bus travel time.

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 value of the properties to be acquired, derived from the *San Jose to Merced Project Section:* Right-of-Way Cost Overview Engineering Report (Authority 2019c) and the property tax rates for Santa Clara. San Benito, and Merced Counties.

Economic Effects on Agriculture

The assessment of potential effects on agricultural businesses involved identifying the direct construction impacts associated with loss of crops or wastewater management lands as a result of property acquisitions. The value of croplands and wastewater management lands can be estimated to provide an indication of impacts on agriculture in the region. Details of the methodology used to calculate agricultural production revenue loss are provided in Appendix D of the Community Impact Assessment (Authority 2019a). Section 3.14 of this Final EIR/EIS also analyzes the extent of agricultural farmland that may be converted to nonagricultural uses as a result of the project.

The Authority used the following data sources and approaches to assess impacts:

- Analysts determined direct impacts using data from the Farmland Mapping and Monitoring Program, county parcel data, and facility data provided by the Central Valley Regional Water Quality Control Board (Central Valley RWQCB) Sacramento and Fresno offices (DOC 2017; Central Valley RWQCB 2007, 2016).
- Analysts determined impacts related to removal of capital improvements such as farm structures using aerial imagery and GIS.

Analysts assessed both construction and operations indirect noise and vibration impacts that could affect revenue of confined animal facilities, such as a dairy. The analysis used established operation guidelines to determine the minimum setback distance between the track centerline and confined animal agricultural facilities. The 100-foot setback used to establish the impact threshold on livestock was based on the more conservative of the following two FRA-established metrics: (1) noise impacts on livestock of 100 A-weighted decibels (dBA) sound exposure level at 100 feet, and (2) vibration impacts at 75 velocity decibels at 70 feet (FRA 2012).

Property Tax Revenue Changes

The Authority estimated the potential impacts of the project on property tax revenues collected by county jurisdictions based on permanent property acquisitions. The Authority quantitatively estimated these potential impacts as the estimated reduction in property tax revenue for county budgets resulting from the permanent removal of properties from the tax rolls. The analysis derived the value of property acquisitions from the San Jose to Merced Project Section Right-of-Way Cost Overview Engineering Report (Authority 2019c). The property tax rates for each county's general fund was applied to the total value of property acquisitions by county. The Authority then compared these property tax revenues to each county's fiscal year (FY) 2014/2015 general fund property tax revenues to determine if impacts would be substantial.



Sales Tax Revenue Changes

The Authority assessed the short-term changes in sales tax revenues following the start of construction by analyzing whether the temporary changes in sales tax revenues from the acquisition of commercial and industrial properties would be substantial as these businesses relocate and reestablish themselves. The Authority estimated sales tax revenues during construction 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 ongoing operations and maintenance of the project and from new economic activity generated around station sites.

3.12.4.4 Method for Evaluating Impacts under NEPA

CEQ's NEPA regulations (40 C.F.R. Parts 1500–1508) provides the basis for evaluating project impacts (as described in Section 3.1.6.4). As set forth 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 includes existing land uses, patterns, and densities
 within the RSA, as well as the proximity and sensitivity of the communities and
 neighborhoods along the project footprint to project construction and operations.
- Intensity—For this analysis, intensity is determined by assessing the degree to which the project would physically divide established neighborhoods, relocate key community businesses and industries, relocate large numbers of residences, affect the overall quality of life in a community, or reduce community cohesion.
- **Duration**—The analysis considers the duration of the effect, whether intermittent, temporary, or permanent.

This analysis covers project impacts related to disruption or division of established communities, as well as project impacts on the economy (i.e., impacts on employment, school district funding, agriculture economy, and property and sales tax revenue). In accordance with USEO 13045, 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

CEQA requires that an EIR identify the significant environmental impacts of a project (CEQA Guidelines § 15126). One of the primary differences between NEPA and CEQA is that CEQA requires a threshold-based impact analysis. Significant impacts are determined by evaluating whether project impacts would exceed the significance threshold established for the resource (as presented in Section 3.1.6.4). By contrast, under NEPA, significance is used to determine whether an EIS will be required; NEPA requires that an EIS be prepared when the proposed federal action (project) as a whole has the potential to "significantly affect the quality of the human environment." Accordingly, Section 3.12.9, CEQA Significance Conclusions, summarizes the significance of the environmental impacts on socioeconomics and communities for each project alternative. 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 people or housing, 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 EIR/EIS where children are considered sensitive receptors, such as Section 3.3.5.1, Pollutants of Concern; Section 3.4.6, Environmental Consequences (noise impacts), and Section 3.10.6.2, Hazardous Material and Waste Impacts on Sensitive Receptors.

The CEQA threshold concerning conversion of agricultural land to nonagricultural uses is presented in Section 3.14.

3.12.5 Affected Environment

This section describes the affected environment for socioeconomics and communities within the region and the communities within the RSA from north to south along the corridor and by project subsection, where applicable. This information provides the context for the environmental analysis and evaluation of impacts. Demographic data are largely from the 2010–2014 ACS, and analysis is summarized from various sources including the Community Impact Assessment (Authority 2019a), Draft Relocation Impact Report (Authority 2019b), and Section 3.18, Regional Growth.

3.12.5.1 Population and Households

Regional

The population in the three-county region of Santa Clara, San Benito, and Merced Counties increased 11 percent between 2000 and 2014 and is projected to increase an additional 29.8 percent between 2014 and 2040. The region's projected population increase is greater than the rate of population increase projected for the state as a whole, with most of the growth expected to occur in San Benito and Merced Counties (both increasing by nearly 50 percent). Santa Clara County is by far the most populous of the three counties, representing more than 86 percent of the region's population. Merced and San Benito Counties consist primarily of agricultural land, with small towns scattered throughout, separated by large agricultural and open-space areas with low population concentrations. Overall, the population of Merced and San Benito Counties is expected to continue to grow at a faster pace than Santa Clara County or California as a whole. In comparison, the annual growth rate in Santa Clara County is projected to steadily decline through 2040, though the absolute population increase is projected to be substantial (Caltrans 2015).

The largest age group in all three counties is the 18–64 group, and the increase in median age between 2000 and 2014 is consistent with general population trends (i.e., an aging population) statewide and nationally. The average median age in Merced County is lower than that in Santa Clara or San Benito Counties. Overall, the population trended slightly older in all three counties between 2000 and 2014, reflecting a generally aging population statewide.

In the more rural areas of Merced and San Benito Counties, average household size was greater than in both Santa Clara County and the state as a whole. In general, household size in the more rural portions of the RSA (south of Morgan Hill) was greater than the statewide average of 3.0.

Cities and Communities in the RSA

San Jose is the most populous of the cities and communities in the RSA, at nearly 1 million people. The next largest is Gilroy, with approximately 50,000 people, followed by Morgan Hill with fewer than 40,000 residents. The population density drops dramatically south of Gilroy because of the area's rural character. Population growth was steady between 2000 and 2014 in the cities and communities in the RSA, with the greatest percent increases in Gilroy, Morgan Hill, and San Martin. Most of the RSA's population resides in Santa Clara County. The northern portion of the project extent has the greatest population concentration because of its more urban and suburban nature; agricultural and open space are the predominant land uses south and east of Gilroy.



Median age distribution of the communities in the RSA varies. Gilroy has the highest percent of population below 18 years and the youngest median age, suggesting a preponderance of young families. San Martin and Volta, have a substantially higher-than-average median age than the other communities in the RSA, suggesting an older population with more empty-nester families and elderly households.

In 2014, estimated average household size in the RSA ranged from 2.7 in Santa Clara to 3.4 in San Martin and Gilroy. In general, larger household sizes characterized the more suburban and rural areas of the RSA. A higher percentage of households were family households in the more rural areas, with more than 80 percent in Morgan Hill, Gilroy, and Volta.

3.12.5.2 Communities and Neighborhoods

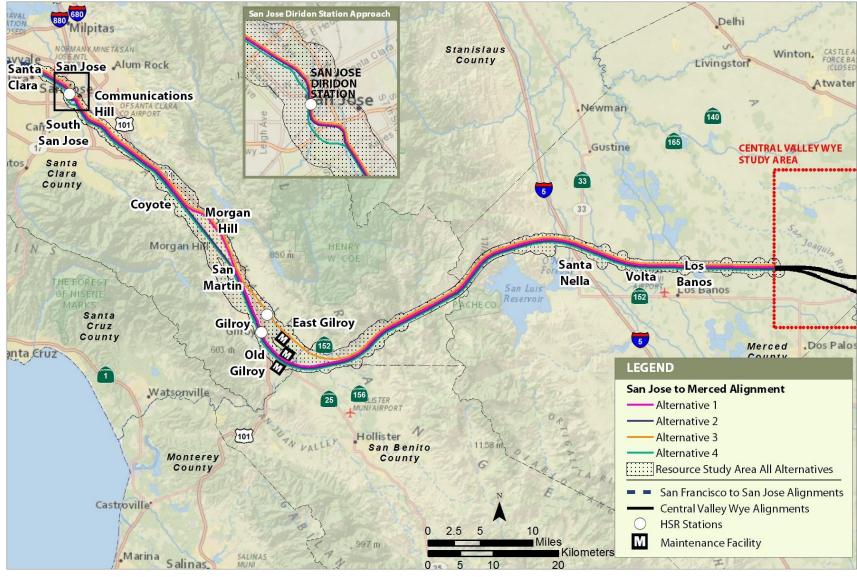
Figure 3.12-1 illustrates the communities within the RSA. Table 3.12-2 shows the cities and communities by project subsection. Because communities and neighborhoods do not divide neatly across these subsection boundaries, the analysis in this section references city and community names rather than subsections. Descriptions of the neighborhoods in each subsection are presented in this section and additional detail may be found in the Community Impact Assessment (Authority 2019a).

Table 3.12-2 Cities and Communities by Subsection

Subsection	City/Community in the Communities and Neighborhoods RSA
San Jose Diridon Station Approach	Santa Clara, San Jose
Monterey Corridor	South San Jose
Morgan Hill and Gilroy	South San Jose, Morgan Hill, San Martin, Gilroy, unincorporated San Benito County
Pacheco Pass	Unincorporated Santa Clara and Merced Counties
San Joaquin Valley	Unincorporated Merced County, Santa Nella, Volta, Los Banos¹

¹ Santa Nella, Volta, and Los Banos are within the displacements and relocations and economic impacts RSAs.





Source: Authority 2019d FEBRUARY 2019

Figure 3.12-1 Communities in the RSA



Community and public facilities within 0.5 mile of the project footprint include schools; religious institutions; parks and recreation facilities; government facilities (e.g., courthouses, prisons, city halls, post offices, libraries); fire stations; police stations; hospitals; social services (e.g., community centers, senior facilities, food banks); and cultural centers (e.g., entertainment venues, museums). Figure 3.12-2 through Figure 3.12-6 illustrate the locations of these community and public facilities for each subsection.

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 Assessment [Authority 2019a] 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

Alternative	Educational Facilities ¹	Religious	Government ²	Public Safety³	Social Services ⁴	Cultural ⁵	Totals
Alternative 1	98	89	50	58	2	21	318
Alternative 2	97	86	53	56	2	21	315
Alternative 3	93	93	50	54	2	21	313
Alternative 4	96	81	43	53	2	17	292

¹ Educational Facilities include schools, preschools, and daycare centers

The greatest number of community and public facilities within 0.5 mile of an alternative footprint are associated with Alternative 1, followed by Alternative 2, Alternative 3, and Alternative 4, although Alternatives 1, 2, and 3 have nearly identical totals. Religious and government facilities are the most prevalent community facilities along the project corridor, accounting for 53 percent of all community facilities in the RSA. The greatest number of those facilities are within the more heavily populated urban areas of the San Jose Diridon Station Approach, Monterey Corridor, and Morgan Hill and Gilroy Subsections. One community facility is in the Pacheco Pass Subsection, and three community and public facilities are within the San Joaquin Valley Subsection.

Schools are present in all subsections except the Pacheco Pass Subsection. The greatest number of schools are in the Morgan Hill and Gilroy Subsection, followed by the Monterey Corridor and San Jose Diridon Station Approach Subsections. Only one school is within 0.5 mile of the project footprint in the San Joaquin Valley Subsection. Like most other community facilities, the majority of the churches and other religious institutions are clustered in the San Jose Diridon Station Approach and Morgan Hill and Gilroy Subsections.

Parks and recreational facilities include neighborhood and regional parks, linear parks, parkways, trails, public gardens, sports and recreation centers, and other open-space areas. In contrast to other public services and facilities, which are principally clustered around the communities of San Jose, Morgan Hill, and Gilroy, parks occur throughout the communities and neighborhoods RSA, although they are more common in the San Jose Diridon Station Approach, Monterey Corridor, and Morgan Hill and Gilroy Subsections than in the Pacheco Pass and San Joaquin Valley Subsections.

San Jose Diridon Station Approach Subsection

The project alignment for Alternatives 1, 2, and 3 in this subsection is mostly within the existing Caltrain corridor. The exception is just south of the San Jose Diridon Station, where the alternatives cross over State Route (SR) 87 and Interstate (I-) 280 on aerial structures into an aerial station at Diridon. In contrast, Alternative 4 is in blended operation within the Caltrain corridor, with an at-grade station at Diridon.

² Government facilities include government offices, courthouses, prisons, city halls, and post offices.

³ Public safety facilities include fire stations, police stations, and hospitals.

⁴ Social services facilities include social services, community centers, senior facilities, and food banks.

⁵ Cultural facilities include entertainment venues, museums, and like facilities.

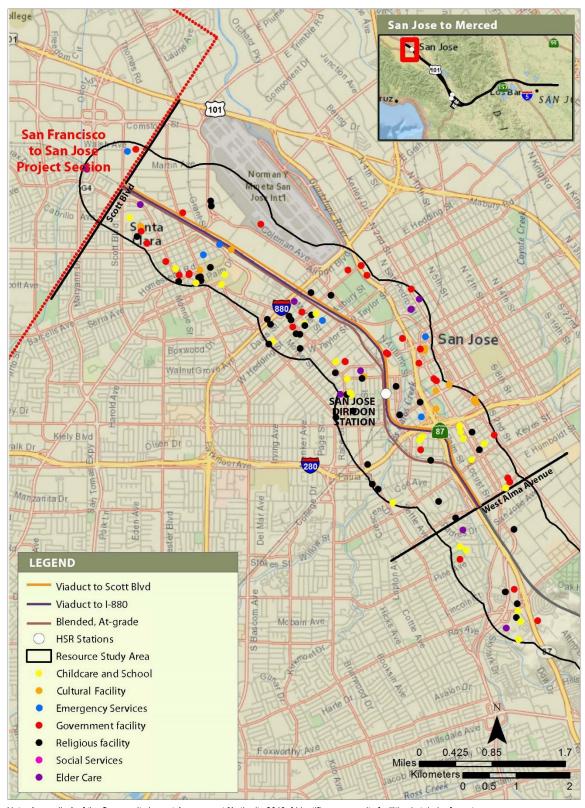


The community character through the San Jose Diridon Approach Subsection is a mix of urban residential, industrial, and commercial uses. Distinct residential neighborhoods border both sides of the Caltrain corridor, as described in greater detail in the Community Impact Assessment (Authority 2019a). A mix of single- and multifamily residential neighborhoods characterize the Autumn-Montgomery, Sunol-Midtown, Auzerais-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- and multifamily residential; while the east side is characterized by a mix of commercial uses, including the SAP Center, 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- 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 Park, Tamien Childcare Center at Tamien Station and other daycare facilities, and the Santa Clara County Social Services Center. The RSA for this subsection includes 33 schools/daycare facilities, 40 places of worship, 24 government facilities, 10 emergency services/hospitals, 15 nursing homes or residential care facilities, 21 cultural facilities, and 1 social services facility. Figure 3.12-2 illustrates the various community and public facilities in the San Jose Diridon Station Approach Subsection.

Bicycle facilities within the RSA are primarily centered on 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 5-37 in the San Jose to Merced Project Section Transportation Technical Report (Transportation Technical Report) (Authority 2019e) illustrates existing bicycle facilities in the San Jose Diridon Station area. There are also many bicycle facilities that are within the RSA but outside the station areas. These include the Coyote Creek Trail, the Guadalupe River Trail in San Jose, and the Highway 87 north/south bikeway. Numerous parks are also within this subsection, as identified in Section 3.15 of this Final EIR/EIS.





Note: Appendix A of the Community Impact Assessment [Authority 2019a] identifies community facilities in tabular format. Source: Authority 2019d

FEBRUARY 2020

Figure 3.12-2 Community Facilities in the San Jose Diridon Station Approach Subsection



Monterey Corridor Subsection

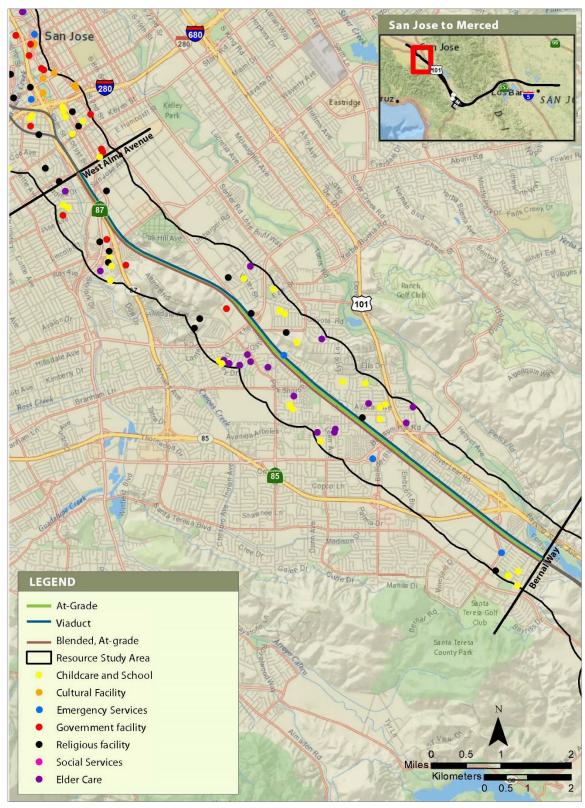
The Monterey Corridor Subsection extends between West Alma Avenue, just south of the Caltrain Tamien Station, and Bernal Road, near the West Valley Freeway (SR 85) in South San Jose. Predominantly single-family residential neighborhoods and local commercial and industrial uses characterize both sides of the existing transportation corridors, both Monterey Road and the UPRR corridor, and the west side of US 101 in the southern portion of the subsection. Neighborhoods in San Jose include Guadalupe-Canoas, Monticello, Carol Drive, Mountain Spring, Farm Drive, Branham, Vista Park, Gardens–Villa Monterey, Seven Trees, South San Jose, Parkview, Hayes, Deer Run, and Sunspring just north of Bernal Way.

All alternatives are designed to conform to the Prop 1A directive to maximize use of existing transportation corridors. The project in the Monterey Corridor and Morgan Hill and Gilroy Subsections is designed to follow the existing UPRR corridor adjacent to the UPRR mainline right-of-way under Alternative 2, to follow some portions of it under Alternatives 1 and 3, and to travel within the railroad right-of-way under Alternative 4.

Community and public facilities within the RSA include several elementary, middle, and high schools; daycare facilities; places of worship; government offices; and nursing homes. There are no cultural centers or social services facilities. In total, there are 42 schools/daycare facilities, 13 places of worship, 6 government facilities, 4 emergency services/hospitals, and 17 nursing homes or residential care facilities. There are no cultural centers or facilities in the communities and neighborhoods RSA in the Monterey Corridor Subsection. Figure 3.12-3 illustrates the community and public facilities in the Monterey Corridor Subsection.

Monterey Road has buffered Class II bicycle lanes in both directions from north of the Capitol Expressway interchange to approximately 400 feet north of the interchange with Blossom Hill Road. From approximately 400 feet north of the interchange with Blossom Hill Road to Bernal Way, Monterey Road provides a Class II bicycle lane with no buffer in both the northbound and southbound directions. Marked pedestrian crossings exist at most signalized intersections along Monterey Road. A pedestrian bridge, Xander's Crossing, provides pedestrian access across Monterey Road just south of Blossom Hill Road. Several parks and trails are present in this subsection, as identified in Section 3.15 of this Final EIR/EIS.





Note: Appendix A of the Community Impact Assessment [Authority 2019a] identifies community facilities in tabular format. Source: Authority 2019d

FEBRUARY 2019

Figure 3.12-3 Community Facilities in the Monterey Corridor Subsection



Morgan Hill and Gilroy Subsection

The Morgan Hill and Gilroy Subsection extends from Bernal Way near the SR 85 interchange with US 101 in south San Jose to Casa de Fruta, at the far west end of the Pacheco Creek Valley. The more urbanized communities of Morgan Hill and Gilroy contain a mix of commercial, industrial, and residential neighborhoods. The unincorporated areas of Santa Clara County, such as Coyote and San Martin, are more rural, with agricultural parcels and large-lot, single-family or rural residential uses dominating the landscape.

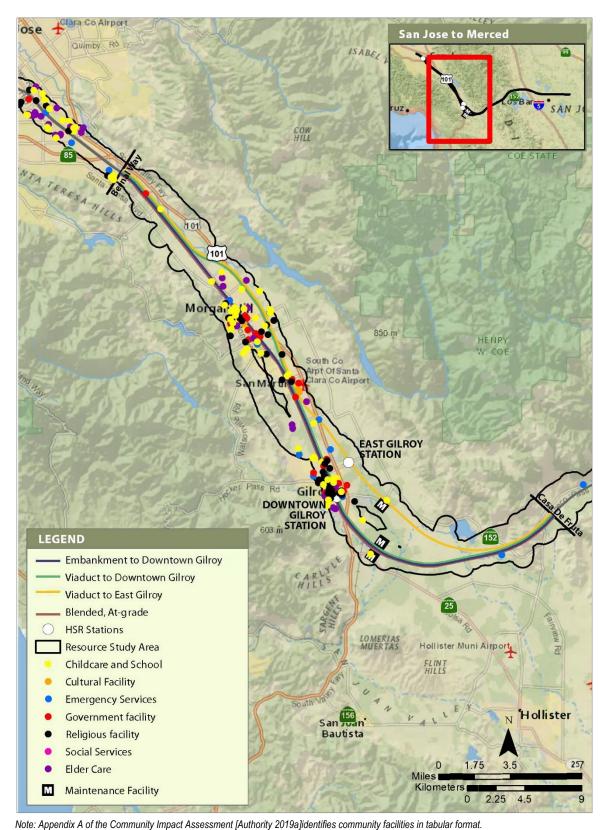
The Morgan Hill and Gilroy Subsection contains two city-designated neighborhoods in San Jose: the mostly single- and multifamily Los Paseos and California Maison neighborhoods. Within each of the cities and communities within this subsection, distinct neighborhoods have formed on each side of the UPRR corridor and US 101 and are currently physically separated by these transportation corridors. Adjacent lands include farms with scattered residential single-family homes, residential neighborhoods, and commercial areas in Morgan Hill near El Camino Real/US 101. Lands east of Gilroy are primarily agricultural, with some commercial development on the west side of the highway corridor and some single-family residential uses.

This subsection contains the most community and public facilities. There are 56 schools and daycare facilities in the RSA; 51 places of worship; 22 government facilities; 15 emergency services and hospitals; 17 nursing homes or residential care facilities; and 11 cultural facilities, including the California Aircraft Antique Museum, Gilroy Historical Museum, Morgan Hill Museum, and the Wings of History Aircraft Museum. A short portion of this subsection crosses unincorporated San Benito County. Figure 3.12-4 illustrates community and public facilities in this subsection.

No on-street bicycle facilities exist within the Downtown Gilroy Station project footprint. Nearby, Class II bike lane facilities are on Chestnut Street between 6th Street and 10th Street, 6th Street between Maple Street and Camino Arroyo, West 10th Street west of Monterey Road, and Monterey Road south of 10th Street. Figure 5-38 in the Transportation Technical Report (Authority 2019e) illustrates the existing bicycle facilities in the Downtown Gilroy Station area. Sidewalks line Monterey Road in both directions in the Downtown Gilroy Station area.

Class II bike lanes are on Leavesley Road between Monterey Road and Arroyo Circle. East of Arroyo Circle, there are no bike facilities on Leavesley Road. No bicycle facilities are on SR 152, SR 25, Bloomfield Avenue, and Frazier Lake Road in the RSA in the vicinity of the proposed maintenance of way facility (MOWF) sites. Bicycle lanes outside the station area include the Oak Glen Preserve and the Sycamore to Willow Spring Trails in Morgan Hill and Day Road in Gilroy. The Downtown Gilroy Station is wheelchair accessible and has fully paved access sidewalks. Marked pedestrian crossings are present at all signalized intersections in the proposed Downtown Gilroy Station area. There are no sidewalks in the vicinity of the proposed East Gilroy Station under Alternative 3. Several parks and trails are present in this subsection, as identified in Section 3.15 of this Final EIR/EIS.





Source: Authority 2019d

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Figure 3.12-4 Community Facilities in the Morgan Hill and Gilroy Subsection



Pacheco Pass Subsection

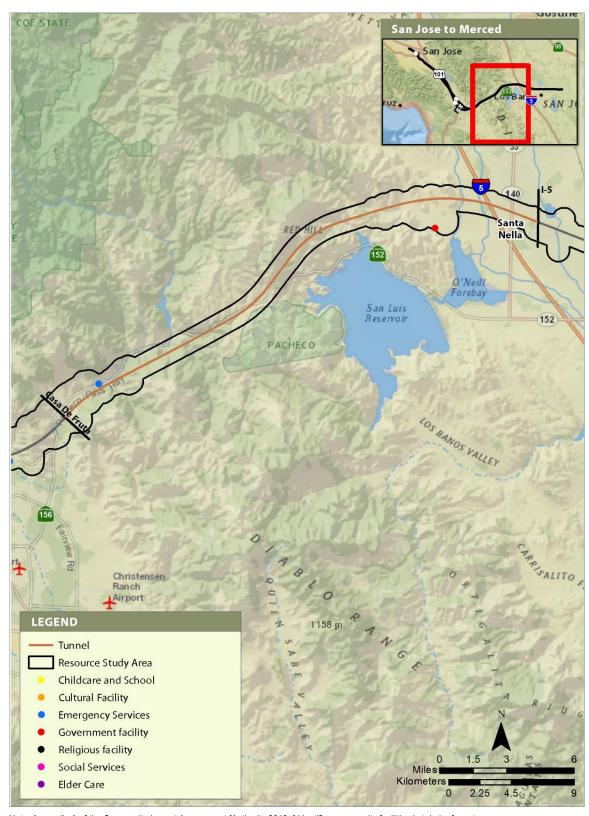
The Pacheco Pass Subsection is between Casa de Fruta (north of the SR 152/SR 156 Interchange) at the west end of the Pacheco Creek Valley, and I-5, north of Santa Nella Village in Merced County. Near the western boundary of the Pacheco Pass Subsection, the corridor passes just south of Casa de Fruta, which offers commercial services for travelers and is surrounded by agricultural uses and open space. No community centers or nonmotorized transportation facilities are present in the Pacheco Pass Subsection RSA. Biking is accommodated along the shoulder of SR 152 and other rural roadways within the RSA. There are no sidewalks along SR 152.

Just past Casa de Fruta, the alignment would enter a tunnel and generally follow SR 152 north through steep, undeveloped terrain, crossing over I-5 north of Santa Nella. The Pacheco Pass Subsection has no city-recognized neighborhoods, no schools or places of worship, no cultural centers, one emergency services facility—Department of Forestry and Fire, and one government facility—the U.S. Department of Veteran's Affairs Cemetery (San Joaquin Valley National Cemetery). Figure 3.12-5 illustrates the community and public facilities in the Pacheco Pass Subsection.

San Joaquin Valley Subsection

The San Joaquin Valley Subsection extends from I-5 to Carlucci Road. The alignment passes north of Santa Nella, Volta, and Los Banos in western Merced County, bordered by mostly agriculture-related uses, including orchards, crops, and dairy farms. The Volta Wildlife Area, the edge of the Los Banos State Wildlife Area, and residential farmhouses are north of the alignment. Various canals cross the alignment, supporting surrounding agricultural uses. Although the Los Banos Planning Area extends to the north and abuts a portion of Henry Miller Road, no neighborhoods are within 0.25 mile of the project footprint in this subsection. Volta Elementary School is within the RSA, as are four government facilities including the Los Banos Wildlife Area and the Los Banos Wastewater Plant. There are no community cultural centers in this subsection. Figure 3.12-6 illustrates the community and public facilities in this subsection. No nonmotorized transportation facilities exist in the RSA. Biking is accommodated along the shoulder of Henry Miller Road and other rural roadways within the RSA.



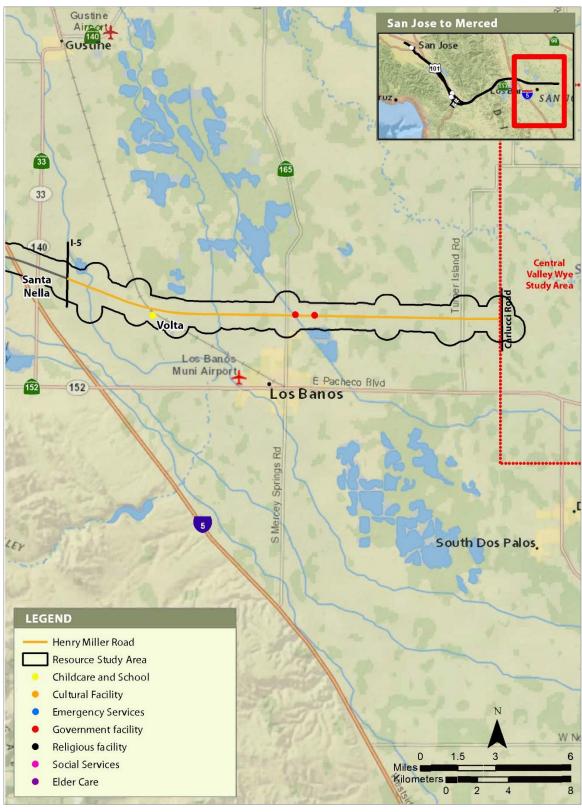


Note: Appendix A of the Community Impact Assessment [Authority 2019a] identifies community facilities in tabular format. Source: Authority 2019d

APRIL 2019

Figure 3.12-5 Community Facilities in the Pacheco Pass Subsection





Note: Appendix A of the Community Impact Assessment [Authority 2019a] identifies community facilities in tabular format. Source: Authority 2019d

APRIL 2019

Figure 3.12-6 Community Facilities in the San Joaquin Valley Subsection



3.12.5.3 Property Displacements and Relocations

This section summarizes residential, commercial and industrial, and agricultural business characteristics of the displacements and relocations RSA. The Draft Relocation Impact Report (Authority 2019b) provides detailed information on property displacements and relocation.

Housing Characteristics

Region

Single-family homes constitute the largest percentage of the total housing stock in San Benito County, followed by Merced and Santa Clara Counties. Overall, there is a greater percentage of multifamily residential units in the northern portion of the project (Santa Clara County), while single-family homes are more predominant in the suburban and rural portions of the project in San Benito and Merced Counties. This pattern is consistent with the urbanized versus rural character of the communities along the project footprint.

Cities and Communities in the RSA

Single-family housing represents the bulk of housing types in the RSA. In the more urbanized areas, such as Santa Clara, San Jose, and Gilroy, there are more abundant multifamily housing choices than in the more suburban and rural portions of the project footprint. In all but Santa Clara and Los Banos, owner-occupied housing represents more than half of the occupied housing. In Santa Clara, renter-occupied housing constitutes 52.4 percent of occupied housing. The communities with the highest percentage of owner-occupied housing are Morgan Hill and San Martin, at about 70 percent. The lowest residential vacancy rate in the RSA is 0.0 percent in the unincorporated community of Volta, and the highest homeowner vacancy rates are in Morgan Hill and Los Banos, at 1.7 percent and 2.2 percent, respectively.

Commercial and Industrial Businesses

Region

Santa Clara County is the economic powerhouse of the region, with approximately 50 times more businesses than San Benito County and 16 times more than Merced County. The types of businesses also vary by county. A high percentage of Santa Clara County's businesses provide professional, scientific, and technical services, whereas San Benito County is dominated by construction-related businesses, and Merced County by retail trade. Comprehensive tables that show the types of commercial and industrial businesses in the three counties can be found in the Community Impact Assessment (Authority 2019a).

Cities and Communities in the RSA

Approximately 74 percent of the businesses within the RSA are in San Jose, 16 percent in Santa Clara, 4 percent in Morgan Hill, 5 percent in Gilroy, and about 2 percent in Los Banos and San Martin combined. In Santa Clara, the greatest number of businesses are associated with professional, scientific, and technical services; manufacturing; and accommodation and food services. While San Jose and Morgan Hill also have a high percentage of businesses in these same categories, they also have a large number of retail trade and health care and social assistance businesses. In San Martin, manufacturing, retail trade, and administrative support and waste management/remedial services make up a high percentage of the community's businesses. Gilroy and Los Banos have similar compositions of businesses, both with a large amount of retail trade, health care and social assistance, and accommodation and food services.

Agricultural Properties

Region

While the northern part of the Santa Clara Valley (Silicon Valley) has been urbanized with high-tech industry and accompanying office parks and residential areas, the southern Santa Clara Valley remains largely agricultural in character (County of Santa Clara Division of Agriculture 2016). Several agricultural centers exist in southern Santa Clara County, each with its own



character. Coyote Valley in the north consists of agricultural uses on the edges of urban areas (Greenbelt Alliance 2017). The Gilroy area is not subject to the urban development pressure present in Coyote Valley, but instead is an active agricultural area, known as the "Garlic Capital of the World." Pacheco Pass, which extends from slightly east of Gilroy to the San Joaquin Valley, is a cattle ranching area.

San Benito County is an agricultural county. Its leading industry, according to the *San Benito County 2015 Annual Crop Report*, is production agriculture (County of San Benito Department of Agriculture 2016). The San Joaquin Valley extends from San Joaquin County in the north to Kern County in the south, including Merced County. The San Joaquin Valley has been and continues to be an important agricultural center in California and the nation; it contains many of the nation's top-producing agricultural counties (American Farmland Trust and USDA 2015).

Merced County, with 226 dairies, ranked second in overall milk production in the state in 2016 at 6,164,643,789 pounds, second only to Tulare County. Santa Clara County had no registered dairy farms in 2016; the number of dairy farms in San Benito County was not published, but was included in the overall totals for the annual statistical report for California because of the likely small number of dairies (CDFA 2017).

A detailed description of farm holdings and other agricultural operations can be found in the Community Impact Assessment and its appendices (Authority 2019a).

Cities and Communities in the RSA

San Jose contains no agriculturally zoned land within the RSA. The Monterey Corridor Subsection contains predominantly urban uses, with some cultivated agriculturally zoned land along the valley floor. The Morgan Hill and Gilroy Subsection contains active agricultural and grazing land uses between the urban centers of Morgan Hill, San Martin, and Gilroy. The Pacheco Pass Subsection contains predominantly grazing land use, although there are some active agricultural uses at the western end of the Pacheco Pass Subsection. The San Joaquin Valley Subsection, except for the urban center of Los Banos, consists almost exclusively agricultural lands, including several dairy operations, primarily near Gustine and Los Banos.

3.12.5.4 Economic Setting

Employment

Region

Santa Clara County is part of the San Francisco Bay Area economic market, San Benito County is in the Coastal economic market, and Merced County is within the San Joaquin Valley economic market. The Great Recession of 2007 to 2009 brought all three counties unemployment spikes. For Santa Clara and Merced Counties, the 2009–2010 highest unemployment rates exceeded those of prior recessions of the early 1990s and early 2000s. Details of the changes in unemployment rates during this period can be found in the Community Impact Assessment (Authority 2019a). All three counties in the economic impacts RSA have had average rates of recovery (as measured by changes in their unemployment rates) that were faster than for California overall.

The decrease in total employment in Santa Clara County between 2000 and 2015 was attributable to substantial declines in the construction, manufacturing, and wholesale/retail trade industries. However, Santa Clara County gained jobs in the information, finance, educational/health, and arts/entertainment/recreation industries. The modest overall net job loss in Santa Clara County over the 15 years can also be explained by the county's extraordinary employment conditions in 2000—just before the end of the first internet technology boom. That boom affected not only technology jobs, but also the local jobs supporting those workers.

The other two counties in the RSA have very different economies from that of Santa Clara County, and both realized job growth overall and in selected sectors. San Benito County gained jobs in retail trade, professional/scientific, and educational/health industries. Merced County gained jobs in agriculture, wholesale/retail trade, transportation/warehousing/utilities,



educational/health, and public administration industries. These jobs grew in Merced County in part because of the opening of the University of California, Merced campus in 2005.

Within the RSA, the manufacturing, professional/scientific, and educational/health industries employ the most workers. CEDD projections indicate that these same industries are anticipated to continue to account for most jobs in the region. Other employment sectors with strong growth include information and arts/entertainment/recreation sectors.

Cities and Communities in the RSA

San Jose had the largest civilian labor force among cities and communities in the economic impacts RSA from 2000 to 2014, as would be expected given the large number of regional employers located there. Lockheed Martin; Cisco Systems, Inc., a major computer peripherals manufacturer; and the SAP Center are major employers in San Jose. The largest employer in Morgan Hill is the Morgan Hill Unified School District, followed by bicycle and electronics manufacturers and food suppliers. San Martin is a large producer of garlic, table mushrooms, and wine. Gilroy is home to several major employers that include Christopher Ranch, Olam International, Syngenta Seeds, and Headstart Nursery. The city is also home to a growing number of food processing manufacturers, including Monterey Gourmet Foods and Silva Sausage.

All the communities in the RSA experienced growth in the civilian labor force between 2000 and 2014 despite the increase in overall unemployment rates during the same period. San Jose, Morgan Hill, and San Martin had the lowest unemployment rates, lower than the regional and statewide averages, while the unemployment rate in Los Banos and Volta was higher than regional and statewide averages in 2014. Gilroy experienced the largest increase in unemployment rates among the cities and communities of the RSA.

School District Funding

Funding for California's public school funding (kindergarten [K] through 12) comes primarily from the state budget (60 percent), local property taxes (23 percent), and the federal government (10 percent). Each school district has its own particular combination of federal, state, and local sources for funding, as defined by each district's annual calculated revenue limit. Each district is entitled to a dollar amount per student (the revenue limit), which is measured by average daily attendance. Local property taxes and state monies fund the revenue limit. 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., building 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 (CDOE 2017a). Overall state funding of K through 12 public education has risen from \$64 billion in the 2011–2012 school year to approximately \$83 billion for the 2015–2016 school year (CDOE 2016, 2017b). Table 3.12-4 shows the 2015–2016 school year funding for each of the school districts that would be affected by relocations.



Table 3.12-4 School Year 2015–2016 Funding for School Districts in the RSA

School District	2015–2016 Funding
Santa Clara Unified School District	\$153,361,022
San Jose Unified School District	\$430,311,581
East Side Union High School District	\$265,305,706
Morgan Hill Unified School District	\$84,611,621
Gilroy Unified School District	\$113,452,942
San Benito High School District	\$32,608,182
Los Banos Unified School District	\$32,017,764
Gustine Unified School District	\$19,824,863
Total All School Districts	\$1,131,493,681

Sources: County of Santa Clara Office of Education 2017; East Side Union High School District 2017; Morgan Hill Unified School District 2017; Gilroy Unified School District 2017; San Benito High School District 2017; Los Banos Unified School District 2017; Gustine Unified School District 2017; San Jose Unified School District 2017.

Agricultural Economy

Agriculture⁶ provides approximately 0.6 percent, 7.6 percent, and 13.1 percent of all jobs in Santa Clara, San Benito, and Merced Counties, respectively (CEDD 2016). While agriculture remains an important component of the larger regional economy, among the three counties the agricultural sector is most prevalent in Merced County, where farm income and employment grew substantially between 2000 and 2014. Farm income and employment decreased in both Santa Clara and San Benito Counties from 2000 to 2014, and farm acreage decreased substantially in Santa Clara County.

Reports produced by the Agricultural Commissioners of the three counties (County of Santa Clara Division of Agriculture 2016; County of San Benito Department of Agriculture 2016; Merced County Department of Agriculture 2016) provide data on the total farm acreage in production, expressed as harvested acres. As shown in Table 3.12-5, of the three counties, the largest producer is Merced County, with a total value of agricultural production in 2015 of approximately \$3.6 billion (Merced County Department of Agriculture 2016). The commodities with the highest production values were livestock and poultry production and products (e.g., milk, eggs, wool); fruit and nuts; and field crops. In Santa Clara and San Benito Counties, vegetable crops had the highest production value in 2014, followed by nursery products in Santa Clara County and fruit and nut crops in San Benito County.

The crop mix in Santa Clara County has shifted toward higher-value, labor-intensive fruit and vegetable crops. This shift, supported by increases in productivity, new technologies, and more efficient farming practices, has led to increasing value per irrigated acre (County of Santa Clara Division of Agriculture 2016). This increase did not, however, increase farm employment; the overall percentage of farm jobs in the county decreased by 11 percent. The total farm employment in San Benito County increased by 7 percent during 2000–2015, while income from farming decreased by approximately 26 percent, primarily because of the less-than-average rainfall and resultant crop yields. In Merced County, income from farming increased more than 100 percent, and farm industry employment increased by 20 percent (Authority 2019a).

California High-Speed Rail Authority

⁶ Includes dairies and animal production



Table 3.12-5 Agricultural Production in Santa Clara, San Benito, and Merced Counties in 2015

	Santa Cla	Santa Clara County		ito County	Merced	Total RSA	
Commodity	Acres Harvested	Value of Production (2015\$)	Acres Harvested	Value of Production (2015\$)	Acres Harvested	Value of Production (2015\$)	Value of Production (2015\$)
Apiary (bee industry)	N/A	N/A	N/A	N/A	N/A	32,355,000	32,355,000
Field crops	268,263	5,242,000	519,609	16,102,500	1,001,810	456,622,000	477,966,500
Fruit and nut crops	2,717	9,824,000	7,668	41,445,000	136,617	746,783,000	798,052,000
Nursery products	576	65,974,000	225	11,383,000	1,646	58,026,000	135,383,000
Other agriculture ¹	N/A	74,970,600	N/A	N/A	N/A	15,724,000	90,694,600
Seed crops	407	823,000	314	1,723,500	5,039	4,110,000	6,656,500
Vegetable crops	13,486	188,245,000	28,325	257,351,000	63,706	451,156,000	896,752,000
Subtotal crops	285,449	345,078,600	556,141	328,005,000	1,208,818	1,764,776,000	2,437,859,600
Livestock and poultry production	N/A	6,237,000	N/A	32,588,000	N/A	803,058,000	841,883,000
Livestock and poultry products ²	N/A	N/A	N/A	N/A	N/A	1,022,070,000	1,022,070,000
Total	N/A	351,315,600	N/A	360,593,000	N/A	3,589,904,000	4,301,812,600

Sources: County of Santa Clara Division of Agriculture 2016; Merced County Department of Agriculture 2016; County of San Benito Department of Agriculture 2016 Includes aquaculture and "other agriculture" in Merced County and floral crops, forest crops, bushberries and strawberries, and mushrooms in Santa Clara County

N/A = not applicable

² Includes milk, egg, and wool production



Property Taxes

Property tax is imposed on real property, based on the property's assessed value. Table 3.12-6 shows general property tax levies in Santa Clara, San Benito, and Merced Counties for FY 2014/2015. Property tax levies in Santa Clara County increased by more than \$700 million between FY 2011/2012 and FY 2014/2015, a nearly 21 percent increase. In the same period, tax levies in Merced County increased by \$29 million, or approximately 16 percent. Trends in property tax revenues were similar in San Benito County, where property tax levies increased by almost \$9 million, or 13 percent.

Table 3.12-6 General Property Tax Levies by County for Fiscal Year 2014/2015

	Net Taxable	Prope	Average				
County	Assessed Value ¹ (\$ Million)	City	County ³	School ³	Other District ⁴	Total ⁴	Tax Rate (percent)
Santa Clara County	\$358,542	\$385.9	\$612.4	\$2,675.6	\$635.6	\$4,309.2	1.202%
San Benito County	\$6,422	\$1.2	\$8.0	\$46.3	\$18.3	\$73.8	1.149%
Merced County	\$19,187	\$11.0	\$45.9	\$133.1	\$19.5	\$209.5	1.092%

Source: CBOE 2016

Sales Tax Revenues

Sales tax is imposed on retailers 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 local city or county operations (CBOE 2017a). Santa Clara County has an additional 1.25 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 Santa Clara VTA Bay Area Rapid Transit (BART) Operating and Maintenance Transactions and Use Tax (0.125 percent), for a total sales tax rate of 8.5 percent (CBOE 2017b, 2017c). Merced County has an additional 0.5 percent sales tax imposed to bring its total sales tax rate to 7.75 percent (CBOE 2017b, 2017c). San Benito County voters defeated a proposed countywide sales tax levy in June 2016 and the county tax rate remains 7.25 percent. Each city within these counties may also impose additional local tax rates, such as the 9.25 percent tax rate in San Jose (CBOE 2017b, 2017c).

The CBOE distributes local sales tax revenues, less an administrative fee, to the cities and counties on a quarterly basis. Total revenue distributions to Santa Clara, San Benito, and Merced Counties and their cities increased by nearly 9 percent in Santa Clara County, by nearly 8 percent in San Benito County, and by approximately 26 percent in Merced County between FY 2011/2012 and FY 2014/2015 (Authority 2019a).

Privately Owned Hunting Clubs

The project extent crosses two resources identified by the National Audubon Society as Important Bird Areas (IBA): the Soap Lake/Upper Pajaro River Floodplain in the Morgan Hill and Gilroy Subsection and the GEA in the San Joaquin Valley Subsection. The Soap Lake area (also known

¹ Excluded are tax exemptions, such as for homeowners.

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 improvements and other levies



as San Felipe Lake) is just south of SR 152 and approximately 10 miles east of Gilroy. The Soap Lake area is an extensive and dynamic floodplain system that extends between San Felipe Lake in the east and Gilroy in the west and is managed by the Santa Clara Valley Water District and Pajaro River Watershed Flood Prevention Authority. While it is an important habitat for migratory waterfowl, the Soap Lake area is used for floodplain management and there are no known private waterfowl hunting clubs in the area. Accordingly, this discussion focuses on the GEA in the San Joaquin Valley, where project construction and operations could affect private waterfowl hunting.

The GEA is a 160,000-acre mosaic of freshwater wetlands, alkali grassland, and riparian thickets cooperatively managed by a variety of private, state, and federal landowners, including the U.S. Fish and Wildlife Service (San Luis and Merced National Wildlife Refuges, Grasslands Wildlife Management Area); California Department of Fish and Wildlife (CDFW) (Volta, Los Banos, and North Grasslands Wildlife Areas); California State Parks (Great Valley Grasslands State Park); and private waterfowl hunting clubs. Although it is not subject to any regional habitat conservation plans, the GEA has been identified as a Site of International Importance by the Western Hemisphere Shorebird Reserve Network (WHSRN 2017). The GEA seasonally supports nearly 50 percent of all Central Valley shorebirds during the peak of spring migration (mid-April) and a half-million individual ducks, geese, and swans each year between November and February (National Audubon Society 2017).

The project would pass through the GEA where the alignment all four alternatives are identical in this subsection) would be parallel to and north of Henry Miller Road between CDFW's Volta and Los Banos Wildlife Areas. Private waterfowl (i.e., ducks and geese) hunting clubs operate out of that general area. These private waterfowl hunting clubs are not public recreational properties and are not addressed in the assessment of parks, recreation, and open space resources in Section 3.15 of this Final EIR/EIS. The purpose of this assessment in this section is to disclose the potential changes to these nearby waterfowl hunting operations.

The California Waterfowl Association provides information about hunting opportunities and how to gain access to them throughout California. Some of the more well-known hunting clubs in the region include the Buckshot Duck Club on 300 acres of open water in the GEA; the Gustine Gun Club, which claims to be the oldest club; and the Hollister Land & Cattle Company (adjacent to Gustine), which encompasses more than 2,500 acres in the GEA. Another is the Midway Land & Cattle Club, which operates from its 352-acre property with four pothole blinds and five openwater blinds (California Waterfowl 2019). The hunting clubs closest to the project alignment are the Elworthy Brothers Islander Duck Club, the 101 Duck Club, the Lazy V Duck Club, the Klamath Gun Club, and the Colton Club. The boundaries of these clubs range from about 0.7 mile to 1.5 miles from the project alignment. Figure 3.12-7 illustrates these duck hunting clubs and their locations relative to the RSA.

The CDFW sells licenses at its Fresno office for hunting in Merced and San Benito Counties. The cost of hunting licenses (July 2019 through June 30, 2020) range from \$49.94 for state residents to \$174.45 for nonresidents. CDFW also offers reduced rates for junior, 1-day, 2-day, disabled veteran, and recovering armed forces service member licenses. There are defined hunting seasons as well as hunting limits for each species (CDFW 2019).



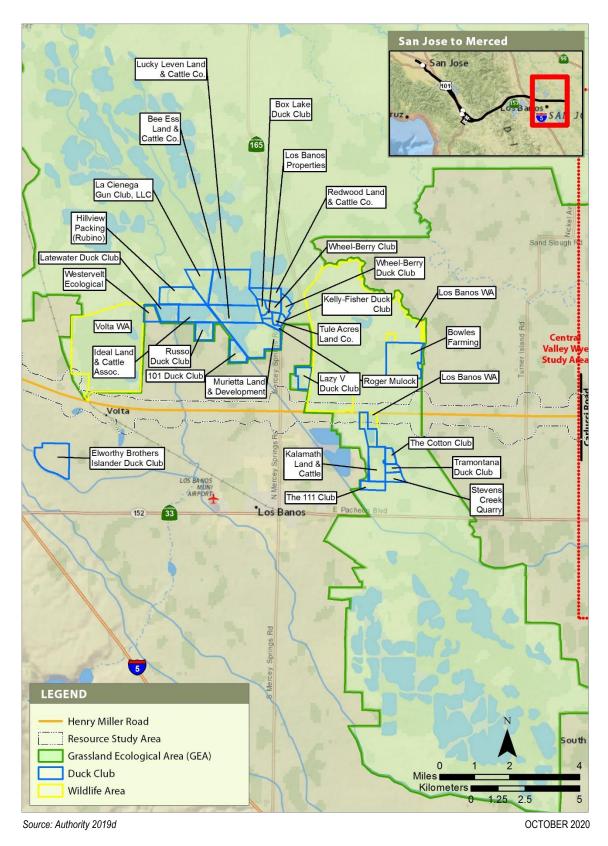


Figure 3.12-7 Wildlife Areas and Private Recreational Use in the Grasslands Ecological Area



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. Impacts on all communities along the project extent are discussed in this section, while specific impacts on minority communities and low-income communities are presented in Chapter 5 of this Final EIR/EIS. The analysis in this section focuses on those topics where temporary and permanent construction impacts and permanent operations impacts could directly or indirectly disrupt established patterns of interactions among community members, result in isolation of communities, displace substantial numbers of residents and businesses, disrupt access to homes or community facilities, present pedestrian safety hazards, create physical barriers, and result in substantial increased noise and traffic, decreased air quality, or changes in visual quality or aesthetics. The discussion of children's health and safety considers the potential direct and indirect project impacts associated with noise, air quality, EMI, hazardous materials, and safety that could specifically affect children. Displacements and relocations address impacts on residences, commercial and industrial businesses, agricultural facilities, and community and public facilities. Economic impacts consider impacts on employment, school district funding, agricultural economy, and county property and sales tax revenues. As described in Chapter 2, all four alternatives would be identical in the Pacheco Pass and San Joaquin Valley Subsections. Accordingly, there would be no relative difference in impacts between alternatives in these two subsections.

3.12.6.2 Disruption or Division of Existing Communities

This section describes anticipated disruptions or divisions of existing communities during both construction and operations of the No Project Alternative and the project alternatives.

All four alignments generally follow existing transportation corridors and do not represent new divisions of existing communities or neighborhoods; however, construction of the project would disrupt access to residences, businesses, and community and public facilities and would have localized transportation, noise and vibration, and visual quality impacts. Construction activities would introduce a temporary visible and functional barrier that could potentially deter neighbors from interacting and participating in community activities, and could create a perception that people have been separated from their community. Demolition of existing buildings necessary to construct the project could also disrupt established community interactions.

No Project Impacts

Section 3.19, Cumulative Impacts, of this Final EIR/EIS identifies planned and other reasonably foreseeable future projects anticipated to be constructed in the region to accommodate projected growth, including shopping centers, industrial parks, transportation projects, and residential developments. The No Project Alternative includes the implementation of bicycle and pedestrian projects from regional and local plans identified in Section 3.12.3, Consistency with Plans and Laws, and Volume 2, Appendix 2-J. These projects include implementation of bike lanes or trails, pedestrian sidewalks, crosswalks, and signal timing enhancements. The active transportation improvement projects that would be constructed by 2029 and 2040 in the transportation RSA are shown in Table 5-28 of the Transportation Technical Report (Authority 2019e).

The beneficial effects of the project (e.g., increased regional connectivity, decreased congestion, improved regional air quality) would not be realized under the No Project Alternative. There would likely be no major improvements at existing rail crossings. Development in some areas of the region would likely continue to create demand for infrastructure projects. These development and infrastructure projects could disrupt or divide established communities as a result of increased traffic congestion, increased noise and vibration, air quality deterioration, increased greenhouse gas emissions, 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, as well as compliance with regulatory requirements, design standards, applicable codes and ordinances, and permits.

Project Impacts

Construction Impacts

Construction activities for all four project alternatives would require permanent roadway improvements, such as new fully grade-separated overpasses and underpasses, as well as permanent road closures and realignments. Activities associated with constructing this infrastructure include 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. The DDV and TDV would not disrupt or divide established communities. Construction activities are described in detail in Chapter 2. Alternatives.

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

Community cohesion takes into consideration access and linkages, community facilities, and local businesses that provide opportunities for residents to gather. Construction activities would temporarily disrupt communities and neighborhoods along the alternative alignments through changes in circulation and access (e.g., lane closures, detours, temporary road closures) that would affect pedestrians, bicyclists, motorists, and transit riders. Construction would result in increased noise and vibration as well as changes to the visual environment from construction fencing, barricades, construction equipment, and material stockpiles. Communities along the alternative alignments include Santa Clara, San Jose, South San Jose, Morgan Hill, San Martin, Gilroy, and unincorporated Santa Clara, San Benito, and Merced Counties. Residential neighborhoods and commercial/industrial areas near the proposed alignments would be affected by construction activities. The discussion of Impact SOCIO#1 addresses each category of impact by project subsection. Temporary interruptions in public utilities such as electricity and natural gas are addressed in the impact analysis in Section 3.6, Public Utilities and Energy, and PUE-IAMF#3 provides for advance public notifications of any potential interruptions in service throughout the construction period.

Transportation, Circulation, and Access

Construction of the stations, platforms, track and track alignment structures, and grade separations would require temporary road closures and modifications, which would result in the diversion of traffic from closed roads and additional congestion and travel time delay. The types of roadway modifications would be similar under Alternatives 1, 2, 3, and 4 between San Jose and Gilroy. In addition to impacts on automobile traffic, these road closures would alter pedestrian, bicycle, and transit circulation patterns in the communities along the project extent, inconveniencing 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 under construction. Residents and community members would be required to take 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, affecting established social engagement patterns within the communities. More details on the effects on circulation and access during construction are presented in Section 3.2 of this Final EIR/EIS.

Although access to some neighborhoods, businesses, and community and public facilities would be disrupted and detoured for short periods during construction, access would remain available. The construction contractor will prepare a construction transportation plan (CTP) (TR-IAMF#2) as described in Section 3.2. The CTP will be reviewed and approved by the Authority. It will detail the activities to be carried out in each construction phase. The CTP will provide a traffic control plan that will identify when and where temporary closures and detours will occur. The goal will be to maintain traffic flow, especially during peak travel periods. The traffic control plan will be developed for affected locations and will include, at a minimum, signage to alert drivers to the construction zone, traffic control methods, traffic speed limits, and alternative access and detour



provisions during road closures. Closure or removal of parking areas or roadways during construction will be temporary and these facilities will be restored upon completion of construction. Roadway realignments will be constructed before the closure of the existing roadway to minimize impacts. Standard construction procedures related to traffic management will be used for project construction including identification of when and where temporary closures and detours will occur to maintain traffic flow during peak-travel periods. For example, in areas where a temporary road closure would be required, detours will be identified first, as necessary, and traffic diverted. After construction is completed, traffic will be routed to the original roadway. Additionally, the Authority will incorporate project features TR-IAMF#1 through TR-IAMF#12 to minimize temporary construction-related traffic impacts. These project features are designed to minimize detours and maintain accessibility to residents, businesses, and community facilities, as well as to minimize hazards to pedestrians in the construction area.

Detailed construction access plans would be developed before the start of construction, and the affected cities would review these plans before construction begins 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 workers or 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 (except in the Pacheco Pass Subsection) to minimize vehicular, pedestrian, and bicyclist delays or access restrictions.

Obstructions to access would most likely affect facilities within 250 feet of construction activities. As shown in Table 3.12-7, a total of 54 community and public facilities would be within 250 feet of construction activities under Alternative 1, 76 facilities under Alternative 2, 47 facilities under Alternative 3, and 45 facilities under Alternative 4. Alternative 2 would have the greatest number of community and public facilities where access could be affected by project construction. The greatest number of effects would be in the Morgan Hill and Gilroy Subsection under all four project alternatives; Alternatives 3 and 4 would affect the fewest number of community facilities.

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

Subsection	Alternative 1	Alternative 2	Alternative 3	Alternative 4
San Jose Diridon Approach	12	14	14	6
Monterey Corridor	5	7	5	2
Morgan Hill and Gilroy	35	53	26	35
Pacheco Pass	0	0	0	0
San Joaquin Valley	2	2	2	2
TOTAL	54	76	47	45

Note: The two facilities within the Pacheco Pass Subsection would not be within 250 feet of project tunnel construction.

The Authority will develop a construction management plan (CMP) that will specify requirements for the contractor to coordinate with local jurisdictions for maintaining access to community and public facilities (SS-IAMF#1). Local access programs, such as Safe Routes to Schools, and access to community facilities for vulnerable populations would be maintained or enhanced. The Authority would coordinate with affected school districts to minimize disruption in school operations for those schools adjacent to construction. Potential conflicts with special events (e.g., fairs, athletic events, major conventions) will be minimized through TR-IAMF#8, which will require police officers to direct traffic, coordinate special event parking, and implement other traffic controls. Through these IAMFs, roadway capacity and emergency vehicle access for police and fire protection services will be maintained in coordination with local police, fire, and emergency services.



In addition to the identified IAMFs, mitigation measures to further reduce potential transportation impacts are discussed in Section 3.2.7, [Transportation] Mitigation Measures, of this Final EIR/EIS.

San Jose Diridon Approach Subsection

The track alignment for Alternatives 1, 2, and 3 north of Monterey Road would be predominantly within the existing Caltrain right-of-way, whereas Alternative 4 would operate in blended service. In some locations track realignments would extend the right-of-way a maximum of 230 feet, with most track realignments extending the right-of-way up to 64 feet, consistent with the current use of the rail corridor. Station, platform, and track alignment construction activities in urban areas would require temporary roadway closures or modifications, lane closures, and underground utility work that would alter vehicle circulation.

Alternative 1 would have fewer construction impacts than Alternatives 2 and 3 because the northern terminus of dedicated HSR track on viaduct would be at I-880 rather than at Scott Boulevard. Viaduct construction in this subsection would extend approximately 2.4 miles farther north under Alternatives 2 and 3, thereby affecting properties and transportation facilities in those areas. Two additional roadway overcrossings would also be affected under Alternatives 2 and 3. While some acquisitions would be required to accomplish the necessary station modifications for all four project alternatives, the modifications would be to existing Caltrain stations, avoiding the creation of a new barrier or division of cities or communities. Alternative 4 would result in the fewest roadway closures or modifications that could alter vehicular circulation, because it would be constructed in the existing right-of-way between San Jose and Gilroy. Alternative 4 would involve a widening of the existing rail overcrossing of I-280 alongside the existing alignment. One weekend of full closure of I-280 would be required to construct the overcrossing of the freeway under Alternative 4.

The construction of the HSR overcrossing of I-280 as part of Alternatives 1, 2, and 3 would generate more disruption than would Alternative 4. Alternatives 1, 2, and 3 would require temporary highway lane closures with temporary on- and off-ramp closures, causing increased traffic disruption in neighborhoods, width reductions, reduced speed limits, detours, and temporary freeway closures. Durations of these disruptions would range from several hours for short-term freeway lane closures to months for substantial roadway modifications. A limited number of weekend full closures of I-280 in coordination with Caltrans would also be required under Alternatives 1, 2 and 3. The residential communities closest to the construction of the HSR I-280 overcrossing (Gardner, Washington-Guadalupe, and Auzerais-Josefa) would experience the greatest community disruption from construction activities. Because Alternative 4 would be constructed in the existing right-of-way through this area, there would be limited disruption of communities adjacent to the construction activities. Less disruption would be experienced by communities near less intensive construction activities or areas more distant from construction activities. Short-term lane closures or detours also would be less disruptive than longer-term closures or detours.

While community access patterns would be disrupted during construction, access to the 6 to 15 community and public facilities in this subsection within 250 feet of the right-of-way would be maintained through practices set forth in the CTP. Pedestrian hazards would be minimized or eliminated. Access for emergency response vehicles would be maintained at all times in coordination with local police, fire, and emergency services. There would be a temporary disruption to established community interaction patterns from the changes to access patterns, but this disruption would not physically divide the communities because construction would occur within the existing Caltrain corridor that passes through these communities and therefore would not create a new division.

Monterey Corridor Subsection

Under Alternatives 1, 2, and 3, construction activities would reduce the number of through lanes on Monterey Road between Capitol Expressway and Blossom Hill Road and would close several left-turn pockets on these roads. Construction of new overcrossings and interchanges would affect Skyway Drive, Branham Lane, Chynoweth Avenue, and Blossom Hill Road. Two left turns would be affected by Alternatives 1, 2, and 3. Alternative 2 would require three more grade



separations than Alternatives 1 and 3 to accommodate the embankment design. Skyway Drive Variant B would depress Monterey Road to connect to the Skyway Drive underpass. Under this variant, access to the mobile home park north of the intersection of Skyway Drive and Monterey Road would be provided by an access road across the northern portion of the San Jose South Service Yard property. Variant B would remove access to San Jose Fire Station #18. If this variant is selected, the fire station may require relocation. The larger footprint and multiple atgrade crossings under Alternative 2 would cause greater disruption to neighborhood circulation patterns than Alternatives 1 and 3. Access to the same number of community and public facilities would be disrupted during construction by temporary detours under Alternatives 1, 2, and 3. Because Alternative 4 would be in blended operations and at grade through this subsection, there would be no new overcrossings or interchanges. Four-quadrant gates would be installed at existing rail crossings under Alternative 4.

Residences and businesses along Monterey Road would experience heavy temporary construction impacts and associated effects on businesses. Traffic delays would be noticeable as residents and business patrons would need to use detours to access neighborhoods and businesses along the corridor. Under Alternatives 1, 2, and 3, travel times between Capitol Expressway and Blossom Hill Road could be increased which would further disrupt the existing travel and social interaction patterns in the communities along Monterey Road. Although access to neighborhoods, businesses, and community and public facilities would be maintained through application of the CTP, the increased travel times would affect social and business interactions. There would be a temporary disruption to established community interaction patterns as residents and business owners become accustomed to alternative circulation routes. Installation of 5 four-quadrant gates at existing rail crossings under Alternative 4 along Monterey Road would result in minor traffic delays in this subsection.

There would be no physical division of an established community because construction would occur within the existing transportation corridor and, therefore, would not create a new division.

Morgan Hill and Gilroy Subsection

In Morgan Hill, the reconfiguration of the Dunne Avenue intersection under Alternative 2 would close traffic lanes and alter access to the Morgan Hill Community Center and Gavilan College, just west of the alignment. Detours and alternative entrances would be provided to maintain access to these facilities through application of the CTP. Construction of the grade separations for Alternative 2 to accommodate the embankment would require more detours than Alternatives 1, 3, and 4, generating a greater disruption to community interaction. Although access would be maintained through application of the CTP, it would be more difficult under Alternative 2 because of the greater number of detours and alternative accesses that would be required. For some residents, their nearest businesses and neighbors would change as a result of these detours. This could alter the sense of belonging to a place for some residents and could limit social and business interactions. There would be a temporary disruption to established community interaction patterns as residents and business owners become accustomed to alternative circulation routes. Alternative 4 would result in relatively minor detours and would require alternative access for the installation of 22 four-quadrant gates at the existing rail crossings.

All project alternatives would follow the existing transportation corridor through the community of San Martin. Commercial uses in San Martin are primarily west of the alignment, with rural residential uses concentrated east of the alignment. While construction of the project would temporarily change existing circulation and access patterns to San Martin neighborhoods, businesses, and community and public facilities, continued access to these areas would be maintained during construction through application of the CTP. There would be no physical division of the community because construction would occur within the existing transportation corridor and therefore would not create a new division. Maintenance of access to neighborhoods, businesses, and community and public facilities would be maintained.

Construction of the Downtown Gilroy Station under Alternatives 1, 2, and 4 would require temporary road closures and detours that would disrupt community interaction patterns and access to businesses, residences, and community and public facilities. As with the other



subsections, access to neighborhoods, businesses, and community and public facilities would be maintained during the construction period through application of the CTP. Emergency vehicle access would be maintained at all times. There would be a temporary disruption of established community interaction patterns in downtown Gilroy as residents and business owners become accustomed to alternative circulation routes. The disruptions to established community patterns during station modifications would not create a new barrier or division of downtown Gilroy because construction would take place within the existing transportation corridor and therefore would not create a new division.

The proposed East Gilroy Station under Alternative 3 would be constructed on agricultural land outside downtown Gilroy and construction activities would not affect community cohesion or physically divide an existing community. Alternative routes would be maintained for residents and patrons of the East Gilroy Outlets and other commercial concerns near the East Gilroy Station location. Although construction of the proposed East Gilroy MOWF with associated short-term lane closures and detours under Alternative 3 would be close to two schools, Anchorpoint Christian Academy and Gavilan Hills Academy in Old Gilroy, access to these schools would be maintained during construction through application of the CTP.

Pacheco Pass Subsection

This subsection is characterized primarily by undeveloped land with rural residential uses. There are no established communities that could be disrupted or physically divided during project construction. The alignment for all four project alternatives would be primarily in tunnel and on embankment (5–10 feet tall), with intermittent viaducts to the San Joaquin Valley Subsection. Realignment of North Romero Road would be the only change to public roads in the Pacheco Pass Subsection. There are two community facilities within this subsection but neither facility is within 250 feet of the project tunnel construction.

San Joaquin Valley Subsection

In the San Joaquin Valley Subsection, the alignment would pass north of Santa Nella, Volta, and Los Banos and would not affect the physical configuration or community interaction patterns in these communities. Henry Miller Road, parallel to the alignment, provides the primary thoroughfare in this larger agricultural and rural residential area; roads that intersect the alignment would be completely reconstructed with new grade-separated roadways and roadway closures. 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 each affected location and would include, at minimum, signage to alert drivers to the construction zone, traffic control methods, traffic speed limits, and alternative access and detour provisions during road closures. The CTP would maintain access to residences and farms, although there would be some short-term lane closures and detours.

Noise and Vibration

Construction activities could increase ambient noise levels in exceedance of the FRA's construction noise guidelines in some areas along the project alignment. These impacts would be temporary and intermittent. 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 when residents are most sensitive. Likely exceptions to this could include construction over a freeway or an active heavy rail line. For example, nighttime construction would likely be required where Alternatives 1, 2, and 3 would pass over US 101 and SR 87 in the San Jose Diridon Station Approach Subsection using a lengthy straddle bent structure. Construction also could occur outside daytime construction hours for the viaduct in the median of Monterey Road under Alternatives 1 and 3; and construction and reconductoring associated with electrical network upgrades, which may require the use of helicopters to provide equipment in remote work areas. Construction noise would potentially disrupt residents, businesses, or community facilities close to construction sites.

February 2022

California High-Speed Rail Authority

⁷ A straddle bent is a transverse rigid bridge structure that supports beams and girders.



As described in Section 3.4 of this Final EIR/EIS, sensitive receptors are near the proposed alignment in the San Jose Diridon Station Approach, Monterey Corridor, and Morgan Hill and Gilroy Subsections. The closest residential sensitive receptors are within 30-40 feet of the alignment, where the FRA noise guidelines would be exceeded during typical track construction activities. Sensitive receptors at these distances would experience temporary noise levels exceeding the FRA noise impact criteria for up to 1.5 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 all four project alternatives. Such construction-related impacts would create nuisance impacts that could affect the user experience. Please see Section 3.15 of this Final EIR/EIS for a more detailed evaluation of the effects of construction noise on use of parks, recreation facilities, and open-space resources.

The CMP will 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:

- Constructing noise barriers (e.g., temporary walls, piles on excavated materials) between noisy activities and noise-sensitive receptors.
- Routing truck traffic away from residential streets where possible.
- Constructing 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 Federal Transit Administration (FTA) guidelines for minimizing construction noise and vibration impacts when work is conducted within 1,000 feet of sensitive receptors.

Except for construction of the stations and maintenance facilities, the increase in noise and vibration would be temporary and intermittent and would not, in and of itself, alter the established community interaction patterns. Construction of the HSR stations and maintenance facilities would occur over most of the 4- to 5-year construction period. The project would follow the FRA and FTA guidelines for minimizing noise and vibration impacts at 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 Final EIR/EIS. Construction noise levels at the Morgan Hill Community and Cultural Center amphitheater, however, would exceed the FRA noise thresholds. There would be no physical division of communities from noise and vibration generated during construction.

San Jose Diridon Station Approach Subsection

Residential uses in this subsection would be subject to moderate and severe noise impacts during construction. These impacts would be substantially similar among all four project alternatives. However, Alternatives 1, 2, and 3 would include pile driving for viaduct structures in this subsection. Alternatives 2 and 3 would expose a great number of residences to noise and vibration from pile-driving because these alternatives would extend all the way to Scott Boulevard compared to Alternative 1, which would begin the aerial structure at I-880. Alternative 4 would likely result in fewer noise impacts during construction because it would not include pile-driving. While construction would generally be limited to daytime hours, nighttime construction could be required. For example, nighttime construction would be required where Alternatives 1, 2, and 3 pass over US 101 and SR 880 using lengthy straddle bent structures.⁸ Nearby residents would be exposed to construction noise. Nighttime construction, however, would be limited. The project

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⁸ A straddle bent is a transverse rigid bridge structure that supports beams and girders.



alternatives would be constructed in an existing rail corridor, which already generates high levels of existing noise and vibration for adjacent uses. The project would maintain noise and vibration levels within FRA requirements and minimize vibration. While construction would cause human annoyance, the impacts would be temporary and thus would not be expected to materially affect quality of life or disrupt established community patterns of social interaction. There would be no physical division of communities from noise and vibration generated during construction.

Monterey Corridor Subsection

The greatest number of severe noise impacts under all four project alternatives would occur in the Monterey Corridor Subsection, which has the most residences in a suburban environment. As noted, the four project alternatives would result in similar construction noise impacts, with Alternative 4 resulting in fewer construction noise impacts in the Monterey Corridor Subsection than Alternatives 1 and 3, which would entail pile driving.

These noise impacts would occur predominantly in the neighborhoods of Guadalupe-Canoas, Monticello, Carol Drive, Mountain Spring, Farm Drive, Branham, Vista Park, Gardens–Villa Monterey, Seven Trees, South San Jose, Parkview, Hayes, Deer Run, and Sunspring just north of Bernal Way. The project will comply with the FRA and FTA guidelines for minimizing construction noise and vibration impacts when work is conducted within 1,000 feet of sensitive receptors (NV-IAMF#1). Some sensitive receptors along the alignment, however, would be exposed to construction noise levels that exceed the FRA guidelines. There would be no physical division of communities from noise and vibration generated during construction.

Morgan Hill and Gilroy Subsection

Cities and communities in this subsection affected by construction noise and vibration would include the Los Paseos and California Maison neighborhoods in San Jose, Coyote, Morgan Hill, San Martin, and Gilroy. Alternatives 2 and 4 would expose a greater number of sensitive receptors to noise and vibration than Alternatives 1 and 3, which would bypass downtown Morgan Hill and travel through less developed areas. The Morgan Hill Community and Cultural Center amphitheater would be exposed to construction noise levels exceeding the FRA threshold. Alternative 1 would be constructed on viaduct through downtown Gilroy, exposing a greater number of sensitive uses to noise and vibration from pile driving, while Alternative 2 would have fewer noise and vibration impacts through downtown Gilroy because it would be constructed on embankment and would not require pile driving. Alternative 4 would require construction of 22 four-quadrant gates at existing at-grade intersections throughout this subsection. There would be no physical division of communities from noise and vibration generated during construction.

In the more rural portions of the RSA (through east Gilroy under Alternative 3 and south Gilroy under Alternatives 1, 2, and 4), noise and vibration from construction activities would represent a greater change in the ambient noise environment than in the more urbanized portions of the RSA because these rural areas do not currently experience high levels of ambient noise. Therefore, construction noise and vibration in these areas, while affecting fewer individuals, would represent a substantial change in the relative quiet of the existing noise environment, affecting the quality of life in these areas. Impacts of noise and vibration through east Gilroy under Alternative 3 would affect a greater number of sensitive uses than Alternatives 1, 2, and 4 through south Gilroy; there is a cluster of residences adjacent to the proposed East Gilroy Station site that would be affected by construction noise. The two schools in the Old Gilroy area, Anchorpoint Christian Academy and Gavilan Hills Academy, would be affected by noise during construction of Alternative 3. However, the project would constrain noise and vibration levels within FRA requirements. There would be no physical division of communities from noise and vibration generated during construction.

Pacheco Pass Subsection

In the Pacheco Pass Subsection, temporary noise and vibration impacts would be minor as land uses are primarily open space and rangeland, with scattered rural residential uses beyond Casa de Fruta and SR 152. There are no established communities in this subsection. The project would be constructed primarily in tunnel through this subsection; therefore, noise impacts would be most apparent at the portal entrances where equipment would be staged and large amounts of excavated soils would be hauled. Given the predominance of open space in this subsection,



construction noise and vibration would affect few, if any, sensitive receptors, and there would be no severe noise impacts.

San Joaquin Valley Subsection

As the project alignment would primarily parallel Henry Miller Road, which is bounded on both sides by open space and agricultural properties, construction noise and vibration would affect only a few scattered rural residences associated with farming operations. Given the existing low levels of background noise in this subsection, noise and vibration generated during construction would represent a substantial change in the existing noise environment. There would be no disruption to established communities or physical division of a community in this subsection.

Visual Quality

During the construction period, the presence of construction equipment, storage and staging areas, earthmoving activities, construction of structures, and concrete plant operations would change the visual environment for adjacent viewers. As noted in Section 3.16 of this Final EIR/EIS, construction activities for any of the project alternatives would increase visual disorder during ground-disturbing and demolition activities while introducing large-scale construction equipment and materials into adjacent public views. During the 7-year construction period, heavy equipment and associated vehicles such as cranes, dozers, graders, scrapers, and trucks, would be visible in the RSA. Dust, material stockpiles, and other visual signs of construction activities 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.

The introduction of industrial equipment into the landscape would be most noticeable in rural communities where large construction equipment, material stockpiles, and nighttime lighting would contrast with the established rural character of the area and alter the existing visual character of residential views. 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 CMP would require screening of construction equipment to the extent feasible. Tall cranes used for construction would, however, remain visible.

In the urbanized and industrialized portions of the project extent between San Jose and Gilroy, construction equipment and construction staging areas would not represent a notable visual change. Where HSR construction would occur within the existing rail corridor or Monterey Road, the changes to the visual environment would be less apparent because of the existing industrial character of the corridor, and these changes would not be expected to affect community cohesion. In the more suburban and rural areas of the project (i.e., south of San Jose and south and east of Gilroy), the visual change would be more noticeable, although it would be considerably less so under Alternative 4. For those areas where construction would occur outside existing transportation corridors, few viewers would be affected and established communities would not experience loss of community cohesion from the visual effects of construction activities.

Along the urban corridor, viewer groups are likely to be accustomed to seeing machinery, trucks, and vehicles within the area because roadway improvement projects, development projects, and rail maintenance activities require the use of such equipment. The temporary visual changes during construction would not be expected to alter the community character and residents' sense of belonging to a place. Alteration of the visual environment from construction activities would be temporary.

San Jose Diridon Station Approach Subsection

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 (defined in Section 3.16) 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 be adjacent to and primarily within the right-of-way, not within established neighborhoods.



Monterey Corridor Subsection

As the visual environment transitions from urban to suburban south of West Alma Avenue, construction activities would be visible for residential viewers in the single- and multifamily neighborhoods of Guadalupe-Canoas, Monticello, Carol Drive, Mountain Spring, Farm Drive, Branham, Vista Park, Gardens—Villa Monterey, Seven Trees, South San Jose, Parkview, Hayes, Deer Run, and Sunspring just north of Bernal Way. These viewers are likely to be accustomed to seeing machinery, trucks, and vehicles in the urbanized area because roadway improvement projects, development projects, and rail maintenance activities 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.

Morgan Hill and Gilroy Subsection

The Morgan Hill and Gilroy Subsection has the largest number of sensitive residential viewers, as identified in Section 3.16 of this Final EIR/EIS, with large clusters in Morgan Hill, San Martin, and Gilroy. In the increasingly rural portion of this subsection south and east of Gilroy in the approach to Pacheco Pass, construction activities outside existing transportation corridors would temporarily alter the visual character and reduce intactness and visual unity in adjacent communities. Alternatives 1 and 3, which would bypass downtown Morgan Hill, would affect fewer sensitive viewers than Alternatives 2 and 4, but would traverse large open-space areas with scattered rural residences and some suburban and residential neighborhoods along US 101, where the visual effects during construction would be more pronounced.

Construction of Alternatives 1, 2, and 3 would introduce large equipment and staging areas that would temporarily alter the visual environment for residential viewers in these communities. Alternative 4 would require some equipment and localized staging areas for track improvements and the installation of four-quadrant gates at existing rail crossings, but it would require less than Alternatives 1, 2, and 3. The introduction of construction machinery, trucks, and vehicles into downtown Gilroy under Alternatives 1, 2, and 4, would increase the industrial character of the visual environment and modify community interactions between the neighborhoods east and west of the downtown alignment. The addition of construction equipment would not, however, be out of character with the visual features associated with operation and maintenance of the Downtown Gilroy Station. Visual changes from construction would be temporary and would not be expected to alter the community character and residents' sense of belonging during the construction period.

Pacheco Pass Subsection

Construction of the project in the Pacheco Pass Subsection would not affect established communities with sensitive viewer groups because the subsection contains only scattered rural residential uses and no established communities. Construction activities would primarily be viewed by motorists on SR 152 with moderate viewer sensitivity.

San Joaquin Valley Subsection

Construction of the project in the San Joaquin Valley Subsection would take place north of Santa Nella, Volta, and Los Banos The San Joaquin Valley Subsection consists predominantly of open space and agricultural operations with scattered residential uses; therefore, there would be little possibility of visual changes to affect community cohesion. Residents along Henry Miller Road outside the established communities are accustomed to farm equipment such as tractors and trucks.

CEQA Conclusion

Project features (IAMFs) have been incorporated into the project to avoid or minimize potential impacts on communities and neighborhoods. These IAMFs will entail screening construction sites to reduce visual impacts, providing alternative access, implementing construction site safety measures, and installing noise barriers. The impact would be less than significant under CEQA because construction activities would not physically divide established communities. (Effects on visual unity and intactness are addressed in Section 3.16.) Construction activities along much of the project extent would take place within an existing transportation corridor either within the existing Caltrain right-of-way or immediately adjacent to existing rail and highway rights-of-way. Access to neighborhoods and community and public facilities would be maintained throughout construction through the use of detours and signage. Skyway Drive Variant B under Alternative 2,



however, would obstruct access to the San Jose Fire Station #18, so if this variant is selected the fire station may require relocation. Other than a potential replacement fire station that would be required under Alternative 2, Skyway Drive Variant B, construction of the project would not result in the provision of new or physically altered government facilities. However, construction of one new fire station, if required, would not be expected to result in substantial physical impacts on the environment. Therefore, CEQA does not require mitigation.

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

Construction of the project alternatives would introduce permanent infrastructure and associated physical changes that would result in impacts on community cohesion in residential communities and the rural agricultural communities adjacent to the project (Table 3.12-8 shows the number of community facilities affected and road closures by subsection and alternative). 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. Increased noise and vibration and pedestrian hazards would not be considered permanent construction impacts and have been analyzed under Impact SOCIO#1. The discussion of Impact SOCIO#2 addresses each category of impact by project subsection.

Table 3.12-8 Residential, Business, and Community Facility Displacements and Permanent Road Closures by Subsection and Alternative

Facility	Alternative 1	Alternative 2	Alternative 3	Alternative 4
San Jose Diridon Station Approach Subs	ection			
Residential, business, and community facility displacements	88	140	140	24 (25)
Permanent road closures	4	4	4	0
Monterey Corridor Subsection				
Residential, business, and community facility displacements	47	75	47	3
Permanent road closures	0	2	0	0
Morgan Hill and Gilroy Subsection				
Residential, business, and community facility displacements	218	730	114	81
Permanent road closures	6	15	5	7
Pacheco Pass Subsection				
Residential, business, and community facility displacements	11	11	11	11
Permanent road closures	0	0	0	0
San Joaquin Valley Subsection				
Residential, business, and community facility displacements	56	56	56	56
Permanent road closures	8	8	8	8
Total residential displacements	147	603	157	68
Total business displacements	266	401	206	106 (107)
Total community facility displacements	7	8	5	1
Total permanent road closures	18	29	17	15



Estimated property displacements for Alternative 4 with the DDV are shown in parentheses.

The total business displacements includes commercial and industrial facilities as well as agricultural properties. Agricultural properties include dairies and feedlots

Community cohesion takes into consideration access and linkages, community facilities, and local businesses 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., lane closures, grade separations, road realignments, permanent road closures) affecting pedestrians, bicyclists, motorists, and transit, as well as changes to the visual environment where new infrastructure obstructs viewsheds. Communities along the project alignment include Santa Clara, San Jose, South San Jose, Morgan Hill, San Martin, and Gilroy. 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 extent.

Transportation, Circulation, and Access

Each of the project alternatives would result in some permanent roadway closures (see Table 3.12-8), as well as other relocations, modifications, or realignments. Alternative 1 would require permanent closure, relocation, or modification of 50 roadways, Alternative 2 would require 92, Alternative 3 would require 53, and Alternative 4 would require 28 (Figures 2-47 through 2-52 in Chapter 2, Alternatives). Under all project alternatives, most road closures would occur in the Morgan Hill and Gilroy Subsection, followed by unincorporated Merced County along Henry Miller Road, which would be reconstructed with four new grade-separated roadways and eight road closures. Roadway modifications and realignments would be distributed along the length of the project alternatives' alignments. Realignment of North Romero Road would be the only change to public roads in the Pacheco Pass Subsection.

The presence of stations, platforms, track and track alignment structures, grade separations, road realignments, and closed roads would alter automobile traffic as well as pedestrian, bicycle, and transit circulation patterns in the communities along the project extent, potentially inconveniencing residents and businesses. Road realignments, grade separations, and road closures would disrupt communities and community interactions where access to some neighborhoods, businesses, or community facilities would be changed, especially for those with ingress and egress on roadway segments that are realigned or closed. Residents and community members would be required to take new routes. The changes to circulation and access could result in increased travel times for pedestrians, bicyclists, motorists, and transit, affecting established social engagement patterns within the communities. More detail on the impacts on circulation and access are presented in Section 3.2 of this Final EIR/EIS.

Although access to some neighborhoods, businesses, and community and public facilities would be changed, access would continue to be available. Roadways that would require realignment would be constructed before the closure of the existing roadway to minimize impacts.

San Jose Diridon Station Approach Subsection

The track alignment for Alternatives 1, 2, and 3 north of Monterey Road would be predominantly within the existing Caltrain right-of-way. Alternative 4 would be blended, at-grade service entirely within the Caltrain right-of-way. Alternatives 1, 2 and 3 would close four roads. Each of the alternatives would grade-separate one roadway; while Alternatives 2 and 3 would grade separate one additional road. Viaduct construction in this subsection would extend approximately 2.4 miles farther north under Alternatives 2 and 3. Two additional roadway overcrossings would also be affected under Alternatives 2 and 3. Established community interaction patterns would change as a result of the changes to access patterns, but this disruption would not physically divide the communities because construction would occur within the existing Caltrain corridor. Construction of Alternative 4 would temporarily reroute traffic as required for track improvements and the installation of four-quadrant gates; the traffic disruption under this project alternative would be less than under Alternatives 1, 2, and 3.



Monterey Corridor Subsection

Under Alternatives 1 and 3, travel times on Monterey Road between Capitol Expressway and Bernal Road would increase by 6–8 minutes in AM peak hours and 11–20 minutes in PM peak hours depending on the direction of travel. These increases would also result in delays in emergency vehicle access and response time. Effects on emergency vehicle access and response time are discussed at greater length in Section 3.11.

Under Alternative 2, travel times on Monterey Road between Capitol Expressway and Bernal Road would increase by 16–26 minutes in AM peak hours and by 5–17 minutes in PM peak hours depending on the direction of travel. These increases would also result in delays in emergency vehicle access and response time. Alternative 2 would require two road closures.

Under Alternative 4, travel times along Monterey Road would not increase because of roadway modifications. However, because of additional gate down time, travel times between Bernal and Capitol Expressway would increase by less than 1 minute in AM peak hours and by 4-8 minutes in PM peak hours depending on the direction of travel. These increases would result in delays in emergency vehicle access and response time. Alternative 4 would require one alignment change.

While travel times along Monterey Road would increase under all project alternatives, the effect on emergency access and response times would be greatest under Alternative 2. Traffic delays under Alternative 2 would be substantial because residents and business patrons would need to use new routes to access neighborhoods and businesses along the corridor. Increased travel times would disrupt the existing travel and social interaction patterns in the communities along Monterey Road. There would be a temporary disruption to established community interaction patterns as residents and business owners become accustomed to alternative circulation routes. Although access to neighborhoods, businesses, and community and public facilities would be maintained, the increased travel time would affect social and business interactions to the greatest extent under Alternative 2. Alternative 4 would result in the least disruption along Monterey Road; these disruptions would be limited to track improvements and the installation of four-quadrant gates at existing rail crossings. There would be no physical division of an established community because construction would occur within an existing transportation corridor.

Morgan Hill and Gilroy Subsection

Grade separations under Alternative 2 would be used to maintain the same connectivity as would the viaducts under Alternatives 1 and 3; however, fifteen road closures would occur under Alternative 2, more than twice that required with either Alternatives 1, 3, or 4. Alternative 4 would be constructed within the existing Caltrain right-of-way, although the existing small stations on the BNSF rail line would require some reconstruction.

All project alternatives would travel along the existing transportation corridor through the community of San Martin. Commercial uses in San Martin are primarily west of the alignment, with rural residential uses concentrated east of the alignment. Existing circulation and access patterns to San Martin neighborhoods, businesses, and community and public facilities would be maintained by viaducts under Alternatives 1 and 3 or grade separations under Alternative 2. Alternative 4 would use existing rail crossings. Alternative 2 would require four, while Alternative 4 would require three road closures in this area, while Alternatives 1 and 3 would each require one road closure. Between E. Main Avenue and Lincoln Avenue, Alternative 2 would require five road closures, while Alternatives 1 and 3 would require two road closures, and Alternative 4 only one road closure.

The Downtown Gilroy Station under Alternatives 1, 2, and 4 would require permanent closure of several streets near the station. Alternatives 1 and 2 would require closure of Railroad Street and Sheldon Avenue; Alternatives 1 and 4 would require closure of Old Gilroy Street. Alternative 2 would require closure of Martin Street; and Alternative 4 would require closure of E 7th Street. Alternative 2 would require closure of three other streets and Alternative 4 would require closure of one other road in this portion of the subsection. Alternative 3 would require two road closures, one at Cohansey Avenue and the other at Holsclaw Road. Road closures permanently change access patterns and require nearby residents and businesses to use different routes. Overall, changes to access and circulation would not disrupt community interaction patterns or access to



businesses, residences, and community and public facilities. As in the other subsections, access to neighborhoods, businesses, and community and public facilities would be changed. There would be a temporary disruption to established community interaction patterns in downtown Gilroy and in the East Gilroy Station area as residents and business owners become accustomed to alternative circulation routes. The disruptions to established community patterns from station modifications would not create a new barrier or division of downtown Gilroy because construction would take place within the existing transportation corridor.

The proposed East Gilroy Station under Alternative 3 would be constructed on agricultural land outside downtown Gilroy and the road closures would not affect community cohesion or physically divide a community. The routes to this area would be widened and new routes created to allow access to the area, which is currently served by agricultural access roads and few public roads. Alternative routes would be maintained for residents and patrons of the East Gilroy Outlets and other commercial concerns near the East Gilroy Station location. Although the proposed East Gilroy MOWF under Alternative 3 would be constructed close to two schools, Anchorpoint Christian Academy and Gavilan Hills Academy, access to these schools would be maintained through provision of grade separations at Bloomfield Avenue (Gavilan) and at Frazier Lake Road (Anchorpoint).

Pacheco Pass Subsection

This subsection is characterized primarily by undeveloped land with rural residential uses. There are no established communities that could be disrupted or physically divided by the project. The project alignment would be primarily in tunnel and on embankment (5–10 feet tall), with intermittent viaducts to the San Joaquin Valley Subsection. Realignment of North Romero Road would be the only change to public roads in the Pacheco Pass Subsection. One community and public facility, the California Department of Forestry and Fire Protection, is within this subsection. No schools, daycare facilities, emergency services, hospitals, places of worship, or cultural centers are within this subsection.

San Joaquin Valley Subsection

Through the San Joaquin Valley Subsection, the project would pass north of Santa Nella, Volta, and Los Banos and would not affect the physical configuration or community interaction patterns in these communities. Road intersections with Henry Miller Road would be completely reconstructed with five new grade-separated crossings of the HSR alignment and eight roadway closures. Access to all local parcels and canal roads from Henry Miller Road will be maintained in coordination with the landowners utilizing these parcels for agricultural operations (AG-IAMF#6). During final design, the Authority would finalize the realignments of any affected access roads to provide equipment crossings to minimize impediments to routine agricultural operations and normal business activities.

Displacements and Relocations

While the overall number of available residential units for sale and rent (2,305) exceeds the number of displaced residential units (ranging from 68 to 603) under all project alternatives, displaced residents in several communities may be unable to relocate within the same community. Sufficient relocation resources (i.e., available properties of comparable type and cost) would not be available in unincorporated Merced County and Volta under all four project alternatives and in Morgan Hill, San Martin, and Gilroy under Alternative 2. Residents in unincorporated Merced County and Volta may need to relocate to Los Banos while residents in Morgan Hill, San Martin, and Gilroy may need to relocate to other areas where ample supplies of available residential units would be available at comparable cost.

Similarly, while the overall number of available commercial facilities for sale or rent (619) exceeds the number of displaced commercial and industrial facilities (between 66 and 348, depending on the alternative), displaced commercial and industrial businesses may be unable to relocate within the same community. Sufficient commercial relocation resources would not be available in unincorporated Merced County and San Martin under all four project alternatives. Additionally, sufficient commercial relocation resources would not be available in unincorporated Santa Clara County under Alternatives 1, 2, and 3; in Gilroy under Alternatives 1, 2, and 4, and in Morgan Hill under Alternative 2. Displaced businesses in these communities may need to relocate to areas



where greater supplies of commercial facilities of comparable cost would be available for sale or rent.

San Jose Diridon Station Approach Subsection

Alternatives 1, 2, and 3 would displace commercial and industrial buildings in the area between I-880 and I-280 on the east and west sides of the alignment. Under Alternative 4, displacements would be limited to 1 to 2 buildings at major intersections such as I-880, West Taylor Street, West Santa Clara Street, and SR-87. All four alternatives would displace commercial and industrial buildings around the San Jose Diridon Station; however, the displacements under Alternative 4 would be fewer than under the other alternatives and would be limited to adjoining streets. These displacements would not affect community cohesion because they would occur on the edges of these neighborhoods.

Monterey Corridor Subsection

Alternatives 1, 2, and 3 would displace clusters of commercial and industrial buildings at Almaden Road and the Almaden Expressway. Alternatives 1 and 3 would also displace an area of commercial and industrial buildings west of the alignment and south of the Capitol Caltrain Station, north of Capitol Expressway. Alternative 2 would cause some displacements north of Capitol Expressway, although substantially fewer than Alternatives 1 and 3. Alternative 4 would displace some residential uses south of Skyway Drive. Like the displacements described for the San Jose Diridon Station Approach Subsection, removal of clusters of commercial and industrial buildings would not affect community cohesion because they would occur on the edges of neighborhoods.

Morgan Hill and Gilroy Subsection

Alternatives 1 and 3 would displace residential, commercial, and industrial land uses where the alignment transitions from Monterey Road to US 101 (between Laguna and Burnett Avenues) and again where it transitions back to Monterey Road (between Tennant and California Avenues). Most of these displacements would be between Monterey Road and US 101, and could affect community cohesion. In contrast, Alternative 2 would displace a greater number of residential, commercial, and industrial land uses throughout this subsection along Monterey Road because of the wider embankment footprint and the amount of grade separations required along the alignment. Alternative 4 would cause the fewest displacements, affecting a cluster of residential uses at Fox Lane and removing residential uses north of Kalana Avenue.

Between Tennant Avenue and Masten Avenue north and south of San Martin, Alternatives 1, 2, and 3 would cause substantially more displacements than Alternative 4, although they would be less likely to disrupt community cohesion because they would be along the roadway. Alternative 4's mostly commercial and industrial displacements would be clustered around San Martin Avenue.

Between Fitzgerald Avenue and the Downtown Gilroy Station, Alternatives 1, 2, and 4 would displace similar amounts of land uses. At about Church Avenue, Alternative 3 would veer east to its crossing of SR 152, and would displace a similar number of residential, commercial, and industrial properties; however, the displacements would occur within the rural agricultural communities throughout this area. In this subsection, Alternative 3 would be the most disruptive to community cohesion because it would veer from the existing transportation corridor between Monterey Road and US 101 north of downtown Gilroy to rejoin the other three alignments at the transition to the Pacheco Pass Subsection.

Pacheco Pass Subsection

The project alignment would be primarily in tunnel and on embankment (5–10 feet tall) with intermittent viaducts to the San Joaquin Valley Subsection. The project would require displacements at the intersection with Lovers Lane, at the Tunnel 1 portals, and at the Tunnel 2 west portal on McCabe Road. These would be isolated land uses and not part of a neighborhood per se.

San Joaquin Valley Subsection

Henry Miller Road would be completely reconstructed with five new grade-separated road crossings and eight roadway closures. The project would displace land uses along Henry Miller Road, especially where grade separations would be constructed. A rural residential community is present along Henry Miller Road. The project could result in community cohesion impacts if all



these property owners choose to relocate rather than rebuild within their existing properties at a deeper setback from the alignment.

Visual Quality

The presence of track, track structures, stations, MOWF, viaducts, embankments, trenches, and tunnel portals would change the visual environment for adjacent viewers (Section 3.16 of this Final EIR/EIS provides the primary impact analysis for this topic). As noted in Section 3.16, all four project alternatives would introduce large-scale infrastructure affecting the existing visual character along the alignment. These alterations in visual character would be greatest under Alternatives 1, 2, and 3, and least under Alternative 4. Depending on their location, viewers would see viaducts, embankments, tracks, stations, MOWF, and ancillary facilities.

This introduction of heavy rail infrastructure into the landscape would be most noticeable where tall facilities such as viaducts and embankment and permanent nighttime lighting at the stations, MOWF, and maintenance of way siding (MOWS) would contrast with the established character of the area and alter the existing visual character of residential views. Elevated structures could block views to established scenic resources for highly sensitive viewers, such as residents and recreationists, and would disrupt their established patterns through altering the visual environment.

In the urbanized and industrialized portions of the project extent between San Jose and Gilroy, introducing large-scale infrastructure into the landscape would constitute a less noticeable visual change. Where HSR structures for the project alternatives would occur within the existing rail corridor or Monterey Road, 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. Along the urban corridor, viewer groups are likely to be accustomed to seeing large-scale transportation infrastructure because of the presence of I-880, I-280, SR 87, and US 101. The visual changes from new heavy rail infrastructure would not be expected to alter the community character and residents' sense of belonging to a place.

In the more suburban and rural areas of the project south of San Jose and south and east of Gilroy, the visual change would be more noticeable. For those areas where track, station, and MOWF would be built outside existing transportation corridors, fewer viewers would be affected. Under Alternative 3, the community of east Gilroy could experience loss of community cohesion from the visual impacts of transportation infrastructure introduced into the predominantly rural landscape.

San Jose Diridon Station Approach Subsection

Because of the urbanized and industrialized nature of the visual setting in this subsection, the introduction of heavy rail 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. 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.

Monterey Corridor Subsection

Where the visual environment transitions from urban to suburban south of West Alma Avenue, viaduct and embankment under Alternatives 1, 2, and 3 would be visible to residential viewers in the single- and multifamily neighborhoods of Guadalupe-Canoas, Monticello, Carol Drive, Mountain Spring, Farm Drive, Branham, Vista Park, Gardens—Villa Monterey, Seven Trees, South San Jose, Parkview, Hayes, Deer Run, and Sunspring just north of Bernal Way. 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 highway and rail infrastructure already present in the subsection. Under Alternative 4, visual character would be minimally changed to include the overhead contact system that conveys traction power to HSR trains and new four-quadrant gates at existing rail crossings.

Morgan Hill and Gilroy Subsection

The Morgan Hill and Gilroy Subsection has the largest number of sensitive residential viewers, with large clusters in Morgan Hill, San Martin, and Gilroy. In the southern portion of this



subsection, where the area becomes more rural, construction activities outside existing transportation corridors (east Gilroy and south of Gilroy) would alter the visual character and reduce intactness and visual unity. Alternatives 1 and 3, which would bypass downtown Morgan Hill, would affect fewer sensitive viewers than Alternatives 2 and 4, but they would traverse large open-space areas with scattered residential and some suburban and residential neighborhoods along US 101, where visual impacts would be more pronounced.

All four alternatives would introduce large transportation infrastructure that would alter the visual environment for residential viewers in these communities. The introduction of expanded rail infrastructure, including 800- to 1,410-foot-long platforms in downtown Gilroy under Alternatives 1, 2, and 4, would increase the industrial character of the visual environment and modify community interactions between the neighborhoods east and west of the downtown alignment. The addition of expanded rail infrastructure would not, however, be out of character with the visual features associated with operation and maintenance of the Downtown Gilroy Station. Visual changes would not be expected to alter the community character and residents' sense of belonging to a place. Under Alternative 3, the visual changes would be more pronounced in east Gilroy as a result of a change in visual character from a rural area to a more industrialized environment.

Pacheco Pass Subsection

The presence of HSR in the Pacheco Pass Subsection would not affect established communities with sensitive viewer groups. Rail infrastructure would primarily be viewed by motorists on SR 152 with moderate viewer sensitivity. Thus, there would be minimal effects on residents of the community from visual changes in this subsection. There would be no disruption of established communities or to community cohesion in this subsection.

San Joaquin Valley Subsection

The project alignment in the San Joaquin Valley Subsection would be north of Santa Nella, Volta, and Los Banos. The San Joaquin Valley Subsection consists predominantly of open space and agricultural operations with scattered residential uses. Residents along Henry Miller Road outside the established communities are accustomed to farm equipment such as tractors and trucks; consequently, there would be no expected disruption of established communities or community cohesion in this subsection.

CEQA Conclusion

The impact would be less than significant under CEQA because HSR infrastructure would not physically divide established communities or require construction of new government facilities. Rail infrastructure would primarily occur within an existing transportation corridor. Access to neighborhoods and community and public facilities would be restored with road realignments and grade separations. Closed roads would require some changed travel patterns. The project would not result in the provision of new or physically altered government facilities. Therefore, CEQA does not require mitigation.

Operations Impacts

Project operations would involve scheduled train travel along the HSR line, as well as inspection and maintenance along the track and railroad right-of-way; at stations; and on structures, fencing, power system, positive train control, and communications. Activities associated with operations are described in Chapter 2.

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

After construction, community members would have access to a new type of transportation (e.g., high speed rail) in addition to existing available modes. Community interactions would be restored, and the project alignment would become part of the visual and functional environment in which these communities exist. New station operations as well as operations at the MOWF would result in circulation around these new facilities, noise, and light and glare, which could affect community cohesion in the communities of Santa Clara, San Jose, South San Jose, Morgan Hill, San Martin, and Gilroy as well as residential neighborhoods and commercial/industrial areas near



the project alignment. It should be noted that improved regional air quality would be a beneficial effect of the project because of reduced vehicle miles traveled (VMT) and improved connectivity.

Transportation, Circulation, and Access

When operational, the HSR system would divert vehicle trips from airports and other intercity travel hubs, shifting vehicle trips to train trips. This diversion of trips, even with the addition of new trips at the stations and maintenance facilities, would change regional and statewide travel patterns. Overall, the effect of these shifts and changes would be a reduction in VMT, which would have associated decreases in regional and local congestion. By 2029, the project would reduce overall VMT in Santa Clara County by 1.4 percent, in San Benito County by 14.4 percent, and in Merced County by 3 percent. By 2040, the project would reduce overall VMT in Santa Clara County by 2.3 percent, in San Benito County by 25.0 percent, and in Merced County by 12.2 percent. This reduction in VMT would be the same for all four project alternatives, as ridership and trip diversion associated with all four alternatives would be the same.

The project would provide safe and accessible bike and pedestrian facilities. Facilities would be designed to the latest standards and guidance and would provide adequate access. Pedestrian and bicycle accessibility will be provided, maintained, and prioritized over motor vehicle access (TR-IAMF#4 and TR-IAMF#5). More detail on the long-term impacts on circulation and access are presented in Section 3.2 of this Final EIR/EIS.

San Jose Diridon Station Approach, Monterey Corridor, Morgan Hill and Gilroy Subsections
While overall traffic would decrease, increased vehicle trips would be clustered around the stations and MOWF and MOWS resulting from the addition of passengers and HSR workers traveling to these sites. Most station trips would occur during peak hours. This additional traffic would lead to increased volume, congestion, and delays around the San Jose Diridon and Gilroy Stations.

All project alternatives would add project-related trips affecting 10 high-frequency bus routes on arterials with San Jose Diridon Station, Monterey Road, and Downtown Gilroy Station. Alternatives 1, 3, and 4 would have comparable impacts, while Alternative 2 would have slightly greater impacts on the affected bus routes because of higher overall levels of delay at study intersections. Both the viaduct and at-grade project alternatives (Alternatives 1, 2, and 3) would reduce the Monterey Road lane capacity, resulting in increased travel times, permanent changes in vehicle circulations, greater congestion, and increased delays at intersections. With implementation of mitigation measures identified in Section 3.2 as well as IAMFs incorporated into the project, these activities will not cause permanent delays in emergency vehicle access and response times.

For the San Jose Diridon Station Approach Subsection, changes to circulation and access patterns would not physically divide the communities because the rail line would be built within the existing Caltrain corridor that currently travels through these communities.

For the Monterey Corridor Subsection, Alternatives 1, 2, and 3 would have the same circulation effects. The reduced capacity of Monterey Road would result in ongoing congestion accessing community facilities and delivering emergency services along this stretch. Alternative 4 would use the existing Caltrain rail corridor, but delays at rail crossings could be increased by the operation of four-quadrant gates and increased rail trips.

In Morgan Hill, access would be maintained through Morgan Hill and to the Morgan Hill Community Center and Gavilan College. Access around the Downtown Gilroy Station would be restored so that the nearest businesses and neighbors would retain their sense of belonging.

Because commercial uses in San Martin are primarily west of the alignment and rural residential uses are concentrated east of the alignment, there would be no new physical division of the community or loss of community cohesion. Maintenance of access to neighborhoods, businesses, and community and public facilities would be maintained.

Operation of the Downtown Gilroy Station under Alternatives 1, 2, and 4 would maintain access to neighborhoods, businesses, and community and public facilities. No disruption would occur to



established community patterns because the station would operate within an existing transportation corridor.

The East Gilroy Station under Alternative 3 would be constructed on agricultural land outside downtown Gilroy and operations would not affect community cohesion or physically divide the community. Access to the East Gilroy Outlets and other commercial concerns near the East Gilroy Station as well as the two schools in Old Gilroy would be maintained.

Pacheco Pass and San Joaquin Valley Subsections

These subsections are characterized primarily by undeveloped and agricultural lands with rural residential uses, and there are no established communities that would be disrupted or physically divided by project operations. The alignment would be primarily in tunnel and on embankment (from 0 to 5 feet tall), with intermittent viaducts to the San Joaquin Valley Subsection and its eastern terminus at Carlucci Road. Access to local parcels and canal roads from Henry Miller Road would be maintained. Access to the California Department of Forestry and Fire Protection would also be maintained. There would be no impacts on schools or daycare facilities, emergency services, hospitals, places of worship, or cultural centers as none are located within this subsection.

Noise and Vibration

Operations would increase ambient noise levels exceeding the FRA's noise guidelines in some areas along the project alignment. These impacts would be intermittent and permanent. Operational noise would disrupt residents, businesses, and community facilities close to the rail line. Section 3.4, Noise and Vibration, provides a detailed analysis of noise and vibration impacts.

The difference in operational noise impacts among the four project alternatives is predominantly a result of the vertical and horizontal profile of each alternative. The greatest difference among the project alternatives would be in the Morgan Hill and Gilroy Subsection. Under Alternative 4, many noise impacts would be caused by HSR train horns. Alternative 2 would have a longer embankment profile than Alternatives 1 and 3, which would be predominantly on aerial structure. Although the aerial structures of Alternatives 1 and 3 would be much higher (which can sometimes lead to higher sound levels resulting from less ground attenuation), the design of the aerial structures includes a 3-foot-high parapet wall that would function as a short noise barrier. This parapet wall would reduce the noise levels from propulsion and wheel-rail sounds under Alternatives 1 and 3, resulting in lesser noise impacts than Alternative 2. The horizontal alignment near Gilroy further differentiates the noise and vibration impacts among the four project alternatives. Alternatives 1 and 2 would pass through downtown Gilroy, while Alternative 3 would veer east of Gilroy through rural agricultural lands that are sparsely populated and have fewer sensitive receptors.

The project alternatives would have the following noise impacts in 2029: Alternative 1 would result in 47 severe impacts and 310 moderate impacts; Alternative 2 would result in 38 severe impacts and 599 moderate impacts; Alternative 3 would result in 34 severe impacts and 227 moderate impacts; and Alternative 4 would result in 190 severe impacts and 1,001 moderate impacts. Alternative 4 would have the greatest number of severe and moderate operational noise impacts, followed by Alternative 2, Alternative 1, then Alternative 3 (refer to Table 3.4-16 in Section 3.4 of this Final EIR/EIS). Under Alternative 4, the number of severe noise impacts on sensitive receptors in the San Jose Diridon Station Approach Subsection would be the same with and without the DDV, while there would be one additional moderate noise impact with the DDV. With the TDV, the number of severe noise impacts would increase by one to five receptors depending on the alternative, while the number of moderate impacts on sensitive receptors would increase by three to seven receptors.

The project alternatives would have the following noise impacts in 2040: Alternative 1 would result in 334 severe impacts and 1,200 moderate impacts; Alternative 2 would result in 752 severe impacts and 1,844 moderate impacts; Alternative 3 would result in 219 severe impacts and 834 moderate impacts; and Alternative 4 would results in 1,186 severe impacts and 1,639 moderate impacts (refer to Table 3.4-17 in Section 3.4). The highest number of noise impacts would occur under Alternative 4, followed by Alternative 2, Alternative 1, and Alternative 3. Under



Alternative 4, the number of severe and moderate noise impacts on sensitive receptors in the San Jose Diridon Station Approach Subsection would be the same with and without the DDV. With the TDV, the number of severe noise impacts would increase by 7 to 9 receptors depending on the alternative; the number of moderate noise impacts would decrease by 3 to 6 receptors for Alternatives 1, 2, and 4; and the number of moderate noise impacts would increase by 13 receptors for Alternative 3.

The results of the 2040 Plus Project noise impact assessment indicate significantly more noise impacts than the 2029 Plus Project noise impact assessment, as a result of more frequent train passbys. Many Alternative 4 noise impacts would be caused by the HSR train horns. The 2029 and 2040 noise impact results differ for Alternative 2 in the Monterey Corridor and Morgan Hill and Gilroy Subsections because of the timeline for Caltrain's electrification of its trains and the subsequent combined operations of Caltrain and HSR. (Alternatives 1 and 3 would operate on a viaduct, dampening train noise.) There would be a greater percentage of Caltrain electric multiple unit trains operating in these subsections in 2040 than in 2029, leading to slightly reduced noise levels and fewer impacts in 2040. The existing noise from non-project elements, such as the airports and local roads, would be unchanged.

Implementation of the project alternatives would change current practices regarding the sounding of train horns and crossing bells within the noise RSA. Alternatives 1, 2, and 3 would be grade-separated and would not regularly sound warning horns between the HSR stations in San Jose and Gilroy. However, one existing at-grade railway crossing at Bloomfield Avenue in Gilroy would be eliminated under Alternative 1, thereby eliminating horn noise at that location. Alternative 2 would be predominantly on embankment within or adjacent to the existing Caltrain/UPRR railway, which would eliminate 33 existing at-grade crossings where trains currently sound warning horns. The elimination of these at-grade crossings associated with Alternative 2 would produce a beneficial impact arising from reduced noise exposure from horns and crossing bells. Existing trains would still sound horns at Caltrain stations under Alternative 2.

Alternative 4 would be at grade at the same locations as the existing Caltrain and other passenger and freight operations. As a result, HSR trains under Alternative 4 would regularly sound warning horns at at-grade crossings and Caltrain passenger stations.

Operation of all four project alternatives would result in wayside noise near the tunnel portals in Pacheco Pass, potentially startling nearby wayside receptors. Based on the current design, it is anticipated that roughly half of the sound generated within the tunnel would pass out through the portal, and the other half would propagate into the interior. The effect would be a rapid rise in sound level as the train leaves the tunnel and portal, forewarned by a propagating wave ahead of the train. Depending on the shape of the portal, shape of the train nose, and blockage ratio, the rate of pressure rise may be substantial. Reductions in noise levels would be achieved with long, flared portals and low blockage ratios. In-tunnel cross-passages and vents can reduce pressure magnitudes and rates of rise, though passage by these vents may generate additional propagating and steepening wave fronts. Portal boom noise is predictable, given sufficient geometric information. The portal boom may be audible over large distances in rural areas where background sound levels are low. In general, the portal boom noise would be much lower than the noise produced by the passing train. Because the closest receptors to the tunnel portals are more than 1,000 feet away, the boom would not cause an adverse effect on sensitive receptors.

One MOWF would be built near Gilroy under each project alternative. There are three potential locations for the MOWF: two locations for a South Gilroy MOWF (one for Alternatives 1 and 2 and another for Alternative 4) and an East Gilroy MOWF (south of the East Gilroy Station under Alternative 3). At both locations, the mainline HSR tracks would be directly adjacent to the MOWF and the HSR speeds would be approximately 200 miles per hour (mph). Therefore, the noise from project operations would dominate noise from occasional HSR train movements into and out of the MOWF. As noted in Section 3.4 of this Final EIR/EIS, the additional noise from the MOWF would not contribute to noise impacts of nearby sensitive receptors because of distance and level of noise.



Alternative 1 would result in 81 vibration impacts, Alternative 2 in 143 vibration impacts, Alternative 3 in 140 vibration impacts, and Alternative 4 in 1,203 vibration impacts. The results would the same with and without the DDV and TDV. Most of these vibration impacts would occur within the Monterey Corridor Subsection, with the remaining vibration impacts occurring in the San Jose Diridon Station Approach and Morgan Hill and Gilroy Subsections. Project operations would not result in building damage impacts.

These operational noise and vibration impacts could disrupt established communities by reducing student learning or outdoor recreational activities. Clusters of severe noise impacts would occur in the vicinity of Middle Avenue and between Highland Avenue and Leavesley Road in the Morgan Hill and Gilroy Subsection. A third cluster of severe noise impacts would occur near the end of this subsection, east of Pacheco Creek. In the San Joaquin Valley Subsection, there would be scattered severe noise impacts east of I-5, with a cluster of severe noise impacts at the Ingomar Grade. Receptors along both sides of Henry Miller Road would also be subject to severe noise impacts.

Parks, recreational facilities, and open-space resources would also experience permanent increases in noise and vibration under all four project alternatives. Impacts would occur at the Los Banos Wildlife Area under all alternatives and at the Morgan Hill Community and Cultural Center under Alternatives 2 and 4 because the new source of noise resulting from project operations, including train operation and maintenance activities, would interfere with use of the outdoor amphitheater at the Morgan Hill Community and Cultural Center and degrade the user experience in an area at the southern edge of the Los Banos Wildlife Area. See Section 3.15 of this Final EIR/EIS for more detailed evaluation of the impacts of project operational noise on the use of parks, recreation facilities, and open-space resources.

Although operation of the stations and maintenance facilities would increase noise and vibration, it would not, in and of itself, alter the established community interaction patterns. There would be no physical division of communities from noise and vibration generated during operations.

Visual Quality

Various HSR buildings and facilities would be lit throughout the night, contributing to increases in nighttime light levels. There would be no overhead lights along the HSR guideway. Project features will provide lighting and building design intended to conform to the local design context (AVQ-IAMF#1). Fixed lighting sources at proposed HSR facilities, including stations, tunnel portals, traction power substations, and maintenance facilities, will be designed to direct lighting downward, minimizing light spillover, but the 24-hour operation of the facilities will require a minimum level of lighting for work safety and security.

These impacts would be most pronounced in rural areas without substantial sources of existing light, such as the rural agricultural area south and east of Gilroy and the Pajaro–San Felipe Landscape Unit, where existing light levels are low. An MOWF is proposed under all project alternatives, in addition to a new HSR station under Alternative 3. In the Henry Miller Landscape Unit, an MOWS is proposed for all project alternatives. In these locations, project features will reduce the effects of nighttime light levels through visually sensitive lighting design, but they could not eliminate the presence of nighttime light where existing nighttime light levels are low. Spillover from elevated viaducts would create a new source of substantial light, increasing nighttime light levels in residential areas, and could be an annoyance to viewers. Project lighting would reduce visual quality and viewer sensitivity would be moderate or, in some cases, high. Because project operations would not result in significant visual quality effects, there would be no disruption of existing communities and loss of community cohesion.

CEQA Conclusion

The impact would be less than significant under CEQA because ongoing project operations would not physically divide established communities or require construction of new government facilities. Project operations would take place within an existing transportation corridor or within sparsely populated areas. Access to neighborhoods and community and public facilities would be maintained. Therefore, CEQA does not require 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, EMI, exposure to hazardous materials, and potential safety risks to children.

Impact SOCIO#4: Temporary Impacts on Children's Health and Safety

Air Quality

As noted in Section 3.3 of this Final EIR/EIS, construction of the project alternatives would generate emissions that could contribute to changes in regional air quality. Impacts on children could occur in areas immediately adjacent to construction activities, where elevated pollutant concentrations could lead to an increase in health risks and degradation of 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 RSA (refer to Section 3.3 of this Final EIR/EIS for full discussion of these construction impacts). Although fugitive dust could present a nuisance to some recreational users of parks, the impacts would result in short-term 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 3.15 of this Final EIR/EIS for a comprehensive discussion of the impacts of project construction on parks, recreational facilities, and open spaces).

Table 3.12-9 shows the number of schools and daycare facilities within 1,000 feet of construction that could experience adverse health effects from exposure to increased dust. There are 53 schools and daycare facilities within 1,000 feet of construction for Alternative 1, 61 facilities for Alternative 2, 49 facilities for Alternative 3, and 48 facilities for Alternative 4. There are no schools or facilities for children in or adjacent to the DDV or TDV so there would be no change in impacts on children's health and safety or schools. Those sensitive receptors within 1,000 feet of construction would experience greater health risks because of exposure to construction emissions. As shown in Table 3.12-9, the greatest number of impacts on sensitive receptors would occur in the Morgan Hill and Gilroy Subsection under all four project alternatives.

Table 3.12-9 Schools/Daycare Facilities within 1,000 feet of Project Construction

Facility	Alternative 1	Alternative 2	Alternative 3	Alternative 4		
San Jose Diridon Station Approach Subsection						
Schools	8	8	8	7		
Daycare facilities	3	3	3	1		
Subtotal	11	11	11	8		
Monterey Corridor Subsection						
Schools	5	7	5	4		
Daycare facilities	2	2	2	0		
Subtotal	7	9	7	4		
Morgan Hill and Gilroy Subsection						
Schools	23	25	23	23		
Daycare facilities	11	15	7	12		
Subtotal	34	40	30	35		



Facility	Alternative 1	Alternative 2	Alternative 3	Alternative 4			
Pacheco Pass Subsection	Pacheco Pass Subsection						
Schools	0	0	0	0			
Daycare facilities	0	0	0	0			
Subtotal	0	0	0	0			
San Joaquin Valley Subsection							
Schools	1	1	1	1			
Daycare facilities	0	0	0	0			
Subtotal	1	1	1	1			
GRAND TOTAL	53	61	49	48			

All four project alternatives would result in comparable levels of construction emissions. Increased health risks associated with construction emissions would be greater under Alternative 2 than under Alternatives 1, 3, and 4 because of the increased earthwork associated with embankment and trench construction in the Monterey Corridor and Morgan Hill and Gilroy Subsections.

The project would avoid or minimize impacts related to fugitive dust emissions generated during construction by creating and implementing a fugitive dust control plan to control dust emissions from equipment, materials, and construction activities (AQ-IAMF#1). Dust control measures will be required and implemented during construction, including covering all haul vehicles traveling on public roads to limit visible dust emissions, cleaning all trucks and equipment before exiting the construction site, and suspending any dust-generating activities when average wind speed exceeds 25 mph.

Alternative 2 would exceed the general conformity threshold for nitrogen oxides (NO_x) and the Bay Area Air Quality Management District's (BAAQMD) CEQA threshold for volatile organic compounds (VOC) in an additional year (2022), compared to Alternatives 1, 3, and 4. Alternative 2 would require the largest amount of grading, which would generate more dust than Alternatives 1, 3, and 4. For instance, Alternative 2 would construct 41.0 linear miles of embankment, compared to 21.9, 24.9, and 25.9 linear miles under Alternatives 1, 3, and 4, respectively. In addition, Alternative 2 would require 3.2 linear miles of trenches, compared to 2.3, 2.4, and 2.3 linear miles under Alternatives 1, 3, and 4, respectively. The difference in earthwork among the project alternatives is predominantly attributable to the embankment profile of Alternative 2 necessary to support the at-grade and embankment structures through the Monterey Corridor and Morgan Hill and Gilroy Subsections, contrasted with the viaduct structures proposed for the same subsections under Alternatives 1 and 3 and the at-grade profile of Alternative 4. The project would also minimize off-gassing emissions of VOCs that would occur from paints and other coatings by requiring the use of low-VOC paint and super-compliant or Clean Air paint that has a lower VOC content than that required by BAAQMD rules (AQ-IAMF#2), AQ-IAMF#3, AQ-IAMF#4, AQ-IAMF#5, and AQ-IAMF#6 will further reduce emissions from construction equipment. Additionally, the Authority has identified mitigation measures to avoid, minimize, or compensate for certain impacts on air quality; these measures are described in Section 3.3.7, [Air Quality and Greenhouse Gases] Mitigation Measures, of this Final EIR/EIS. The carbon monoxide (CO) hotspot analysis presented in Impact AQ#11 demonstrates that the project would not result in CO concentrations in excess of the health protective California or National Ambient Air Quality Standards, and consequently would not expose sensitive receptors to significant pollutant concentrations or health effects. The California standards are set to protect the health of sensitive populations, including children and the elderly.



Construction emissions, including fugitive dust and greenhouse gases, would not be expected to be generated in sufficient concentrations that the health of children would be compromised, nor would they affect the quality of life in the communities and neighborhoods RSA.

Noise

Construction of the project alternatives would occur near residences, parks, schools, and other facilities where children congregate, such as daycare facilities, and would subject these facilities to temporary severe noise impacts. This noise would result from demolition and 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 of this Final EIR/EIS. 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 daycare, or at parks, schools, and other facilities that could be near construction sites. For example, under all project alternatives, Bellarmine College Preparatory is adjacent to the project in the San Jose Diridon Station Approach Subsection. Under Alternatives 1 and 2, South Valley Middle School would be adjacent to project construction.

Those schools within 1,000 feet of construction would be exposed to higher levels of construction noise. Most of the affected schools are in the Morgan Hill and Gilroy Subsection. Severe construction noise could temporarily disrupt children's learning ability and lead to increased stress, which could, in turn, affect children's health.

The Authority will implement a CMP (SOCIO-IAMF#1:) prior to construction that will include actions pertaining to noise controls, such as installing temporary 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 offset time periods, to minimize effects on children's health and safety and on community facilities where children might be present (NV-IAMF#1, SOCIO-IAMF#1). Mitigation to reduce noise and vibration during construction is discussed in Section 3.4.7 of this Final EIR/EIS.

ЕМІ

The only EMI that might be generated during construction would be occasional licensed radio transmissions between construction vehicles. Some construction equipment also would generate low levels of EMF, and would only affect construction workers within the construction site. Brief, temporary detours through construction zones would not expose children or the general public to long-term impacts from EMF/EMI. There would be no disproportionate impacts related to children's health and safety because children would not be present within the construction site and levels of EMF/EMI outside the construction site would be below levels considered harmful to humans.

Hazardous Materials and Waste

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, leading to temporary hazards to schools. 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#3, HMW-IAMF#4, HMW-IAMF#5, HMW-IAMF#6, HMW-IAMF#7, HMW-IAMF#8, HMW-IAMF#9, and HMW-IAMF#10) will prevent the use of extremely hazardous substances or mixtures thereof in a quantity equal to or greater than the state threshold quantity within 0.25 mile of a school. 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, [Hazardous Materials and Waste] Mitigation Measures, of this Final EIR/EIS. Therefore, there would be no impacts on children's health and safety.



Safety and Security

The Authority has established safety measures as part of project design and construction that minimize or avoid impacts on children's health and safety. The Construction Safety Transportation Management Plan (SS-IAMF#1) requires the contractor's coordination with local jurisdictions for maintaining emergency vehicle access. The plan will also specify the contractor's procedures for implementing temporary road closures, including 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 (SS-IAMF#2) to guide the activities, processes, and responsibilities during project construction. This plan will protect the safety and security of construction workers and the public, further minimizing the potential exposure of children to construction site safety hazards. The Authority will also implement a CTP (TR-IAMF#2) that will include minimization practices such as provisions for safe pedestrian and bicycle passage or detours. In addition, the Authority will prepare and implement written hazardous materials plans (HMW-IAMF#10) that will manage the transport, use, storage, and disposal of hazardous waste and materials. Avoiding conflicts with other modes of transit or pedestrians is discussed in greater detail in Section 3.2 of this Final EIR/EIS.

The safety measures discussed in the preceding paragraphs will be implemented to restrict access of members of the public, including children, to construction areas. 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. Construction would not require closure of any parks. PK-IAMF#1 will provide for maintenance of safe access to parks. The aforementioned project features will minimize the exposure of children to health and safety risks. Mitigation that has been identified to reduce potential impacts on safety and security is discussed in Section 3.11.7, Mitigation Measures, of this EIR/EIS. There would be no disproportionate impacts on children's health and safety.

CEQA Conclusion

The CEQA Guidelines do not include a threshold for impacts on children. Any potential impacts have been reported in the primary analysis for each resource topic. Therefore, CEQA does not require mitigation.

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

Because of the design of the viaduct for Alternatives 1 and 3, operational noise impacts from HSR would not subject facilities where children congregate, such as schools, parks, and daycare facilities, or children living in residences adjacent to the project, to severe noise impacts. Alternative 2, however, which would be on embankment in the Morgan Hill and Gilroy Subsection, would result in perceptible operational noise that could subject schools, parks, and daycare facilities to noise and vibration from train operations, although the noise and vibration would be intermittent and brief during HSR train passbys. This brief and intermittent exposure to severe noise would not be expected to result in long-term health impacts on children. Alternative 4, which would be blended service at grade from San Jose to downtown Gilroy, would result in noise impacts similar to those under Alternative 2. There are no schools or facilities for children in or adjacent to the DDV or TDV, so there would be no change in impacts on children's health and safety or schools.

As a component of the overall HSR system, the project has the potential to have beneficial regional impacts on air quality by reducing overall emissions, thus providing a healthier environment for children. However, as noted previously, construction equipment and activities would generate temporary increases in construction emissions that could affect children's health in the immediate vicinity of construction activities. Poor air quality is known to be a health risk, particularly for sensitive populations such as children. However, construction emissions, including fugitive dust and greenhouse gases, are not expected to be in sufficient concentrations to compromise children's health. In addition, these impacts would be temporary and intermittent and would cease after construction is completed. Those schools within 1,000 feet of construction would experience greater health risks because of exposure to construction emissions. Project



features will minimize the potential for construction activities to generate dust and VOCs, further reducing health risks to children (AQ-IAMF#1, AQ-IAMF#2).

Alternative 3 would result in somewhat greater levels of emissions during operations than Alternatives 1, 2, and 4 because of the greater VMT associated with the East Gilroy Station. With regard to air quality related to relocated freight service and emergency generators, an operational Health Risk Assessment (HRA) was performed, as discussed in Section 3.3 of this Final EIR/EIS. The HRA determined that the relocated freight service would result in increases and decreases of cancer and non-cancer health risks, relative to existing and No Project Alternative conditions, depending on the receptor locations. The changes in risk levels would be the same under all alternatives. The increase in cancer risk to children would be less than BAAQMD thresholds. Maximum concentrations of particulate matter smaller than or equal to 2.5 microns in diameter (PM_{2.5}) from operation of the emergency generators would be less than BAAQMD, Monterey Bay Unified Air Pollution Control District, and San Joaquin Valley Air Pollution Control District health risk thresholds of significance for all four project alternatives. Thus, children's health and safety would not be compromised by project operations. The Safety and Security Management Plan (SS-IAMF#2) will include 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 will 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, as noted, Alternatives 1, 2, and 3 would be fully grade-separated to minimize HSR operation risks to the health and safety of children. Alternative 4 would be completely rebuilt at each at-grade crossing to provide barriers to access to the tracks. There would be no disproportionate impact on children's health and safety.

CEQA Conclusion

The CEQA Guidelines do not include a threshold for impacts on children. Any potential impacts have been reported in the primary analysis for each resource topic. Therefore, CEQA does not require mitigation.

3.12.6.4 Property Displacements and Relocations

This section evaluates the displacements that would occur as a result of the construction of the project alternatives and describes the relocation of resources within the displacements and relocations RSA. The Draft Relocation Impact Report (Authority 2019b) provides complete information on displacements and relocations.

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, community facilities, and agricultural properties. Other future development would occur on currently undeveloped or agricultural land. Section 3.19 of this Final EIR/EIS identifies planned and other reasonably foreseeable future projects anticipated to be constructed 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 properties to address and minimize these impacts.

Project Impacts

This section evaluates the residential, commercial/industrial businesses, agricultural, ⁹ and community and public facility displacements that would result from construction of the project alternatives and presents the relocation capacity within the relocation RSA. The Draft Relocation Impact Report (Authority 2019b) provides more detailed information on property displacements and relocations. Displacement of a substantial number of these uses could result in loss of

February 2022

California High-Speed Rail Authority

⁹ For purposes of this analysis, agricultural properties primarily include confined animal agricultural facilities.



community cohesion. All displacements and relocations would result from project construction; operations would not require further displacements of any residences, commercial/industrial businesses, agricultural properties, or community and public facilities. The track alignment for Alternatives 1, 2, and 3 north of Monterey Road would be predominantly within the Caltrain right-of-way, an existing rail corridor, and would continue either on the east side of the UPRR rail corridor under Alternative 2 or within the median of Monterey Road under Alternatives 1 and 3, bypassing Morgan Hill, extending primarily through rural and residential areas. Track realignments would shift the alignment a maximum of 220 feet, with most track realignments shifting the right-of-way between 40 and 85 feet. Alternative 4 would be constructed entirely within the existing Caltrain right-of-way between San Jose and downtown Gilroy.

Embankment construction in the Monterey Corridor Subsection under Alternative 2 would result in more property displacements than Alternatives 1 or 3, which would be on viaduct in this subsection. Alternative 4 would result in the fewest property displacements. In Alternative 4 without the DDV, there would be 66 commercial and industrial displacements. With the DDV, there would be partial acquisition of one additional commercial parcel and one additional commercial building displacement. There would also be up to 23 feet of additional property acquisition in the SAP Center parking lot in the San Jose Diridon Station Approach Subsection. Property acquisition would also occur in the SAP Center parking lot with Alternative 4 without the DDV, but the area of acquisition would be greater with the DDV. Alternative 2 would require the relocation and reconstruction of Monterey Road to the east. Construction of Alternatives 1, 2, and 3 along Monterey Road would result in property displacements, as Monterey Road would be narrowed from six lanes to four between Capitol Expressway and Blossom Hill Road. This roadway narrowing would not occur under Alternative 4. Table 3.12-10 shows the number and type of property displacements that would occur under each of the project alternatives. The TDV would not result in any additional displacements compared to the alternatives without the TDV.

Table 3.12-10 Estimated Property Displacements

Property Type	Alternative 1	Alternative 2 ¹	Alternative 3	Alternative 4
Residential properties (units)	147	603	157	68
Commercial and industrial facilities (units)	217	348	157	66 (67)
Agricultural properties ²	49	53	49	40
Community and public facilities	7	8	5	1
Total Property Displacements	420	1,012	368	175 (176)

Estimated property displacements for Alternative 4 with the DDV are shown in parentheses.

Impact SOCIO#6: Residential Displacements and Relocations

Residential Displacements

The total residential units displaced would be 147 units under Alternative 1, 603 units under Alternative 2, 157 units under Alternative 3, and 68 units under Alternative 4, as shown in Table 3.12-11. Alternative 2 would result in approximately three times the residential displacements of the other three project alternatives, a function of both the horizontal and vertical alignment and the types of residences affected (refer to Section 5.2.1, Residential Units, of the Draft Relocation Impacts Report [Authority 2019b]).

¹The same number of properties would be affected under Alternative 2 Skyway Drive Variant A and Variant B.

² Includes dairies and feedlots

 $^{^{10}}$ One realignment would shift the VTA railyard in downtown Gilroy up to 3,000 feet under Alternatives 1, 2, and 4.



Table 3.12-11 Estimated Number of Displaced Residential Units by Housing Type and Alternative

Location	Residential Properties Acquired	Single- Family Residences	Multifamily Residences	Mobile/ Manufactured Homes	Total Residential Units
Alternative 1					
Unincorporated Santa Clara County	25	32	0	0	32
San Jose	25	29	2	0	31
Morgan Hill	8	8	0	0	8
San Martin	7	7	2	0	9
Gilroy	10	9	15	0	24
Unincorporated San Benito County	4	4	0	0	4
Unincorporated Merced County	21	23	0	10	33
Volta	4	4	0	2	6
Totals	104	116	19	12	147
Percent Displacements by Type	N/A	78.9%	12.9%	8.2%	100.0%
Alternative 2					
Unincorporated Santa Clara County	26	32	0	0	32
Santa Clara	1	0	25	0	25
San Jose	44	50	0	3	53
Morgan Hill	55	44	137	1	182
San Martin	30	30	25	0	55
Gilroy	17	12	201	0	213
Unincorporated San Benito County	4	4	0	0	4
Unincorporated Merced County	21	23	0	10	33
Volta	4	4	0	2	6
Totals	202	199	388	16	603
Percent Displacement by Type	N/A	33.0%	64.3%	2.7%	100.0%
Alternative 3					
Unincorporated Santa Clara County	33	35	0	1	36
Santa Clara	1	0	25	0	25
San Jose	22	27	0	0	27
Morgan Hill	10	8	2	0	10
San Martin	10	10	2	0	12
Gilroy	4	5	0	0	5
Unincorporated San Benito County	3	3	0	0	3
Unincorporated Merced County	21	23	0	10	33



Location	Residential Properties Acquired	Single- Family Residences	Multifamily Residences	Mobile/ Manufactured Homes	Total Residential Units	
Volta	4	4	0	2	6	
Totals	108	115	29	13	157	
Percent Displacement by Type	N/A	73.2%	18.5%	8.3%	100.0%	
Alternative 4						
Unincorporated Santa Clara County	10	16	0	0	16	
San Jose	7	7	0	0	7	
San Martin	1	1	0	0	1	
Gilroy	1	1	0	0	1	
Unincorporated San Benito County	4	4	0	0	4	
Unincorporated Merced County	21	23	0	10	33	
Volta	4	4	0	2	6	
Totals	48	56	0	12	68	
Percent Displacement by Type	N/A	82.4%	0%	17.6%	100.0%	

N/A = not applicable

Most residential displacements under Alternatives 1 and 3 would be single-family residences (approximately 79 and 73 percent, respectively), while the remaining displaced residential units would be multifamily residences (approximately 13 and 19 percent, respectively) and mobile/manufactured homes (approximately 8 percent). Properties can include more than one residence; multiple residences are indicated where the unit count is larger than the number of properties. In comparison, Alternative 2 would affect a greater percentage of multifamily residences than the other alternatives, while Alternative 4 would displace no multifamily residences. Displacements under Alternative 2 would consist of multifamily residences (approximately 64 percent), single-family residences (approximately 33 percent), and mobile/manufactured homes (approximately 3 percent). Displacements under Alternative 4 would consist of approximately 82 percent single-family and 18 percent mobile/manufactured homes. While individual mobile/manufactured homes would be displaced under each alternative, only three units are in mobile home parks in the Monterey Corridor Subsection under Alternative 2.

Table 3.12-12 shows the estimated number of displaced residential units and estimated number of residents by geographic location for each project alternative.

Table 3.12-12 Estimated Number of Displaced Residences and Population to be Relocated by Alternative

	Residential Units Displaced		Estimated Number of d Residents to Be Relocated ¹	
Location	Number	Percent	Number	Percent
Alternative 1				

¹¹ A manufactured home (formerly known as a mobile home) is built in the controlled environment of a manufacturing plant and is transported in one or more sections on a permanent chassis (HUD 2015). Despite its name, most mobile/manufactured homes are kept in a single location permanently; their mobility has decreased considerably as units have become larger.

California High-Speed Rail Authority

February 2022



	Residential U	nits Displaced	Estimated Residents to	Number of Be Relocated
Location	Number	Percent	Number	Percent
Unincorporated Santa Clara County	32	22	93	20
San Jose	31	21	96	20
Morgan Hill	8	5	25	5
San Martin	9	6	31	6
Gilroy	24	16	82	17
Unincorporated San Benito County	4	3	13	3
Unincorporated Merced County	33	22	112	24
Volta	6	4	20	4
Totals	147	100	472	100
Alternative 2	•			
Unincorporated Santa Clara County	32	5	93	5
Santa Clara	25	4	68	3
San Jose	53	9	164	8
Morgan Hill	182	30	564	29
San Martin	55	9	187	10
Gilroy	213	35	724	37
Unincorporated San Benito County	4	1	13	1
Unincorporated Merced County	33	5	112	6
Volta	6	1	20	1
Totals	603	100	1,945	100
Alternative 3		•		
Unincorporated Santa Clara County	36	23	104	21
Santa Clara	25	16	68	14
San Jose	27	17	84	17
Morgan Hill	10	6	31	6
San Martin	12	8	41	8
Gilroy	5	3	17	3
Unincorporated San Benito County	3	2	10	2
Unincorporated Merced County	33	21	112	23
Volta	6	4	20	4
Totals	157	100	486	100
Alternative 4	,			
Unincorporated Santa Clara County	16	24	47	21
San Jose	7	10	22	10



	Residential U	nits Displaced	Estimated Number of Residents to Be Relocate	
Location	Number	Percent	Number	Percent
San Martin	1	1	3	1
Gilroy	1	1	3	1
Unincorporated San Benito County	4	6	13	6
Unincorporated Merced County	33	49	111	51
Volta	6	9	20	9
Totals	68	100	219	100

Sources: U.S. Census Bureau 2010–2014a

N/A = not applicable

The residential units and residents displaced under each alternative would total 147 units and 472 residents under Alternative 1, 603 units and 1,945 residents under Alternative 2, 157 units and 486 residents under Alternative 3, and 68 units and 219 residents under Alternative 4. The most residential displacements would occur in unincorporated Merced and Santa Clara Counties, Gilroy, and San Jose under Alternative 1; Morgan Hill and Gilroy under Alternative 2; unincorporated Santa Clara and Merced Counties, San Jose, and Santa Clara under Alternative 3; and San Jose and unincorporated Merced and Santa Clara Counties under Alternative 4 (refer to Section 5.2.1, Table 5-2 of the Draft Relocation Impacts Report [Authority 2019b]).

Residential displacements in the city of Santa Clara would occur under Alternatives 2 and 3, and both alternatives would displace the same 25-unit multifamily residential property adjacent to the south side of the existing Caltrain tracks and south of De La Cruz Boulevard. The multifamily residential buildings comprising the complex are managed by Charities Housing, and provide subsidized, affordable housing and on-site childcare for survivors of domestic abuse and their children. Alternatives 1 and 4 would result in no residential displacements in Santa Clara.

In San Jose, residential displacements under all alternatives would consist predominantly of single-family residences near the existing San Jose Diridon Station and in the Auzerais/Josefa neighborhood, several condos near Communications Hill (south of Curtner Avenue), and rural residential single-family residences along Monterey Road north of Morgan Hill. Additionally, several mobile/manufactured homes would be displaced under Alternative 2 just north of Morgan Hill.

In Morgan Hill, Alternatives 1 and 3 would be aligned adjacent to US 101 on aerial structure along the east side of Morgan Hill, while Alternative 2 would be on embankment adjacent to the existing Caltrain/UPRR tracks through downtown Morgan Hill. The construction of Alternative 2 through downtown Morgan Hill would result in a substantial amount of residential displacement. Alternative 2 would displace 182 residences in Morgan Hill compared to 8 residences under Alternative 1, 10 residences under Alternative 3, and zero residences under Alternative 4. Residential displacements under Alternative 2 in downtown Morgan Hill would consist predominantly of single-family and multifamily residences north and south of the existing Morgan Hill Caltrain Station that would be displaced because of the construction of the East Main Avenue and Dunne Avenue underpasses. The displaced multifamily residences contain, on average, 6 residential units per displaced building, and the largest of the displaced multifamily buildings contains 40 units. The 40-unit residential building, owned and operated by Bella Terra, provides affordable senior housing. Residential displacements in Morgan Hill under Alternative 1 and 3 would consist predominantly of single-family residences adjacent to US 101. Alternative 4 would cause no residential displacements in Morgan Hill.

South of Morgan Hill, the alignments of Alternatives 1, 2, and 3 would converge, and the project alternatives extend through San Martin adjacent to the east side of Monterey Road. Alternative 4

¹The numbers of persons to be relocated 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. The average number of persons was multiplied by the number of displaced residential units by location to arrive at the numbers shown in this column.



would be in blended operations at grade through this area. Residential displacements in San Martin would vary by alternative based on the vertical profile of the alignment through the community. Alternatives 1 and 3 would be constructed on aerial structures, minimizing the need for right-of-way acquisition and displacements; these alternatives would result in 9 and 12 residential displacements within San Martin, respectively. Alternative 2 would be constructed on embankment through San Martin, resulting in 55 displacements associated with an expanded right-of-way and the construction of grade separations. Residential displacements in San Martin under Alternative 2 would be concentrated in northern San Martin near East Middle Avenue, where construction of the HSR alignment would require shifting the Caltrain/UPRR tracks westward and a new grade separation (overcrossing), and in central San Martin, where a new grade separation would be built at San Martin Avenue. One of the displaced residential buildings under Alternative 2 has 22 units and is associated with the Boccardo Family Living Center, which provides affordable, transitional housing for homeless families with children in South Santa Clara County, an emergency shelter program for families, and seasonal migrant farmworker housing. Alternative 4 would be in blended operations at grade through San Martin, resulting in one displaced single-family unit.

Residential displacements would vary substantially by alternative within Gilroy. Alternatives 1 and 2 would pass through Gilroy adjacent to the existing Caltrain/UPRR tracks, with Alternative 1 on aerial structure and Alternative 2 on embankment. Under both Alternatives 1 and 2, displacements of single-family and multifamily residences in Gilroy would occur north of the existing Gilroy Caltrain Station, along Railroad Street. Under Alternative 2, a multifamily building with 24 units would be displaced in northern Gilroy, north of Lewis Street, and another apartment building with 160 units would be displaced east of the alignment just south of East 10th Street. Alternative 3 would travel east of Gilroy through rural unincorporated Santa Clara County, and would displace five single-family residential units in Gilroy. Alternative 4, which would be in blended operations at grade through Gilroy, would displace one residential unit.

Between 16 and 36 residential displacements would occur in unincorporated Santa Clara County in the vicinity of Coyote Valley, in rural residential lands between Morgan Hill and Gilroy, and in agricultural lands south or east of Gilroy, depending on the project alternative. Continuing east, the project alternatives would pass through the northernmost portion of unincorporated San Benito County for less than 5 miles, displacing three to four single-family residences under each project alternative. All four project alternatives would be identical in the Pacheco Pass and San Joaquin Valley Subsections. The project would displace 23 single-family residences and 10 mobile/manufactured homes in unincorporated Merced County, mostly along the south side of Henry Miller Road, as well as four single-family residences and two mobile/manufactured homes in the community of Volta. The project would not result in residential displacements in Los Banos.

In addition to the residential displacements, children who reside in the displaced homes may be required to relocate to a different school, perhaps in a different school district. It is estimated that 88 school-aged children (grades K–12) would be displaced under Alternative 1, 318 school-aged children under Alternative 2, 91 school-aged children under Alternative 3, and 113 children under Alternative 4.12

Residential Relocation Resources

A gap analysis was performed to determine the potential likelihood that displaced residents would be able to find similar housing within the relocation RSA. The results of the gap analysis indicate that the overall number of available residential units exceeds the number of displaced residential units under all project alternatives, showing that there are sufficient relocation resources (i.e., similar residences for sale or rent) within the relocation RSA. However, at the community level, displaced residents in several communities may be unable to relocate within the same community. Sufficient numbers of relocation resources would not be available in unincorporated Merced County and Volta under each of the four project alternatives and in Morgan Hill, San

February 2022

California High-Speed Rail Authority

¹² The number of affected students in each school district was estimated by first multiplying the percentage of school-age children (grades K–12) in each city or county population by the average household size in the corresponding location (U.S. Census Bureau 2010-2014a, 2010-2014b) to obtain the average number of school-age children per household.



Martin, and Gilroy under Alternative 2. Residents in unincorporated Merced County and Volta could relocate to Los Banos, while residents in Morgan Hill, San Martin, and Gilroy could relocate to San Jose where there would be ample numbers of available residential units. However, size, amenities, and cost of available units would determine if available housing would actually meet the needs of displaced households. In the case of San Jose, housing costs are substantially higher than in the communities to the south, potentially reducing the availability of affordable replacement housing units.

Further discussion of the potential availability of replacement housing based on 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 Report (Authority 2019b). The Authority must comply with the Uniform Act as identified in SOCIO-IAMF#2. The Uniform Act requires that the owning 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 would be 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 moving or relocating their residence. 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 Section 1263.320a).

In addition to the impacts on established residential communities, construction of the project alternatives would displace some rural residences in one of the most productive agricultural regions of the country. The acquisition of land for construction would displace rural residences in unincorporated rural areas in San Benito and Merced Counties. Rural neighbors often rely on each other for assistance (e.g., for responding to an emergency, lending resources in the event of unexpected equipment failure, finding extra hands at harvest). This interdependence can build community cohesion, even in areas with low population density, especially where the same families may have been neighbors for many years. Displacement of rural homes also can cause substantial disruption to families faced with having to move or replace their established home, along with outbuildings, gardens, irrigation and fencing systems, mature landscaping, and other improvements that have been built over decades or even generations. The broader farming community can also suffer disruption from the displacement of multiple neighbors—who may or may not decide to continue farming in proximity to a new HSR line—and through having other farming operations in the area divided by a new linear feature. While relocation assistance would be provided for displaced residents, there would be some loss of community cohesion in areas where residential displacements would be concentrated, as in the Monterey Corridor and Morgan Hill and Gilroy Subsections.

CEQA Conclusion

The impact under CEQA would be less than significant. 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. 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 will develop a relocation mitigation plan (SOCIO-IAMF#3) for all displaced properties in consultation with affected cities and counties. Therefore, CEQA does not require mitigation.



Impact SOCIO#7: Commercial and Industrial Displacement and Relocation

For the purpose of this analysis, commercial and industrial businesses comprise nonagricultural facilities used for retail, offices, manufacturing, distribution, and warehouses. Agricultural properties are addressed in Impact SOCIO#8.

Commercial and Industrial Business Displacements

As shown in Table 3.12-13, 217 commercial and industrial businesses would be displaced under Alternative 1, 348 businesses under Alternative 2, 157 businesses under Alternative 3, and 66 businesses under Alternative 4. With the DDV, there would be partial acquisition of one additional commercial parcel and one additional commercial building displacement. All four project alternatives would displace more commercial businesses than industrial businesses (refer to Section 5.2.2, Commercial and Industrial Businesses, Table 5-22, of the Draft Relocation Impacts Report [Authority 2019b]).

Table 3.12-13 Estimated Number of Displaced Commercial and Industrial Businesses

Location	Commercial/ Industrial Properties Acquired	Commercial Businesses	Industrial Businesses	Total Businesses
Alternative 1	138	149	68	217
Alternative 2	230	258	90	348
Alternative 3	110	119	38	157
Alternative 4	48 (49)	41 (42)	25	66 (67)

Estimated property displacements for Alternative 4 with the DDV are shown in parentheses.

Under Alternative 1, most commercial and industrial displacements would occur in San Jose (107 of the total 217 displacements) and Gilroy (90 of the total 217 displacements). The types of businesses most affected by displacement under Alternative 1 are those categorized as "retail trade." This category encompasses various types of businesses, including automobile-related businesses, building material supply stores, home furnishing stores, miscellaneous store retailers, and nonstore retailers (OMB 2017). "Transportation and warehousing" is the second largest category of businesses most affected by displacements under Alternative 1. This category includes storage facilities, warehouses, large industrial buildings, and transportation-related industries (OMB 2017).

Alternative 2, which would result in the most business displacements, would displace the majority of commercial and industrial businesses in San Jose (124 of the 348 displacements) and Gilroy (122 of the 348 displacements). The types of businesses most affected by this project alternative would be "retail trade" and "transportation and warehousing."

Of the 157 commercial and industrial displacements under Alternative 3, most would be in San Jose (102 of the 157 business displacements) and Santa Clara (36 of the 157 business displacements). The types of businesses most affected by this project alternative would be "retail trade" and "transportation and warehousing."

Alternative 4, which would cause the fewest business displacements, would displace commercial and industrial businesses located mostly in Gilroy (29 of the 66 business displacements) and San Jose (21 of the 66 business displacements). The types of businesses most affected by this project alternative would be "retail trade" and "transportation and warehousing." With the DDV, there would be partial acquisition of one additional commercial parcel and one additional commercial building displacement. There would also be up to 23 feet of additional property acquisition in the SAP Center parking lot in the San Jose Diridon Station Approach Subsection. Property acquisition would also occur in the SAP Center parking lot with Alternative 4 without the DDV, but the area of acquisition would be greater with the DDV.



Business displacements in Santa Clara would occur under Alternatives 1, 2, and 3 but not under Alternative 4. The greatest number would occur under Alternatives 2 and 3. Most of the displaced businesses are adjacent to the east side of the existing Caltrain tracks between Scott Boulevard and De La Cruz Boulevard. These businesses include mixed-use commercial and industrial buildings, automotive sales and services, and a manufacturing facility.

Business displacements in San Jose under each project alternative are generally east of the existing Caltrain tracks and concentrated between the alignment's crossing of I-880 and I-280, along Almaden Road, north of Curtner Avenue, and in South San Jose near Capitol Expressway. Alternatives 1, 2, and 3 would displace between 102 and 124 businesses in San Jose, while Alternative 4 would displace 22 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, gas stations, one of the two remaining drive-in movie theaters in the San Francisco Bay Area (Bay Area), and a concrete/aggregate distribution center.

In Morgan Hill, the alignment of Alternatives 1 and 3 would be adjacent to US 101 and would avoid business displacements. Alternative 2, which would extend through downtown Morgan Hill on embankment, would displace an estimated 41 commercial and industrial businesses. Most of these displacements would be along East Main Avenue, Dunne Avenue, and Railroad Street. Types of affected businesses in Morgan Hill include food and drink services, mixed-use offices, retail, gas stations, automotive sales and services, transportation and storage, and an adult day care facility. Alternative 4, which would be in blended operations at grade through Morgan Hill, would displace two commercial businesses north of East Dunne Avenue.

South of Morgan Hill, the alignments would continue through San Martin, and would displace between 10 and 15 commercial and industrial businesses predominantly along the east side of Monterey Road. The types of business displacements include food services, retail, and transportation and warehousing businesses.

Business displacements in Gilroy would vary substantially by project alternative. Alternatives 1 and 2 would displace 90 and 122 commercial and industrial businesses in Gilroy, respectively, while Alternative 3, which extends east of Gilroy, would displace two businesses in northern Gilroy. Alternative 4, which would be in blended operations at grade through Gilroy, would displace 29 businesses. Business displacements under Alternatives 1 and 2 would consist of automotive repair and services, retail and wholesalers, manufacturing, construction transportation and warehousing, health care and social assistance, and vacant buildings. These displacements would occur primarily north and south of Leavesley Road, north of the existing Gilroy Caltrain Station, and in the industrial portions of southern Gilroy.

In unincorporated Santa Clara County in the vicinity of Coyote Valley, Alternatives 1, 2, and 3 would displace between two and five commercial and industrial businesses while Alternative 4 would not displace any. Another four business displacements would occur under all project alternatives in unincorporated Merced County. These displacements would consist mostly of trade and transportation-related businesses.

The Authority determined the number of affected employees by reviewing U.S. Bureau of Labor Statistics data on employment and number of businesses in each subsector. Alternative 2 would affect the most employees, an estimated 5,412. Alternative 4 would affect the fewest employees, approximately 1,077. Alternative 1 would affect 3,512 employees, and Alternative 3 would affect 2,444 employees. None of the key employers in the displacements and relocations RSA—Lockheed Martin; Cisco Systems; the SAP Center; the Morgan Hill Unified School District; bicycle and electronics manufacturers; food producers, manufactures, and suppliers—would be displaced by construction of the any of the project alternatives.

Commercial and Industrial Replacement Resources

A review of suitable available properties that could provide potential relocation sites for displaced commercial and industrial businesses identified 619 commercial or industrial buildings for sale or rent in the relocation RSA, as well as an additional 57 parcels of land zoned for commercial, retail, or industrial for sale or rent (LoopNet 2017). These potential relocation properties comprised 132



industrial facilities, 286 offices, 197 retail spaces, 1 hotel, and 3 special-purpose facilities. Approximately 88 percent of these properties were concentrated in Santa Clara and San Jose, with the remaining 12 percent distributed in Morgan Hill, Gilroy, and Los Banos. Table 5-25 of the Draft Relocation Impact Report shows the results of gap analysis for commercial and industrial properties available by alternative (Authority 2019b). Chapter 6 of the Draft Relocation Impact Report provides further discussion of the likely availability of replacement properties based on additional characteristics of the acquired property (Authority 2019b).

As shown by the gap analysis (see the Draft Relocation Impact Report [Authority 2019b]), the overall number of available commercial or industrial facilities or properties for sale or for rent (619) exceeds the number of displaced commercial and industrial facilities (between 66 and 348, depending on the project alternative), indicating a sufficient number of relocation resources within the relocation RSA. However, at the community level, displaced commercial and industrial businesses may not be able to relocate within the same community. Sufficient commercial or industrial properties would not likely be available in unincorporated Merced County and San Martin under the four project alternatives. Additionally, sufficient commercial or industrial properties would not likely be available in unincorporated Santa Clara County under Alternatives 1, 2, and 3; in Gilroy under Alternatives 1, 2, and 4; and in Morgan Hill under Alternative 2. Displaced businesses in these communities may need to relocate to Santa Clara, San Jose, or Los Banos, where greater numbers of commercial and industrial properties would likely be available for sale or for rent.

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 displacements and relocations of commercial and industrial businesses.

Impact SOCIO#8: Agricultural Displacements and Relocations

Agricultural lands would be permanently acquired for construction of the project alternatives, disrupting agricultural operations and businesses. Displacement of cropland or associated agricultural facilities such as silos, waste management ponds, or other agricultural buildings could affect business operations.

Agricultural Displacements

As analyzed in the Draft Relocation Impact Report and the Community Impact Assessment (Authority 2019b, 2019a), an estimated 49 agricultural businesses would be displaced under Alternative 1, 53 businesses under Alternative 2, 49 businesses under Alternative 3, and 40 businesses under Alternative 4 (refer to Section 5.2.3, Agricultural Businesses, Table 5-26, of the Draft Relocation Impact Report [Authority 2019b]). The types of agricultural facilities displaced include barns, equipment and storage sheds, silos, water tanks, and dairy facilities. Most of the affected agricultural facilities are in unincorporated Merced County (50 percent) and unincorporated Santa Clara County (22 to 32 percent); these facilities are situated on an average 36-acre parcel. Dairy farms in the RSA consist of multiple-parcel facilities, with the parcels sometimes contiguous and sometimes nonadjacent. Capital improvements include holding facilities, milking facilities, wastewater treatment facilities, and associated storage facilities.

The temporary business interruption from the displacement of agricultural facilities on these parcels could result in temporary increases in business costs and lost revenues. Additional documentation related to the project's impact on agricultural resources is provided in Section 3.14 of this Final EIR/EIS.

Agricultural Replacement Resources

A gap analysis performed for agricultural properties identified 59 agricultural properties for sale or rent in the relocation RSA with an average size of 153 acres and a total acreage of 7,740 acres (LoopNet 2017; Redfin 2017). Most of these properties were in unincorporated Santa Clara County (particularly in agricultural areas east of Gilroy) and unincorporated Merced County—17 and 47 percent, respectively.



As shown by the gap analysis, the overall number of available agricultural properties for sale or rent (59) exceeds the number of displaced agricultural businesses under all four alternatives, indicating there would likely be sufficient relocation supply (Authority 2019b). The Authority's right-of-way agents would work with each affected agricultural business to address issues of concern. Agents would attempt to resolve conflicts; for example, facilities potentially could be reconfigured so that there would be no net loss of operational capacity. The agents may not be able to resolve all issues, and may offer compensation to landowners who demonstrate a hardship from loss of facilities.

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, this section does not provide CEQA significance conclusions related to agricultural displacements and relocations.

Impact SOCIO#9: Community and Public Facility Displacements and Relocations

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. Such facilities could be displaced by construction easements or as a result of roadway modifications and closures.

Within the RSA, the numbers of community and public facility displacements are eight under Alternative 1, nine under Alternative 2 (both Skyway Drive variants), six under Alternative 3, and one under Alternative 4. Most of the community and public facility displacements would occur in San Jose under all project alternatives; three facilities would be displaced in Gilroy under Alternatives 1 and 2 (refer to Section 5.2.4, Community and Public Facilities, Table 5-28, of the Draft Relocation Impact Report [Authority 2019b]).

Table 3.12-14 shows the ten community and public facilities that have the potential to be displaced by the project alternatives. Some of the affected community and public facilities would be fully displaced and require relocation, while others could likely be reconfigured on their current sites, avoiding relocation (e.g., new striping for the parking lot to maintain the same number of parking spaces). Alternative 1 could affect eight community and public facilities: two schools, three religious facilities, one recreation center, one planned multiuse turf/soccer field, and one cultural facility. Alternative 2 could displace or require the reconfiguration of one public safety facility, one recreation center, one cultural facility, three schools, one planned multiuse turf/soccer field, and two religious facilities. Alternative 3 could displace two schools, two religious facilities, one planned multiuse turf/soccer field, and one cultural facility. Alternative 4 could displace one religious facility. The Authority would coordinate with the relevant service providers to support the continued provision of services through either temporary or permanent relocation and would provide technical and financial assistance. More detailed information on relocation resources for displaced community and public facilities is presented in Section 6.7, Community and Public Facility Relocations, of the Draft Relocation Impact Report (Authority 2019b). In San Jose, demolition of storage buildings adjacent to athletic fields of Bellarmine College Preparatory and the Fire Department Training Center would not disrupt the overall operation and activities of these facilities; under Alternative 1, the Fire Department Training Center main building would also be displaced. It is anticipated that the San Jose Unified School District bus yard would accommodate storage and parking elsewhere, and removal of warehouses and parking facilities at the yard would not affect overall operations. Conversely, the San Jose Taiko and Templo La Hermosa would cease to operate under Alternatives 1-3 and would need to relocate elsewhere. Under Alternative 4, the Taiko building would not be displaced. These two facilities serve minority populations and it may be difficult to find suitable similar facilities. While there are numerous cultural and religious facilities in San Jose, loss of these facilities would affect the neighborhoods and communities they serve. At Tamien Park in San Jose, use of a planned multiuse turf/soccer field would be impaired with acquisition of a portion of the planned facility located within the project right-of-way under Alternatives 1-3. Conversely, under Alternative 4, the park property would not be affected. A new fire station would likely need to be constructed to replace San Jose



Fire Station #18 to maintain emergency services in its service area under Alternative 2 Skyway Drive Variant B. In Morgan Hill, one community church would be displaced.

In Gilroy, the Gilroy Preparatory School would be fully acquired under Alternatives 1 and 2. It is one of more than 30 charter schools serving the Gilroy area, including 11 K-8 schools in the Gilroy Unified School District. Students attending Gilroy Prep School would need to relocate to one of the other schools serving the area if the Gilroy Prep School chooses not to relocate. However, even if the school were to choose to relocate, students may have to relocate temporarily to another school. Alternatives 1 and 2 would also acquire a soccer field associated with Gilroy Prep and may require reconfiguration of South Valley Middle School facilities on the site. This could temporarily disrupt school operations but is not anticipated to require school closure. The school contains another large playing area north of the school buildings that could accommodate soccer play. There are several other soccer fields in Gilroy, including the 79-acre Gilroy Sports Park and other local parks that have large enough areas to accommodate field soccer. In addition, Alternatives 1 and 2 would displace the Tom Carr Youth Boxing Center, which is part of Gilroy's youth programs and a public facility. One community church would be displaced. The Authority would coordinate with these community service providers to support continued operation through temporary or permanent relocations, as required, and would provide technical and financial assistance.

Table 3.12-14 Community and Public Facility Displacements by Alternative

Facility and		Alternative		е		
Location	Туре	1	2	3	4	Description
San Jose						
San Jose Taiko	Cultural Facility	Х	Х	Х		Requires full acquisition.
Tamien Park	Park/Recre ational Facility	Х	Х	Х		Requires permanent acquisition of a portion of the planned multiuse turf/soccer field located on the western edge of the existing park, directly adjacent to the existing right-of-way.
Templo La Hermosa	Religious Facility	Х	Х	Х	Х	Requires full acquisition.
Bellarmine College Preparatory	School		Х	Х		Requires acquisition and demolition of a storage building adjacent to the athletic fields on Hedding Street under Alternatives 2 and 3. The primary buildings would be unaffected. It is anticipated that the site could be reconfigured to replace the storage buildings.
San Jose Unified School District School Bus Yard	School	Х	Х	Х		Requires acquisition and displacement of warehouses and solar panel-covered bus parking adjacent to the Caltrain right-of-way. It is anticipated that the site could be reconfigured to maintain current operations.
San Jose Fire Station 18	Public Safety		Х			Requires full acquisition under Alternative 2 with Skyway Drive Variant A because of required demolition of the primary building. Requires full acquisition under Alternative 2 with Skyway Drive Variant B because of eliminated access.
Morgan Hill						
Kingdom Hall of Jehovah's Witnesses	Religious Facility	Х		Х		Requires full acquisition.



Facility and		Alternative			е	
Location	Туре	1	2	3	4	Description
Gilroy						
Gilroy Prep School	School	Х	Χ			Requires full acquisition, including the soccer field.
New Hope Community Church	Religious Facility	Х	Х			Requires full acquisition.
Tom Carr Boxing Center	Recreation	Х	Х			Requires full acquisition.

CEQA Conclusion

The impact on community and public facilities under CEQA would be less than significant because construction of the project alternatives would not require the construction of new government facilities due to increased demand under any of the project alternatives. However, Alternative 2, Skyway Drive Variant B, would displace San Jose Fire Station #18, and a new fire station may need to be constructed if other fire stations cannot maintain emergency services to its service area. Construction of one new public facility would not result in significant environmental impacts on acceptable service ratios, response times, or other performance objectives for fire protection. Therefore, CEQA does not require mitigation.

3.12.6.5 Economic Impacts

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

No Project Impacts

Development in the three-county region to accommodate the projected population and employment increase would continue under the No Project Alternative, resulting in associated direct and indirect impacts on the local and regional economy, including potential temporary reductions in property tax revenues and changes in sales tax revenues, potential decreases in school funding from property displacements, and agricultural production losses as a result of development. Section 3.19 of this Final EIR/EIS identifies planned and other reasonably foreseeable future projects anticipated to be constructed in the region to accommodate projected growth, including shopping centers, industrial parks, transportation projects, and residential developments.

Development, both public and private, in some areas of the project vicinity would likely continue, creating demand for infrastructure projects. These development and infrastructure projects could result in acquisitions and displacements of properties. Property displacements could result in reductions in property tax revenues, school funding, sales tax revenues, and agricultural production. All development projects under the No Project Alternative would be required to conform to state and federal relocation statutes to provide assistance for displaced properties to address and minimize these impacts.

Project Impacts

Construction Impacts

Construction of the project alternatives would include building new HSR tracks and traction power infrastructure, modifying existing stations, realigning existing tracks, constructing the MOWF and MOWS, and modifying roadways, all of which could cause changes in employment, school district funding, and property and sales taxes. Activities associated with the project include employing construction workers and long-term operational workers; displacements and relocations, causing changes to school district funding and property taxes; and additional spending, leading to changes in sales tax revenues. Construction activities are described in Chapter 2.



Impact SOCIO#10: Temporary Impacts on Employment

Section 3.18 and Appendix 3.18-A of this Final EIR/EIS present the range of capital and construction cost estimates for the four project alternatives and effects on employment during construction. Capital costs represent the total cost associated with the design, management, land acquisition, and construction of the HSR system. Alternative 4 is projected to have the lowest capital cost and local construction cost. Capital costs would be roughly equivalent for Alternatives 1 and 3, with costs for Alternative 2 approximately 20 percent lower. All four 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 among the project alternatives. The impact on employment from constructing the project is based on the construction cost estimate, exclusive of real estate acquisition costs. The construction of any of the four 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, or approximately 35 percent of all workers, as estimated in Section 3.18 of this Final EIR/EIS. Direct employment refers to the jobs created to construct the project and primarily involves jobs in the construction sector. Indirect employment refers to the jobs created in existing businesses in the region (e.g., material and equipment suppliers) that supply goods and services to project construction. Induced employment refers to jobs created in new or existing businesses (e.g., retail stores, gas stations, banks, restaurants, service companies) that supply goods and services to workers and their families. Because the job creation corresponds to the local spending on the project, Alternative 3 is estimated to yield the greatest employment impacts, generating a total of more than 27,643 annual job years. Alternatives 1 and 3 would have a similar magnitude of employment effects, and about \$3 million to \$9 million more than Alternatives 2 and 4. Alternatives 1 and 3 would involve the most infrastructure development and workers, and consequently the highest cost.

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, such as services to support these new construction workers. This would result in an increased demand for 14,780 annual job years for Alternative 1, 12,650 annual job years for Alternative 2, 15,180 annual job years for Alternative 3, and 10,670 annual job years for Alternative 4. Added to the demand for construction workers, the project employment effects would total an estimated 43,660 annual job years for Alternative 1, 37,380 annual job years for Alternative 2, 44,850 annual job years for Alternative 3, and 31,510 annual job years for Alternative 4. If added to the three-county region's projected total employment for 2024 (about 1,228,000), the peak construction-period jobs would add about 0.6 percent (Alternative 4) to 1.0 percent (Alternative 3) to the total projected employment in the region (Caltrans 2015; CEDD 2016).

Employment in the RSA is heavily concentrated in Santa Clara County, with more than 90 percent of the RSA's total jobs. Santa Clara County is the home of Silicon Valley, world-renowned as the origin and headquarters of many technology and internet firms such as Apple, Google, and Facebook. Employment in Santa Clara County is highly concentrated in the professional services industries, while San Benito and Merced Counties have much higher concentrations of agricultural jobs.

Alternative 3 would provide a greater number of employment opportunities for guideway, station, and maintenance facility construction than Alternatives 1, 2, and 4 because job creation corresponds to the local spending on the project, and Alternative 3 has the highest construction costs associated with station and maintenance facility construction. Overall, however, Alternatives 1 and 3 would provide a similar number of construction employment opportunities, with Alternatives 2 and 4 providing fewer construction jobs.

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 employment changes. CEQA does not require mitigation.



Impact SOCIO#11: Permanent Impacts on School District Funding

Project construction could affect school district funding in the economic impacts RSA in two different ways: student relocations resulting from acquisition of residential properties, and decreased funding resulting from reduced property tax revenue. Greater details of this analysis and complete results by school district can be found in the Community Impact Assessment (Authority 2019a).

Student Relocations

The potential impact of residential unit displacements on school districts was evaluated based on reductions in student populations in communities with a substantial number of relocations. School district funding is partially dependent on student attendance, and the relocation of large populations of students outside existing school districts could therefore reduce funding for the affected school districts.

The Authority examined the locations of residential displacements in relation to elementary, secondary, and unified school district boundaries in Santa Clara, San Benito, and Merced Counties to determine the number of residential displacements in each school district. The boundaries of these school districts overlap, because secondary school districts often serve multiple elementary school districts. Using a conservative approach, analysts counted residential displacements where school districts overlap in both districts.

The number of affected students in each school district was estimated by first dividing the number of school-age children (K–12) in each county by the average number of households in the corresponding county (U.S. Census Bureau 2010–2014a, 2010–2014b) 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 (CDOE 2017b). It is estimated that a total of 86 school-aged children (K–12) would be displaced under Alternative 1, 318 under Alternative 2, 91 under Alternative 3, and 47 under Alternative 4.

As described in the Community Impact Assessment (Authority 2019a), the number of students displaced under all four project alternatives would represent less than 0.1 percent of the total enrollment overall. The greatest percentage of total enrollment that would be relocated would be in the Morgan Hill School District in Santa Clara County under Alternative 2, but this would not materially affect school district funding. As described in the residential displacement analysis in Section 5.3.1.1, Residential Properties, of the Community Impact Assessment (Authority 2019a), a suitable amount of replacement housing is available in the vicinity of most 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 overall, and the loss of funding to affected school districts would be less than half of one percent.

Reduced Property Tax Revenues

Project construction would result in the acquisition and displacement of land uses, removing some private property from the local property tax rolls. Because school districts are funded, in part, by property taxes (approximately 23 percent), it is likely that the removal of properties would result in a net reduction in the local property tax revenues available to school districts.

Property tax revenues would be expected to decrease along the project extent regardless of whether a residential property 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 Santa Clara, San Benito, and Merced Counties under all four project alternatives. Since beneficial impacts cannot be quantified, revenue reductions are calculated based on the acquired properties only. Any revenue reductions could result in the reduction of school funding. Table 3.12-15 shows the potential reductions in property tax revenues allocated for school districts as a result of the project alternatives. The reduction in school district funding revenue conservatively assumes that



all displaced residents would relocate outside the assigned school district; these estimates are 0.3 percent for Alternative 1, 0.5 percent for Alternative 2, 0.3 percent for Alternative 3, and 0.2 percent for Alternative 4. With the DDV and TDV, no residences would be displaced, so there would be no change in effects on school district funding. In all cases this is less than 1 percent of total estimated FY 2015/2016 funding for all school districts in the RSA.

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. Therefore, CEQA does not require mitigation.



Table 3.12-15 Estimated Annual School District Funding Losses from Acquisitions

	Property Ta	x Revenue Loss	from Acquisitio	ns (2015\$) ^{1, 2}	Estimated School District Funding Loss from Acquisitions (Annual \$)			
School District	Alternative 1	Alternative 2 ³	Alternative 3	Alternative 4	Alternative 1	Alternative 2	Alternative 3	Alternative 4
Santa Clara Unified School District	0	64,225	64,225	0	0	14,772	14,772	0
San Jose Unified School District	78,894	43,490	46,456	13,909	18,146	10,003	10,685	3,199
East Side Union High School District	8,724	77,458 (68,745)	8,724	9,617	2,007	17,815 (15,809)	2,007	2,212
Morgan Hill Unified School District	273,471	1,125,832	270,990	198,825	62,898	258,941	62,328	45,730
Gilroy Unified School District	154,739	262,570	235,324	53,079	35,590	60,391	54,125	12,208
San Benito High School District	61,687	53,767	48,508	32,566	14,188	12,366	11,157	7,490
Los Banos Unified School District	94,852	94,852	94,852	94,852	21,816	21,816	21,816	21,816
Gustine Unified School District	11,022	11,022	11,022	11,022	2,535	2,535	2,535	2,535
School District not defined	14,231	14,231	14,231	14,231	3,273	3,273	3,273	3,273
Total	697,620	1,747,447 (1,738,723)	794,332	428,101	160,453	401,913 (399,906)	182,696	98,463
% of Total Funding ⁴	-	-	-	-	0.3%	0.5%	0.3%	0.2%

¹Property tax reductions in Santa Clara and San Benito 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.

² The assessed/current value of properties in Merced County was unavailable for 2015, so 2017 values were obtained from https://common1.mptsweb.com/megabytecommonsite/(S(4o0voi14bjahisudo23p5gvg))/PublicInquiry/Inquiry.aspx?CN=merced&SITE=Public&DEPT=Asr&PG=Search.

³ Where Skyway Drive Variant B is different from Skyway Drive Variant A, Variant B data are shown in parentheses

⁴ Total 2015/2016 tax revenues taken from Table 5-59 (\$1,047,042,872).



Impact SOCIO#12: Temporary Impacts on Agriculture Economy

Temporary Use of Agricultural Lands

Construction activities associated with the project alternatives could have temporary impacts on agricultural businesses. Section 3.14 of this Final EIR/EIS analyzes impacts associated with the conversion of agricultural farmland to nonagricultural uses as a result of the project.

As detailed in the *San Jose to Merced Project Section Agricultural Farmland Technical Report* (Agricultural Farmland Technical Report) (Authority 2019f), temporary use of Important Farmland associated with the project alternatives would be 617.6 acres under Alternative 1, 658.7 acres under Alternative 2, 671.9 acres under Alternative 3, and 460.9 acres under Alternative 4. These acreages would be temporarily unavailable for agricultural use as a result of construction activities.

Project construction would require construction staging areas adjacent to or near the alignment. Construction staging could have direct impacts on agricultural farmland if it is proposed areas designated as Important Farmland¹³ or on confined animal facility¹⁴ operations if the temporary construction easement (TCE) would require relocation of waste/wastewater management land. There is one non-dairy confined animal facility (a poultry farm) that would be affected by land acquisition for TCEs in the San Joaquin Valley Subsection. However, the acquisition of land for TCEs at this facility would not affect any production facilities and would not be expected to result in revenue or job loss. Therefore, this analysis focuses on loss of milk production for the 16 dairies in the San Joaquin Valley Subsection that would require land acquisition for TCEs.

Acquisition of portions of dairy parcels for TCEs could result in a reduction in milk production, depending on the type of asset acquired. Some acquisitions would consist only of crop land or waste management lands, while others may contain agricultural buildings such as holding pens and dairy sheds. Appendix D of the Community Impact Assessment describes the acquisitions of dairies that would result from project construction (Authority 2019a). Road and canal realignments could also affect access to these dairy operations. This temporary use would result in a direct impact that could last for the duration of construction.

Although construction of the project alternatives would temporarily use Important Farmland in the Morgan Hill and Gilroy, Pacheco Pass, and San Joaquin Valley Subsections and land associated with dairy operations in the San Joaquin Valley Subsection, this land will be restored as close to the pre-construction condition as possible, with the goal that parcels remain available for long-term agricultural use (AG-IAMF#1). LU-IAMF#3 also provides for restoration of all land used for construction staging, including agricultural land. The top 18 inches of soil would be removed and stockpiled for replacement during restoration activities, preserving essential soil productivity. Pre-construction conditions of temporary staging areas would be documented through time-stamped photography. Consequently, Important Farmland subject to temporary use would be restored to agricultural use and would not be subject to permanent conversion to nonagricultural use in the Morgan Hill and Gilroy, Pacheco Pass, and San Joaquin Valley Subsections. Disruption of agricultural use would last only from the time land is leased from the landowner until restoration is complete.

In addition, it is possible that some infrastructure on Important Farmland would have to be relocated to accommodate construction activities. Project features will avoid temporary disruption of utilities, utility access roads, and power supply infrastructure. New irrigation facilities will be installed and operational before existing facilities are disconnected, avoiding temporary disruption to agricultural operations (PUE-IAMF#2). Construction activities will also be coordinated with service providers to minimize or avoid interruptions in service that could affect agricultural operations (PUE-IAMF#4). Therefore, utility disruptions would be avoided by rectifying the disruption through alternative utility connections in advance of disconnection.

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¹³ Important Farmland includes Prime Farmland, Farmland of Statewide Importance, Unique Farmland, and Farmland of Local Importance.

¹⁴ Confined animal facilities include dairies, sheep farms, and poultry farms.



Noise Impacts on Confined Animals

Animals in confined animal facilities could be affected by construction noise if they are housed within 100 feet of the construction activities. To keep noise emission levels below the FRA thresholds and to avoid or minimize the impacts of construction-related vibration, FRA and FTA guidelines for minimizing noise and vibration effects at sensitive receptors will be followed during construction, reducing the impact of construction noise and vibration on confined animal agriculture operations (NV-IAMF#1). Refer to the *San Jose to Merced Project Section Noise and Vibration Technical Report* (Authority 2019g) for more information. Indirect noise impacts would not be expected to affect agricultural production revenues.

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 impacts on the agricultural economy and CEQA does not require mitigation.

Impact SOCIO#13: Permanent Impacts on Agriculture Economy

Non-Dairy Farms

The project alternatives would require permanent acquisition and conversion of Important Farmland to nonagricultural use in the amounts of 1,036 acres under Alternative 1; 1,181 acres under Alternative 2; 1,193 acres under Alternative 3; and 1,033 acres under Alternative 4. Because Important Farmland is not replaceable, its conversion results in the permanent depletion of agricultural resources. Permanent acquisition of 0.1 acre of the waste management pond area for one poultry operation in the Morgan Hill and Gilroy Subsection would be required under Alternative 1, and 1.36 acres would be acquired under Alternative 2. No waste management pond area would be acquired under Alternatives 3 or 4.

As noted in the Agricultural Farmland Technical Report (Authority 2019f), only in the Morgan Hill and Gilroy Subsection would there be a difference in acreage among project alternatives in permanent conversion of agricultural land. Alternative 4 would permanently convert the smallest area of Important Farmland because it would minimize land use displacement and conversion by staying predominantly within the existing transportation corridor right-of-way. Alternative 3 would permanently convert the largest area of Important Farmland because it would bypass the urban area of Gilroy to be built largely on Important Farmland in east Gilroy. Alternatives 1 and 2 would pass through downtown Gilroy and would thus avoid some Important Farmland. However, Alternative 2 would require relocation of the UPRR, resulting in impacts on Important Farmland. Alternative 1 would be built on viaduct in the median of Monterey Road for a portion of its length and would pass through downtown Gilroy, thus avoiding some of the Important Farmland in the subsection.

The project would permanently convert Important Farmland to a nonagricultural use in the Pacheco Pass and San Joaquin Valley Subsections. In the Pacheco Pass Subsection, permanent conversion of Important Farmland would take place in the western portion of the subsection before the alignment enters the proposed tunnel. Where the alignment surfaces east of this tunnel, grazing land predominates. In the San Joaquin Valley Subsection, most of the alignment would entail permanent conversion of Important Farmland. AG-IAMF#4, AG-IAMF#5, and AG-IAMF#6 include provisions for equipment and livestock crossings during construction.

Construction would also result in the creation of remnant parcels of Important Farmland because of severance, where the project right-of-way would transect the parcel, or where roadway access would be restricted or eliminated. Some remnant parcels will remain in agricultural use under a Farmland Consolidation Program (AG-IAMF#3). The program, which is administered by the Authority, would provide for continued agricultural use on the maximum feasible amount of remnant parcels by facilitating the sale of remnant parcels to neighboring landowners for consolidation with adjacent farmland properties. Remnant parcels that are considered viable candidates for consolidation with adjoining agricultural properties through the Farmland Consolidation Program are anticipated to remain in agricultural use. Remnant parcels that are not considered viable to continue in agricultural use are considered to be converted as a result of



parcel severance. The area of remnant parcels rendered permanently nonviable for agricultural use would be 162.9 acres under Alternative 1, 244.3 acres under Alternative 2, 252.8 acres under Alternative 3, and 147.0 acres under Alternative 4 (see the Agricultural Farmland Technical Report) (Authority 2019f).

Table 3.12-16 shows the projected economic and employment effects of agricultural acquisitions (excluding dairy) for Santa Clara, San Benito, and Merced Counties by project alternative. The estimated total reduction in agricultural production associated with the project alternatives would represent a small amount of the total annual revenue generated by agricultural production in each of the counties in the economic effects RSA. The permanent conversion of 0.1 acre of waste management pond under Alternative 1 and 1.36 acres under Alternative 2 at the poultry operation in Gilroy and 0.02 acre of the 54.4-acre sheep farm for permanent construction easements (PCE) would not result in removal of any production facilities and would not be expected to result in any loss of revenue from egg, meat, or wool production or loss of jobs. The estimated total annual reduction in revenues of \$7.1 million under Alternative 1, \$7.3 million under Alternative 2, \$7.7 million under Alternative 3, and \$7.1 million under Alternative 4 represents approximately 0.2 percent of the region's estimated \$4.2 billion annual agricultural production (CDFA 2017). The estimated associated reduction in agricultural employment as a result of crop loss in the region would be 62 employees under Alternative 1, 65 employees under Alternative 2, 77 employees under Alternative 3, and 60 employees under Alternative 4.15 Appendix D of the Community Impact Assessment provides a full description of the methods for analysis and detailed results (Authority 2019a).

Decreased revenues vary widely depending on both the types and value of the crops displaced. As noted in Section 3.12.4, the Authority calculated a dollar-value estimate of lost agricultural production and used state and county data on jobs generated per dollar of revenue to estimate the corresponding potential direct agricultural job loss for these revenue reductions. Alternative 3 would result in the greatest overall acreage of crop loss, the highest revenue reduction, and the greatest job loss. Alternative 4 would result in the least job loss.

February 2022

California High-Speed Rail Authority

¹⁵ To provide the most conservative estimate of job loss as a result of reduced agricultural production, jobs were rounded up to the next whole person.



Table 3.12-16 Projected Economic Impacts of Changes in Agricultural Production

	Santa Clara County		San Benito County			Merced County			Region			
Alternative	Total Crop Acres Displaced ¹	Estimated Revenue Loss ² (annual 2015\$)	Estimated Job Loss ³	Total Crop Acres Displaced	Estimated Revenue Loss (annual 2015\$)	Estimated Job Loss	Total Crop Acres Displaced	Estimated Revenue Loss (annual 2015\$)	Estimated Job Loss	Total Crop Acres Displaced	Total Estimated Revenue Loss (annual 2015\$)	Total Estimated Job Loss
Alternative 1	408.9	5,321,150	34	114.7	358,887	7	676.0	1,471,734	21	1,199.6	7,151,771	62
Alternative 2	405	5,478,863	37	114.7	358,887	7	676.0	1,471,734	21	1,195.7	7,309,484	65
Alternative 3	576.2	6,122,134	50	115.7	199,383	6	676.0	1,471,734	21	1,367.9	7,793,251	77
Alternative 4	230.6	5,338,933	33	116.5	312,624	6	676.0	1,471,734	21	1,023.1	7,123,291	60

Acres displaced as reported from the Draft Community Impact Assessment (Authority 2019a).
 Estimated revenue is derived by multiplying Community Impact Assessment Appendix D Table 1 values for specific crop types with acreage lost.

³ Estimated job loss is derived by multiplying Community Impact Assessment Appendix D Table 2 values by the number of acres displaced.



Dairy Farms

Project Construction would require permanent acquisition of dairy acreage. All the identified dairies are in Merced County near or adjacent to Henry Miller Road in the San Joaquin Valley Subsection. Most of the affected dairies would entail both temporary and permanent conversion to nonagricultural use for a portion of the facility. Loss of land or facilities needed for dairy production could result in reduced revenue. Table 3.12-17 shows the dairies that would be affected by project construction.

Table 3.12-17 Dairy Farms Affected by Construction of the Project

		Total Facility	Number of Acres Affected	Number of Acres Affected
Facility/Owner Name	Address	Acreage	(TCE)	(PCE/PUE)
Joseph & Antonia Borba	W Fahey Road, Gustine	94.4	0.0	10.7
Correia Family Dairy	26380 W Fahey Road, Gustine	106.2	1.6	2.2
Guimor Cuoto Costa	22578 Henry Miller Road, Los Banos	83.4	0.7	0
Joseph & Ann Cozzi	Henry Miller Road, Los Banos	67.3	0.1	0.1
Den-K Holsteins, Inc.	13235 Baker Road, Los Banos	78.2	0.5	0.1
Faustino Dairy	28263 W Fahey Road, Gustine	117.9	1	0.7
Manuela Godinho, Trustee	13140 Johnson Road, Los Banos	211.7	2.3	7.8
Godinho Dairy	12710 S Wilson Road, Los Banos	85.2	0.0	0.01
M&A Dairy #1	14561 Carlucci Road, Dos Palos	127.9	0.6	0.2
M&A Dairy #2	13459 S Turner Island Road, Dos Palos	144.6	0.5	1.8
Machado Dairy	22495 China Camp Road, Los Banos	23.9	0.0	0.01
James D. McCune	W Fahey Road, Gustine	122.8	1.7	0.8
Raphael Pacheco Dairy	22884 W Ingomar Grade, Los Banos	226.1	0.2	5.5
Raphael Pacheco Dairy #2	21881 Henry Miller Road, Los Banos	90.0	35.3	10.4
Gary Ramos	15101 Henry Miller Road, Los Banos	95.4	3.6	11.1
Silveira Brothers Dairy #2	12581 Cherokee Road, Gustine	717.7	5	45.7
Total	-	2,392.7	53.1	97.1

¹Less than 0.1 acre (911 square feet) would be acquired for PUE.

Dairies have two main waste streams: manure and wastewater. The Central Valley RWQCB requires these facilities to file waste disposal management plans. The facilities dispose of both waste streams on croplands as permitted by the Central Valley RWQCB, but these two waste streams have different requirements. Manure is typically spread onto permitted cropping areas. Disposal of manure is typically undertaken by truck transport from barns to either on-site (i.e., on-facility) or off-site disposal lands.

Wastewater typically requires treatment before being disposed of onto wastewater disposal lands. The most common treatment is detention in a pond or a series of ponds. Detention separates solids from liquids, resulting in clarification of wastewater. Waste disposal plans must include certification of wastewater detention pond capacity by a licensed engineer. Wastewater is

TCE = temporary construction easement

PCE = permanent construction easement

PUE = permanent utility easement



distributed onto permitted wastewater land application areas after clarification in the wastewater treatment ponds. Disposal of wastewater typically occurs via pipelines either on site or on adjacent parcels permitted as wastewater disposal lands (Central Valley RWQCB 2014). In both cases, the volumes of wastes applied to land cannot exceed the capacity of the land and the crop being grown to absorb the wastes agronomically.

Loss of pond capacity would have the greatest impact on dairy facilities because reductions in pond capacity below the level required for a specified herd size require either installation of replacement pond capacity and recertification of capacity by a licensed engineer, or reduction in herd size. Any substantial project-related reduction in pond capacity would have an impact on operational feasibility. Loss of wastewater disposal lands, if the displacement is too large to be accommodated in the available remaining permitted area of on-site or adjacent wastewater disposal lands, would have a greater impact than loss of lands for solid waste disposal. Pipeline infrastructure is limited, and wastewater disposal options are therefore typically more limited than manure disposal options. If replacement permitted area of on-site or adjacent wastewater disposal is not available, the landowner would be required to build infrastructure or reduce herd size. Any substantial project-related reduction in wastewater disposal capacity would have an effect on dairy operational feasibility. The Authority intends to relocate any agricultural facilities that would be displaced before removing existing facilities so that the loss of facility acreage would not result in decreased production. In addition, AG-IAMF#2 will assist confined animal operators in obtaining new or amended permits or other regulatory compliance necessary for the continued operation or relocation of the facility. Therefore, the impacts of the project would generally be limited to production losses associated with relocation of manure lands.

Approximately 139.9 acres of manure management land would be permanently acquired to accommodate the project. The Authority assumed that the typical dairy operation could support 10 cows per acre of land (the necessary crop lands for nutrient distribution and manure management). Therefore, multiplying the Merced County Value of \$38,575 per acre for dairy operations by 139.9 acres results in a total annual production loss of \$5.4 million if replacement lands cannot be accommodated elsewhere. As noted, all four project alternatives would result in the same revenue loss because the affected dairies are in the San Joaquin Valley Subsection, where the project alternatives are the same. Up to 30 jobs would be lost as a result of permanent dairy property acquisitions, depending on whether dairy facilities can be relocated elsewhere on the affected parcels. Table 3.12-18 shows the total waste management acres that would be displaced along with estimated annual revenue loss and job loss.

Table 3.12-18 Projected Economic Impacts of Changes in Dairy Production (Merced County)

Total Waste Management Acres Displaced	Estimated Revenue Loss (annual\$)	Maximum Estimated Job Loss
139.9	\$5.4 million	30

Sources: County of Santa Clara Division of Agriculture 2016; County San Benito Department of Agriculture 2016; Merced County Department of Agriculture 2016; CEDD 2016; USDA 2012

Poultry Farms

Waste from poultry farms is normally regulated similarly to waste from dairy farms. The Central Valley RWQCB requires these facilities to file waste disposal management plans. One poultry farm, Davis Poultry Farms in Gilroy, would experience a loss of 0.1 acre of its waste management pond under Alternative 1 and 1.38 acres under Alternative 2. However, the Authority confirmed that Davis Poultry Farms has not applied for a permit with the Central Valley RWQCB and thus has filed no waste management report. Therefore, it is not possible to determine the economic effects of loss of waste management pond area as a result of the project alternatives.

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." Therefore,



this section does not provide CEQA significance conclusions related to changes in the agricultural economy and CEQA does not require mitigation.

Impact SOCIO#14: Permanent Impacts on Property Tax Revenues from Property Acquisition

Analysts estimated the potential impacts of the project on property tax revenues collected by county jurisdictions based on permanent property acquisitions. While losses would also affect city jurisdictions, these losses are compiled at the county level to avoid double counting changes to the county rolls. 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 partial and full property acquisitions for each county. Analysts then compared these property tax revenues to each county's FY 2015/2016 general fund property tax revenues. Table 3.12-19 shows property tax revenue loss for the region (based on data from the county assessor for each county). The project alternatives would affect tax revenues for Santa Clara, San Benito, and Merced Counties, with the greatest impact on Santa Clara County. Overall, the loss of property tax revenue from acquisitions would range from approximately \$11 million to \$24 million, representing, at most, 0.006 percent of the total property tax revenues collected by the counties; the estimated lost property tax revenue accounts for less than one-tenth of 1 percent of the county general fund property tax revenues.

Table 3.12-19 Annual Lost Property Tax Revenue (FY 2015/2016)

	Net Taxable Assessed Value	Reduction in Property Tax Revenues							
County	(FY 2015/2016\$)	Alternative 1	Alternative 2 ¹	Alternative 3	Alternative 4				
Santa Clara	\$358,542,000,000	\$530,059	\$1,587,806 (\$1,579,082)	\$639,950	\$289,661				
San Benito	\$6,422,000,000	\$61,687	\$53,767	\$48,508	\$32,566				
Merced	\$19,187,000,000	\$105,874	\$105,874	\$105,874	\$105,874				
Total region	\$384,151,000,000	\$697,620	\$1,747,447 (\$1,738,723)	\$794,332	\$428,101				
Percent of FY 2015/2016 county general fund property tax revenues	-	0.000002	0.000005	0.000002	0.000001				

¹ Alternative 2 has two variants, Skyway Drive Variant A and Skyway Drive Variant B; where they differ, Variant B data are shown in parentheses. FY = fiscal year

Under Alternative 1, displacements would result in estimated annual loss of \$697,620 in property tax revenue to the three counties. This estimated amount is equivalent to approximately 0.000002 percent of the total FY 2015/2016 property tax revenue for the three-county region.

Under Alternative 2, displacements would result in estimated annual loss of \$1,747,447 (\$1,738,723 for Variant B) in property tax revenue to the three counties. These estimated amounts are equivalent to approximately 0.000005 percent of the total FY 2015/2016 property tax revenue for the three-county region.

Under Alternative 3, displacements would result in estimated annual loss of \$794,332 in property tax revenue to the three counties. These estimated amounts are equivalent to approximately 0.000002 percent of the total FY 2015/2016 property tax revenue for the three-county region.



Displacements under Alternative 4 would result in estimated annual loss of \$428,101 in property tax revenue to the region. This loss is equivalent to approximately 0.000001 percent of the total FY 2015/2016 property tax revenue for the three counties. Due to the commercial displacements with the DDV, there would be a slight reduction in property tax revenue.

Long-term reductions in property tax revenues could result from 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 current assessed values and may result in lower property tax revenues in the long term. Although this impact cannot be quantified, it would likely affect only areas adjacent to project construction activities but could also affect properties where vehicular access is disrupted because of construction, particularly the area where straddle bents would be constructed around US 101 and SR 87, along Monterey Road, and around larger construction areas (e.g., precast yards, MOWF). There could also be long-term reduction in agricultural property values along Henry Miller Road because of reduced access to affected properties.

Other aspects of construction may result in reduced property values that cannot be quantified. For example, a perceived negative change in the visual environment could drive property values down in some portions of the project extent. This would be most likely to occur in the more rural 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 under Alternatives 1 and 3 because of the introduction of a higher vertical profile compared to the embankment of Alternative 2 and the at-grade profile of Alternative 4.

Conversely, in the denser urban portions of the project, particularly around existing rail stations, construction of the project would likely lead to increased transit-oriented development (TOD) for Alternatives 1, 2, and 4, which would be expected to increase property values given the desirability of living and working near available transit. Alternative 3 would not be anticipated to experience a beneficial impact on property values in the area of the East Gilroy Station because additional TOD would not likely occur in this area, as open lands to the north, east, and southeast of the station site are subject to Measure H. Measure H amended the City of Gilroy's general plan to establish an urban growth boundary (UGB) and designate land outside the UGB as open space. The UGB limits the potential for TOD adjacent to and within 0.5 mile of the East Gilroy Station because the station is partially within the UGB boundary.

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." Therefore, this section does not provide CEQA significance conclusions related to property tax revenues and CEQA does not require mitigation.

Impact SOCIO#15: 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 3.12-20 shows estimates of taxable local expenditures projected to be generated by the project alternatives over the construction period. The Authority generated these estimates using capital cost estimates from the Authority (Authority 2018), total and local construction cost estimates from the Authority (Authority 2017a, 2019c) and estimates of spending within the RSA for materials and equipment (see Section 3.18 of this Final EIR/EIS for details). The Authority determined the proportions of the estimated RSA spending for taxable equipment and materials 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. Materials

California High-Speed Rail Authority

February 2022

¹⁶ 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 phase of the project.



were broken down further into nonmetallic (stone, gravel, concrete) (37.5 percent) and primary metal (steel) components (12.5 percent).

Table 3.12-20 Construction Spending within Region, by Alternative and Economic Sector (2015\$ in millions)

Economic Sector	Percentage of Total Spending by Sector	Alternative 1 Construction Expenditures	Alternative 2 Construction Expenditures	Alternative 3 Construction Expenditures	Alternative 4 Construction Expenditures
Construction equipment	15%	\$2,405.7	\$2,063.7	\$2,473.3	\$1,567.3
Materials—nonmetallic	37.5%	\$6,014.2	\$5,159.2	\$6,183.1	\$3,918.2
Materials—primary metal	12.5%	\$2,004.7	\$1,719.7	\$2,061.0	\$1,306.1
Transportation ¹	N/A	\$0.0	\$0.0	\$0.0	\$0.0
Wholesale margin ¹	N/A	\$0.0	\$0.0	\$0.0	\$0.0
Construction labor ²	35%	\$5,613.3	\$4,815.2	\$5,770.9	\$3,656.9
Construction Phase Total	100%	\$16,038.0	\$13,757.8	\$16,488.4	\$10,448.4

Sources: Authority 2011, 2016, 2017a, 2017b, 2017c

Based on prior analysis for the Merced to Fresno Final EIR/EIS (Authority and FRA 2012), it is assumed that 30 percent of the nonmetallic (stone, gravel, concrete) and 10 percent of the primary metal (steel) materials could be procured within the region. It is assumed that the bulk of the steel needed for the project would originate from major steel-producing areas outside the region, but given the presence of the base metal sector in the region, it is assumed that some material and additional processing would be provided by local companies. Some equipment spending (20 percent) was assumed to occur within the region; this assumption reflects limitations on the three-county region to supply all the specialized equipment necessary for project construction.

The Authority derived sales tax revenues during construction using the sales tax rates specific to each county jurisdiction within the RSA (as of April 1, 2017) and the estimated local expenditures on materials and supplies for construction. Table 3.12-21 shows the projected expenditures subject to sales taxation in the region.

The sales tax revenues that would be realized during construction for Santa Clara, San Benito, and Merced Counties under each of the project alternatives would primarily result in beneficial economic impacts, as shown in Table 3.12-22. These projections assume that local taxable sales from HSR construction activities would be distributed and taxed proportionally 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.

This analysis indicates that most of the sales tax revenues would be generated in Santa Clara County because of the relative size of its economic base of industries that can supply materials to the project. The analysis also indicates that Alternatives 1 and 3 would yield the highest total sales taxes because they are projected to have a higher cost than Alternatives 2 and 4, and sales tax generation is directly proportionate to the cost of materials.

Percentage 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.

²Construction 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 phase of the project.

N/A = not applicable



Table 3.12-21 Taxable Sales within Region, by Alternative and Economic Sector (2015\$ in millions)

Economic Sector	Percent Spent within the Region	Percent that Is Producer Value	Percent that Is Subject to Sales Tax	Alternative 1	Alternative 2	Alternative 3	Alternative 4
Construction equipment	20	100	100	\$481.1	\$412.7	\$494.7	\$313.5
Materials— nonmetallic	30	81.5	100	\$1,470.5	\$1,261.4	\$1,511.8	\$958.0
Materials—primary metal	10	65.4	100	\$131.1	\$112.5	\$134.8	\$85.4
Transportation ¹	100	6.6	0.0	\$0.0	\$0.0	\$0.0	\$0.0
Wholesale margin ¹	100	18.1	0.0	\$0.0	\$0.0	\$0.0	\$0.0
Construction labor ²	50	100	0.0	\$0.0	\$0.0	\$0.0	\$0.0
Construction phase total	-	-	_	\$2,082.7	\$1,786.6	\$2,141.2	\$1,356.9

Sources: Authority 2011, 2016, 2017c, 2019c

Table 3.12-22 Projected Sales Tax Revenues Generated During Construction (2015\$ in millions)

Geographic Area	Alternative 1 Estimated Local Sales Tax Revenues¹	Alternative 2 Estimated Local Sales Tax Revenues¹	Alternative 3 Estimated Local Sales Tax Revenues¹	Alternative 4 Estimated Local Sales Tax Revenues¹
Santa Clara County	\$55.6	\$47.9	\$57.5	\$36.4
San Benito County	\$1.0	\$0.9	\$1.0	\$0.7
Merced County	\$4.7	\$4.0	\$4.8	\$3.1
Region ²	\$61.3	\$52.8	\$63.3	\$40.1

Sources: Authority 2016, 2017c, 2019c; CBOE 2017a, 2017b; CDOF 2016

The sales tax revenue generated by construction activities would increase local government revenues during the construction period. 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 alignment. 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. As discussed previously in the examination of suitable replacement properties for relocated businesses, most businesses would have the opportunity to relocate within the same city tax jurisdiction. Consequently, the duration of business disruptions would be expected to be minimal.

¹Percentage 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.

²Construction 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 and O&M phases of the project.

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

² Region is Santa Clara, San Benito, and Merced Counties.



Relocations of businesses in the same vicinity would limit losses in sales tax revenues for local jurisdictions; 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. In addition, most businesses would be expected to relocate in the same geographic area; accordingly, sales tax would accrue to the same County. Although other businesses would eventually replace those that close, temporary revenue losses could nevertheless occur. Due to the commercial displacements associated with the DDV, there would be a slight reduction in sales tax revenue compared with Alternative 4 without the DDV. Any potential sales tax losses would be more than offset by the projected sales tax revenues generated in the three-county RSA during construction, which would be between \$40 and \$63 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." Therefore, this section does not provide CEQA significance conclusions related to sales tax revenues and CEQA does not require mitigation.

Impact SOCIO#16: Temporary Impacts on Private Recreational Use (Waterfowl Hunting) in Important Bird Areas

The proposed project could affect waterfowl hunting conditions during the project construction period by temporary use and permanent alteration of waterfowl habitat. As noted in Section 3.7 of this Final EIR/EIS, wetland and open-water habitat for waterfowl and shorebirds would be lost or disturbed as a result of HSR track and systems construction in all subsections. Disturbance of waterfowl and shorebirds would result from the noise, vibration, and visual disturbance associated with construction activities. The potential for impact would be greatest in the GEA IBA.

The Authority would implement pre-construction and construction actions into the project design to protect waterfowl and shorebirds and their habitat. Prior to ground-disturbing activity, the Authority will submit to the appropriate wildlife agencies the names and qualifications of project biologists, designated biologists, species-specific biological monitors, and general biological monitors retained to conduct biological resource monitoring activities and implement avoidance and minimization measures (BIO-IAMF#1). The project biologist will prepare a biological resources management plan (BRMP) consolidating permit conditions and an array of other requirements relevant to protection of sensitive biological resources, including wetland and open water habitat for waterfowl and shorebirds (BIO-IAMF#5). Workers will be provided with environmental awareness training to help them understand their responsibilities in following procedures to reduce impacts (BIO-IAMF#3). Staging areas will be sited away from sensitive resources (BIO-IAMF#8). In addition to the identified IAMFs, mitigation measures to reduce the impacts on waterfowl and shorebirds and compensate for habitat loss are discussed in Section 3.7.8, Mitigation Measures, of this Final EIR/EIS.

The proposed project would involve constructing embankment and aerial structures along the south side of Henry Miller Road in the GEA. Project construction would result in temporary impacts of 30.5 acres and permanent impacts of 51.8 acres on habitat for waterfowl in the GEA, as shown in Table 3.7-16. The amount of temporary and permanent habitat loss in the GEA would comprise approximately 0.05 percent of the 160,000 acres of the GEA, and therefore would not be considered substantial.

Project construction would involve demolition of existing structures; clearing and grubbing; handling, storing, hauling, excavating, and placing fill; possible pile driving; and construction of aerial structures, bridges, road modifications, utility upgrades and relocations, HSR electrical systems, and railbeds. These construction activities would occur for 1.5 years in any given location and would result in temporary road closures and detours, noise and vibration, and visual disturbance. Temporary road closures and detours would inconvenience waterfowl hunters during the construction period, but access to properties would be maintained. Temporary construction noise and visual disturbance associated with construction equipment and materials could reduce the desirability of some private recreational use areas in close proximity to construction activities. Construction noise could affect nesting waterfowl in the GEA, particularly within 1,000 feet of



project construction activities. Of the waterfowl hunting clubs nearest to the project alignment, only the northernmost portion of the Klamath Gun Club (less than 7 percent of its total area) is within 1,000 feet of project construction activities. At this hunting club, construction noise could result in birds nesting farther from construction activities; however, construction noise would not likely drive birds from the area altogether, given the overall size of the wetland ecosystem. Other waterfowl hunting clubs are 0.7 to 1.5 miles from the project alignment and because construction noise decreases with distance from construction activities, it is not anticipated that construction noise would affect waterfowl hunting at these other clubs. Furthermore, the Authority will develop a CMP and include measures in the project to control noise levels (SOCIO-IAMF#1, NV-IAMF#1). Installation of noise-reducing measures will minimize the impact on ducks and geese in the area.

Project construction would result in some temporary and permanent habitat loss for waterfowl in the GEA, and project construction activities could temporarily affect the desirability of some private recreational use areas and in certain areas could affect the nesting locations of waterfowl. However, these effects would be temporary, would be limited in scope to the areas closest to the project alignment, and are not anticipated to affect the overall economic viability of waterfowl hunting activities in the GEA.

CEQA Conclusion

Although impacts to waterfowl habitat are impacts to the environment as defined by CEQA (i.e., "the physical conditions that exist within the area which will be affected by a proposed project, including land, air, water, minerals, flora, fauna, noise, or objects of historic or aesthetic significance"), impacts to the quality of the recreational experience enjoyed by people as they engage in waterfowl hunting is not a distinct environmental effect. Rather, CEQA is concerned with recreation only to the extent that proposed projects may negatively affect recreational facilities or lead to the construction of new recreational facilities. Thus, the sample Initial Study checklist found in Appendix G to the CEQA Guidelines asks whether a proposed project would "increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated." The checklist also asks whether a proposed project would "include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment." The quality of hunters' recreational experience, as distinct from the waterfowl habitat in which they hunt, is therefore a social effect outside the ambit of CEQA.

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." Therefore, this section does not provide CEQA significance conclusions related to impacts on private recreational use in IBAs and CEQA does not require mitigation.

Operations Impacts

Project operations would involve scheduled train travel along the HSR line; inspection and maintenance along the track and railroad right-of-way and at stations; and inspection and maintenance of structures, fencing, power system, positive train control, and communications. Project operations would generate permanent employment opportunities and cause changes in property and sales tax revenues. Operations activities are described in Chapter 2.

Impact SOCIO#17: Permanent Impacts on Regional Employment

Operations 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, the MOWF, and the MOWS west of Turner Island Road in the Central Valley. Workers would spend money for such items as gasoline, food, and other personal items when on location maintaining and repairing the HSR track and facilities.

The project is estimated to create approximately 600 direct operations jobs as part of Phase 1 of the HSR system. Additionally, approximately 510 permanent jobs would be created within the economic impacts RSA through indirect and induced effects of the operations-related employment and expenditures, for an estimated total of 1,110 jobs per year associated with



project operations. This figure represents considerably less than 1 percent of the three-county region's projected total employment in 2040 under the No Project Alternative, and is not considered to reflect a substantial impact on the local and regional economy or draw workers from outside the region to move to the RSA for employment opportunities. However, as noted in the analysis of construction impacts, the unemployment rates in San Benito and Merced Counties are much higher than in Santa Clara County and exceed the statewide average by a substantial margin. Therefore, operations job opportunities would have a greater impact on reducing the unemployment rate in these two counties than in Santa Clara County, with its substantial number of jobs and low unemployment rate.

In addition, the statewide HSR system (San Francisco to Los Angeles) could conservatively increase statewide employment by 102,000 jobs because of improved connectivity compared to the No Project Alternative (Authority 2017c). As discussed in Section 3.18 of this Final EIR/EIS, the growth attributable to operations of the HSR system is not very different from the expected conditions under the No Project Alternative (the workers required for direct operations and indirect and induced employment are projected to represent only about 1,110 employees in an economic impacts RSA with more than a million workers, or 0.1 percent of the RSA's labor force).

Additional jobs can also be expected to come to the region as a result of improved connectivity and growth in the overall regional economy created by the HSR system. Approximately 21,860 of these accessibility-based jobs would be in the three-county RSA. In aggregate, the population and employment gains associated with increased accessibility represent a small addition to the expected growth in the entire three-county region. Induced population growth would be expected to be greater in Santa Clara County than in San Benito and Merced Counties, where the project would not be expected to result in a change in land use patterns or an increase in TOD (see Section 3.13 of this Final EIR/EIS).

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." Therefore, this section does not provide CEQA significance conclusions related to regional employment and CEQA does not require mitigation.

Impact SOCIO#18: Permanent Impacts on Property Taxes and Sales Tax Revenues

Property Taxes

Project operations could result in long-term reductions in property values, particularly in residential areas subject to severe noise impacts. The difference in operational noise impacts among the four project alternatives is predominantly a result of the vertical and horizontal profile of each alternative, as described in the discussion of Impact SOCIO#3.

Increased nighttime light and glare from the proposed maintenance facilities could also reduce adjacent property values if surrounding land uses, such as residential areas, are sensitive to light and glare. The maintenance facilities are surrounded by undeveloped, agricultural, and industrial land. Industrial property values would not be expected to decrease and, in fact, would likely increase in the vicinity of the maintenance facility because the maintenance facility could spur development ancillary to project operations (such as metal fabricators). Alternatives 1, 2, and 4 would likely result in the greatest beneficial impact for industrial land values, given the proposed location of the MOWF in south Gilroy under these alternatives, where adjacent land uses are primarily undeveloped, agricultural, or industrial. It is not expected that agricultural property values would be affected by operation of any of the project alternatives. Conversely, project operations would be expected to increase long-term property values around the San Jose Diridon and Downtown Gilroy Stations because of the two cities' desires to encourage TOD through adopted general plan policies and zoning.

Sales Tax Revenues

Project operations would include passenger train traffic; operation of two stations, one MOWF and one MOWS; and inspection and maintenance along the track and railroad right-of-way, as well as at structures, fencing, power system, automatic train control, and communications facilities. The activities involving routine track maintenance are intermittent and would not require



large numbers of workers or materials, and it is not anticipated that these activities would result in noticeable sales tax impacts. However, operation of two stations and the MOWF would require a larger number of workers, materials, and track maintenance. Therefore, increased sales tax revenues generated by purchases associated with operation of the stations would go to the cities and counties in the RSA. HSR employees as well as patrons arriving at and departing from the two stations would make purchases that would contribute to increases in regional sales tax revenues.

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." Therefore, this section does not provide CEQA significance conclusions related to property taxes and sales tax revenue and CEQA does not require mitigation.

Impact SOCIO#19: Permanent Impacts on Private Recreational Use (Waterfowl Hunting) within Audubon Important Bird Areas

HSR operations along Henry Miller Road through the GEA have the potential to affect the behavior and presence of waterfowl, the desirability of waterfowl hunting, and potential for waterfowl hunting revenues. As discussed in Section 3.7 of this Final EIR/EIS, train operations and associated noise, visual disturbance, and artificial light could affect the behavior of waterfowl, interrupting normal movement patterns and causing birds to fly away from approaching trains or avoid habitat along the railway. Figure 3.12-8 illustrates noise contours relative to wildlife areas and private hunting clubs. Of the private waterfowl hunting clubs nearest to the project alignment, the Cotton Club and Bowles Farming intersect the 63-69 dBA noise contour, while the northernmost portion of Klamath Gun Club intersects the >93 dBA noise contour. As a noise level greater than 77 dBA may result in arousal of birds, it is likely that waterfowl would avoid wintering habitat within the northern portion of the Klamath Gun Club, which is immediately adjacent to the HSR alignment. Additionally, train operations pose the risk of injury and mortality to aerial species by striking birds flying in the path of passing trains. A mitigation measure to reduce the impact of noise, visual disturbance, and train strike on waterfowl is discussed in Section 3.7.8 of this Final EIR/EIS. As part of this mitigation, the Authority will construct an additional structure that encloses the train's operating envelope and overhead contact system and minimizes noise and the visual presence of moving trains in the GEA (BIO-MM#80).

Train operations could affect the desirability of waterfowl hunting within the GEA if noise increases were to alter the tranquil sense of place that defines the rural nature of the waterfowl hunting club property. As illustrated on Figure 3.12-8, most of the private waterfowl hunting clubs near Henry Miller Road are located 0.7 to 1.5 miles from the project alignment, and only a few clubs partially intersect the noise contours. Because only a small portion of several clubs would be affected by noise, the project would not be expected to alter the rural sense of place that characterizes the club grounds.

With the implementation of the mitigation measures identified in Section 3.7.8, it is not anticipated that train operations would result in a substantial change in the behavior or presence of waterfowl within the private hunting clubs in the GEA. While noise associated with intermittent train operations may affect the desirability of small portions of several clubs located along Henry Miller Road, these effects would be limited to the areas closest to the project alignment. As a result, train operations are not anticipated to result in a substantial loss of revenue associated with diminished use of private hunting clubs or the issuance of fewer permits by CDFW for waterfowl hunting in the GEA.

CEQA Conclusion

Although impacts to waterfowl habitat are impacts to the environment as defined by CEQA (i.e., "the physical conditions that exist within the area which will be affected by a proposed project, including land, air, water, minerals, flora, fauna, noise, or objects of historic or aesthetic significance"), impacts to the ability of recreational hunters to have ready access to waterfowl in order to hunt them is not an environmental effect distinct from the impacts to waterfowl habitat. CEQA is concerned with recreational activities only to the extent that proposed projects may



negatively affect recreational facilities or lead to the construction of new recreational facilities. Thus, the sample Initial Study checklist found in Appendix G to the CEQA Guidelines asks whether a proposed project would "increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated." The checklist also asks whether a proposed project would "include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment." The possibility that hunters may face reduced hunting opportunities within a particular area is therefore a social effect outside the ambit of CEQA.

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." Therefore, this section does not provide CEQA significance conclusions related to impacts on private recreational use in IBAs and CEQA does not require mitigation.



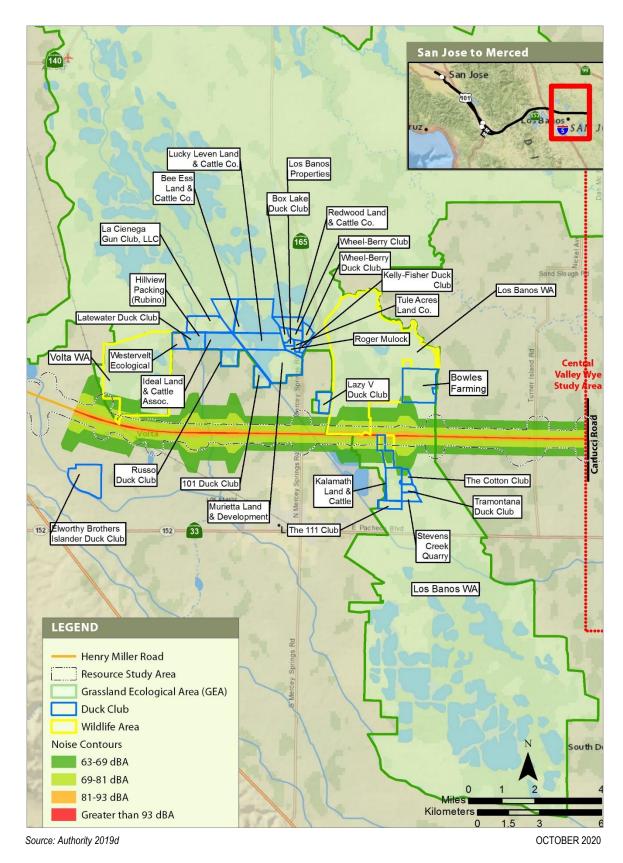


Figure 3.12-8 Noise Contours Relative to Wildlife Areas and Private Hunting Clubs



3.12.7 Mitigation Measures

There are no significant impacts under CEQA related to socioeconomics and communities and no mitigation measures are required.

However, related to effects under NEPA, the following mitigation measure will be implemented to reduce impacts associated with residential displacement in certain areas.

SO-MM#1: Implement Measures to Reduce Impacts Associated with Residential Displacement

At least 1 year prior to construction in the specific residential areas noted below, the Authority will minimize impacts in residential areas by conducting special outreach to affected homeowners and residents to understand their special relocation needs fully. In addition to the relocation assistance required under the federal Uniform Relocation Assistance and Real Property Acquisition Policies Act and the California Relocation Act, in areas with inadequate relocation availability in reasonable proximity to displacements, the Authority will make efforts to locate suitable replacement properties that are comparable to those currently occupied by these residents and/or construct suitable replacement facilities, if necessary.

This measure applies only to the areas of insufficient residential relocation availability by alternative as follows:

- All alternatives: Unincorporated Merced County. There is an estimated residential availability deficit of 22 units in this area for all alternatives within the unincorporated county area, but there is surplus residential relocation availability in nearby Los Banos. Some homeowners and residents may desire to remain in the unincorporated County areas outside Los Banos instead of relocating to available units within Los Banos, and this measure will only apply to those who desire to remain in the unincorporated County areas.
- Alternative 2: Alternative 2 will also have residential displacement in areas with relocation availability deficits in Morgan Hill (59 units), San Martin (39 units), and Gilroy (75 units), in addition to the deficit noted above in unincorporated Merced County.

In cases where residents wish to remain in the immediate vicinity and there is inadequate local relocation availability, the Authority will take measures to purchase vacant land or buildings in the area and consult with local authorities over matters such as zoning, permits, and moving of homes and connection of services and utilities, as appropriate. The Authority will document implementation of this measure through annual reporting.

With application of this mitigation measure, the Authority will assist these displaced residents with finding new suitable housing within the communities they currently reside in, if desired. Where relocation to existing residential units occurs, this will not require ground-disturbing activities that would result in secondary environmental impacts. Where relocation will include movement of homes to new sites or construction of suitable replacement facilities, this will only be done where determined suitable by local land use authorities and where it can be completed without resulting in significant secondary environmental impacts. The Authority, as a condition of providing funding, will require implementing partners to implement relevant IAMFs and direct mitigation measures discussed in this EIR/EIS.

3.12.8 Impact Summary for NEPA Comparison of Alternatives

As described in Section 3.1.6.4, 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 project construction and operations. Table 3.12-23 shows a comparison of the project impacts by alternative and is followed by a summary of the impacts. The table is organized according to types of impacts that are associated with the impact statements preceding this section rather than by specific individual impact statements.



All four project alternatives would disrupt the communities along the alignment. These communities would experience construction impacts that include changes in traffic patterns; construction-related traffic; increases in noise, vibration, and dust as a result of construction activities; and visual changes that could affect community character and cohesion. The intensity of the heavy construction disturbance would vary among the project alternatives. The duration of construction would likely be longer in the HSR station areas in San Jose and Gilroy because of the additional infrastructure requirements involved in station renovation.

The project alternatives would be similar within San Jose, through the Pacheco Pass, and across the San Joaquin Valley. Alternatives 1 and 3 would require extensive viaduct construction within the median of Monterey Road compared to the at-grade construction of Alternative 2 and the atgrade profile of Alternative 4 within that same stretch of Monterey Road. While the overall construction period for each of the project alternatives would be essentially the same, excavation for the deeper footings for the viaduct alternatives would be more intensive and would require substantial pile driving rather than footings for the embankment alternative, and would occur over a longer period. This would result in more intense construction impacts under Alternatives 1 and 3 than under Alternatives 2 and 4. Similarly, construction of the viaduct from Morgan Hill to the Gilroy area under Alternatives 1 and 3 would be more intense for air emissions, noise and vibration levels, and views of large construction equipment, compared to the mostly at-grade profile through Monterey Road or the embankment from Morgan Hill to Gilroy under Alternative 2. As described in Section 3.4 of this Final EIR/EIS, the most severe noise impacts on residential receptors from construction noise would occur in the Monterey Corridor and Morgan Hill and Gilroy Subsections. The most property displacements would occur under Alternative 2, nearly twice the number that would occur under the other project alternatives. The most displacements would occur in the San Jose Diridon Station Approach, Monterey Corridor, and Morgan Hill and Gilroy Subsections. Therefore, the perceived disruptive construction impacts on communities would be greatest in these three subsections under Alternative 2, and in the San Jose Diridon Station Approach and Morgan Hill and Gilroy Subsections under Alternatives 1, 3, and 4.



Table 3.12-23 Comparison of Project Alternative Impacts for Socioeconomics and Communities

Impact	Alternative 1	Alternative 2	Alternative 3	Alternative 4
Communities and Neighbo	rhoods			
Impact SOCIO #1: Temporary Disruption or Division of Established Communities from Project Construction	Construction activity would disrupt existing circulation and access patterns for residents, businesses, and agricultural properties but would not physically divide existing communities. Monterey Road would be permanently reduced from six to four lanes between Capitol Expressway and Blossom Hill Road.	Same as Alternative 1, except construction activity would result in greater changes in access in the Monterey Corridor Subsection because of the need for new grade separations.	Same as Alternative 1, except disruption would occur in east Gilroy instead of downtown Gilroy for Alternatives 1 and 2.	Similar to Alternative 1, except there would be fewer disruptions in access in the Monterey Corridor Subsection and no need for narrowing of Monterey Road. Alternative 4 would have no grade separations.
Impact SOCIO #2: Permanent Disruption or Division of Established Communities	HSR infrastructure, including a viaduct rising up to 80 feet, would introduce permanent visual changes and disrupt the existing visual character along the project by adding a view of transportation infrastructure and precast yards for construction of 40 miles of viaduct.	Same as Alternative 1, except would add a view of transportation infrastructure and precast yards for construction of 18 miles of viaduct.	Same as Alternative 1, except would add a view of transportation infrastructure and precast yards for construction of 39 miles of viaduct.	Similar to Alternative 2, except the visual intrusion of HSR infrastructure would be less because of the at-grade, blended profile of Alternative 4.
Disruption or Division of Established Communities from Changes to Air Quality, Noise and Vibration, and Community Safety and Security (See Table 3.12-23 and Impact SOCIO#1)	Reductions in air quality could disrupt community activities, particularly outdoor activities at gathering places such as parks. Construction noise could exceed established noise thresholds and affect sensitive receptors such as schools, residences, daycare facilities, and hospitals. No changes in community safety and security.	Similar to Alternative 1, except construction noise impacts would be less than under Alternatives 1 and 3 because extensive pile driving would not be required in the Monterey Corridor and Morgan Hill and Gilroy Subsections.	Same as Alternative 1.	Impacts would be less than Alternatives 1, 2, and 3 because extensive pile driving would not be required and there would be fewer excavation and construction activities.



Impact	Alternative 1	Alternative 2	Alternative 3	Alternative 4
Impact SOCIO #3: Disruption or Division of Established Communities from HSR Operations	The overall HSR system in the long term would improve regional access, reduce travel times, and could reduce interregional traffic on regional roadways.	Same as Alternative 1.	Similar to Alternative 1, except VMT would be increased for the East Gilroy Station compared to the other project alternatives and could result in greater community disruption in the east Gilroy area.	Similar to Alternative 1, except there would be no grade separations between San Jose and downtown Gilroy, leading to greater delays to cross the rail line compared to other alternatives.
Impact SOCIO #3: Disruption or Division of Established Communities from Changes to Air Quality from HSR Operations	With a reduction of regional automobile travel and associated emissions, the project would improve regional air quality.	Same as Alternative 1.	Same as Alternative 1.	Same as Alternative 1.
Impact SOCIO #3: Disruption or Division of Established Communities from Changes to Noise and Vibration from HSR Operations	Operations would result in severe noise impacts on 337 sensitive receptors (347 with the DDV).	Operations would result in severe noise impacts on 755 sensitive receptors (766 with the TDV).	Operations would result in severe noise impacts on 222 sensitive receptors (233 with the TDV).	Similar to Alternative 2, except operations would result in severe noise impacts on 1,212 sensitive receptors (1,224 with the TDV). There would be potential indirect noise effects on confined animals within approximately 285 feet of the edge of the HSR right-of-way, depending on train speed.
Impact SOCIO #3: Disruption or Division of Established Communities from Changes to Aesthetics and Visual Quality from HSR Operations	Train vehicle headlights and maintenance facility nighttime operations would introduce a new source of substantial light and glare and would diminish views of the nighttime sky in the rural areas of the project.	Same as Alternative 1.	Same as Alternative 1.	Same as Alternative 1
Impact SOCIO #3: Disruption or Division of Established Communities from Changes to Community Safety and Security from HSR Operations	Roads crossing the project alignment would be fully grade-separated from the right-of-way, minimizing risks to the community that could lead to disruption.	Same as Alternative 1.	Same as Alternative 1.	Similar to Alternative 1 except that existing at-grade crossings would be used and improved with four-quadrant gates.



Impact	Alternative 1	Alternative 2	Alternative 3	Alternative 4		
Children's Health and Safet	Children's Health and Safety					
Impact SOCIO #4: Construction Impacts on Children's Health and Safety	Construction could result in long- term health impacts on children living, learning, and playing in the RSA.	Similar to Alternative 1, except that noise impacts along Monterey Road through downtown Gilroy would be less because of construction of embankment rather than viaduct, but emissions would be greater than under Alternatives 1, 3, and 4 because of a greater amount of earthwork and trenching.	Same as Alternative 1	Similar to Alternative 1, except that noise impacts along Monterey Road through downtown Gilroy would be less because of construction of an atgrade profile between San Jose and downtown Gilroy. There would be reduced emissions during construction because of the at-grade profile		
Impact SOCIO #5: Operations Impacts on Children's Health and Safety	Project operations would not result in continuous impacts on children's health and safety.	Same as Alternative 1	Similar to Alternative 1, except that emissions would be greater for Alternative 3 because of the greater VMT associated with the East Gilroy Station.	Same as Alternative 1 except operational noise impacts would be the greatest because of HSR and freight train horn soundings between San Jose and downtown Gilroy, where the alignment would use existing at-grade rail crossings and no new grade separations would be constructed.		
Property Displacements an	d Relocations					
Impact SOCIO #6: Permanent Displacement and Relocation of Residential Properties	Construction of the project would displace 147 residential units. Sufficient available relocation properties exist in the region, but some residences in unincorporated Merced County and Volta may be unable to relocate within the same community.	Construction of the project would displace 603 residential units. Sufficient available relocation properties exist in the region, but some residences in Morgan Hill, San Martin, Gilroy, unincorporated Merced County, and Volta may be unable to relocate within the same community.	Construction of the project would displace 157 residential units. Sufficient available relocation properties exist in the region, but some residences in unincorporated Merced County and Volta may be unable to relocate within the same community.	Construction of the project would displace 68 residential units. Sufficient available relocation properties exist in the region, but some residences in unincorporated Merced County and Volta may be unable to relocate within the same community.		



Impact	Alternative 1	Alternative 2	Alternative 3	Alternative 4
Impact SOCIO #7: Permanent Displacement and Relocation of Commercial and Industrial Facilities	Construction of the project would displace 217 businesses. Sufficient available relocation properties exist in the region, but some businesses in unincorporated Santa Clara County, San Martin, Gilroy, and unincorporated Merced County may be unable to relocate within the same community.	Construction of the project would displace 348 businesses. Sufficient available relocation properties exist in the region, but some businesses in unincorporated Santa Clara County, Morgan Hill, San Martin, Gilroy, and unincorporated Merced County may be unable to relocate within the same community.	Construction of the project would displace 157 businesses. Sufficient available relocation properties exist in the region, but some businesses in unincorporated Santa Clara County, San Martin, and unincorporated Merced County may be unable to relocate within the same community.	Construction of the project would displace 66 businesses. With the DDV, there would be partial acquisition of one additional commercial parcel and displacement of one additional commercial building. Sufficient available relocation properties exist in the region, but some businesses in San Martin, Gilroy, and unincorporated Merced County may be unable to relocate within the same community.
Impact SOCIO #8: Permanent Displacement and Relocation of Agricultural Properties	Construction of the project would displace 49 agricultural properties (including dairies). Sufficient available relocation properties exist in the region.	Construction of the project would displace 53 agricultural properties (including dairies). Sufficient available relocation properties exist in the region.	Construction of the project would displace 49 agricultural properties (including dairies). Sufficient available relocation properties exist in the region.	Construction of the project would displace 40 agricultural properties (including dairies). Sufficient available relocation properties exist in the region.
Impact SOCIO #9: Permanent Displacement and Relocation of Community and Public Facilities	Construction of the project would displace 8 community and public facilities.	Construction of the project would displace 9 community and public facilities, depending on the Skyway Drive variant selected.	Construction of the project would displace 6 community and public facilities.	Construction of the project would displace 1 community and public facility.
Economic Impacts				
Impact SOCIO #10: Construction Impacts on Employment	Construction of the project would provide 14,780 direct and indirect jobs, representing an increase in employment demand for the region.	Construction of the project would provide 12,650 direct and indirect jobs, representing an increase in employment demand for the region.	Construction of the project would provide 15,180 direct and indirect jobs, representing an increase in employment demand for the region.	Construction of the project would provide 10,670 direct and indirect jobs, representing an increase in employment demand for the region.
Construction Impacts on Population Growth (See Section 3.18, Regional Growth).	Construction of the project would not result in substantial direct population growth.	Same as Alternative 1, except that the indirect population growth would be anticipated to be greater because of the greater number of employment opportunities.	Same as Alternative 1, except that the indirect population growth would be anticipated to be greater because of the greater number of employment opportunities.	Same as Alternative 1, except that indirect population growth would be anticipated to be less because of the smaller number of employment opportunities.



Impact	Alternative 1	Alternative 2	Alternative 3	Alternative 4
Construction Impacts on School District Funding from Changes in Bus Transportation Costs (See Table 3.12-23)	Construction of the project would not result in changes in bus transportation costs.	Same as Alternative 1, except that the need for construction of grade separations would result in more extensive roadway closures and greater delays.	Same as Alternative 1, except that road closures would occur in east Gilroy rather than in downtown Gilroy.	Same as Alternative 1
Impact SOCIO #11: Construction Impacts on School District Funding from Student Relocations	Residential displacements would result in a maximum of 86 student relocations, representing a maximum of 1% of the total enrollment overall.	Same as Alternative 1, except residential displacements would result in a maximum of 318 student relocations, representing a maximum of 1% of the total enrollment overall.	Same as Alternative 1, except that residential displacements would result in a maximum of 91 student relocations, representing a maximum of 1% of the total enrollment overall.	Same as Alternative 1, except that residential displacements would result in a maximum of 47 student relocations, representing a maximum of 1% of the total enrollment overall.
Impact SOCIO #11: Construction Impacts on School District Funding from Reduced Property Tax Revenues	Decrease in property tax revenues from 147 residential displacements and a maximum of 86 student relocations would represent 0.000002% of total annual school funding sources.	Decrease in property tax revenues from 603 residential displacements and a maximum of 318 student relocations would represent 0.000005% of total annual school funding sources.	Decrease in property tax revenues from 157 residential displacements and 91 student relocations would represent 0.000002% of total annual school funding sources.	Decrease in property tax revenues from 68 residential displacements and 47 student relocations would represent 0.000001% of total annual school funding sources.
Impact SOCIO #12: Construction Impacts on Agriculture Economy	Construction activities associated with Alternative 1 would require the temporary use of approximately 617.6 acres of Important Farmland, the permanent conversion of 1,035.5 of Important Farmland and 162.9 acres of waste management lands, an estimated total annual reduction in crop revenues of \$7.2 million and annual dairy production loss of \$5.4 million, and an estimated reduction of 92 agricultural and dairy jobs.	Construction activities associated with Alternative 2 would require the temporary use of approximately 658.7 acres of Important Farmland, the permanent conversion of 1,181.3 acres of Important Farmland and 244.3 acres of waste management lands, an estimated total annual reduction in crop revenues of \$7.3 million and annual dairy production loss of \$5.4 million, and an estimated reduction of 95 agricultural and dairy jobs.	Construction activities associated with Alternative 3 would require the temporary use of 672 acres of Important Farmland, permanent conversion of 1,192.5 acres of Important Farmland and 252.8 acres of waste management lands, an estimated total annual reduction in crop revenues of \$7.8 million and annual dairy production loss of \$5.4 million, and an estimated reduction of 107 agricultural and dairy jobs.	Construction activities associated with Alternative 4 would require the temporary use of 458.9 acres of Important Farmland, permanent conversion of 1,032.6 acres of Important Farmland and 147 acres of waste management lands, an estimated total annual reduction in crop revenues of \$7.1 million and annual dairy production loss of \$5.4 million, and an estimated reduction of 90 agricultural and dairy jobs.



Impact	Alternative 1	Alternative 2	Alternative 3	Alternative 4
Impact SOCIO #14: Construction Impacts on Property Taxes	Property tax revenues would be reduced by 0.004% overall because of property acquisitions. Other aspects of construction may result in reduction in property values that cannot be quantified because of increased noise, light, and glare.	Same as Alternative 1, except that property tax revenues would be reduced by 0.006% overall because of property acquisitions. Other aspects of construction may result in reduction in property values that cannot be quantified because of increased noise, light, and glare.	Same as Alternative 1, except that property tax revenues would be reduced by 0.004%. Also Alternative 3 would not be anticipated to experience a beneficial effect on property values in the area of the East Gilroy Station because additional transit-oriented development would not occur in this area.	Same as Alternative 1, except that property tax revenues would be reduced by 0.003%. Also property values would be less likely to be affected along Monterey Road in the Monterey Corridor Subsection because Monterey Road would not be narrowed.
Impact SOCIO #15: Construction Impacts on Sales Tax Revenues	An increase in sales tax revenues of \$61.6 million is expected for Santa Clara, San Benito, and Merced Counties and the communities in the region as a result of construction of Alternative 1.	An increase in sales tax revenues of \$52.8 million is expected for Santa Clara, San Benito, and Merced Counties and the communities in the region as a result of construction of Alternative 2.	An increase in sales tax revenues of \$63.3 million is expected for the Santa Clara, San Benito, and Merced Counties and the communities in the region as a result of construction of Alternative 3.	An increase in sales tax revenues of \$40.1 million is expected for the Santa Clara, San Benito, and Merced Counties and the communities in the region as a result of construction of Alternative 4.
Impact SOCIO #16: Temporary Impact on Private Recreational Waterfowl Hunting	Project construction would not affect the overall economic viability of waterfowl hunting activities in the GEA.	Same as Alternative 1.	Same as Alternative 1.	Same as Alternative 1.
Impact SOCIO #17: Operations Impacts on Employment	Project operations would provide approximately 1,110 direct and indirect jobs annually.	Same as Alternative 1.	Same as Alternative 1.	Same as Alternative 1.
Operations Impacts on Population Growth (See Section 3.18, Regional Growth).	Operation of the project is expected to induce population growth in the three-county region.	Same as Alternative 1.	Same as Alternative 1.	Same as Alternative 1.



Impact	Alternative 1	Alternative 2	Alternative 3	Alternative 4
Impact SOCIO #13: Operations Impacts on the Agriculture Economy	There would be no direct impacts on the agricultural economy from project operations. With respect to indirect impacts, animals housed within 100 feet of the track centerline or proposed maintenance facility footprint could be affected by operational noise.	Same as Alternative 1.	Same as Alternative 1.	Same as Alternative 1.
Impact SOCIO #18: Operations Impacts on Property Taxes	Project operations could result in property value reductions in some locations because of increased noise, light and glare. There would likely be an increase in property values in the vicinity of the HSR stations.	Same as Alternative 1.	Similar to Alternative 1, except there would be slightly less beneficial impact on property values in the station areas because no transit-oriented development is planned for the East Gilroy Station area.	Same as Alternative 1.
Impact SOCIO #18: Operations Impacts on Sales Tax Revenues	Sales taxes would likely increase in the three-county region from materials being purchased by HSR riders and employees.	Same as Alternative 1.	Same as Alternative 1.	Same as Alternative 1.
Impact SOCIO #19: Permanent Impact on Private Recreational Waterfowl Hunting	Project operation would not affect the overall economic viability of waterfowl hunting activities in the GEA.	Same as Alternative 1.	Same as Alternative 1.	Same as Alternative 1.

HSR = high-speed rail VMT = vehicle miles traveled



For all four project alternatives, there would be a loss of community cohesion in those communities where existing views would be blocked by HSR infrastructure. This would be most noticeable in Morgan Hill under Alternative 2, where the embankment through downtown Morgan Hill would obstruct existing residential views across the alignment. San Martin and Gilroy would also experience loss of community cohesion by the introduction of the embankment structure to downtown Gilroy under Alternative 2. The viaduct of Alternatives 1 and 3 would not obstruct views to the same extent as Alternative 2, as some views would be maintained between supports of the viaduct. However, the viaduct would be an incongruous new visual barrier, particularly in the more rural and open areas of the project, degrading the visual intactness and unity of the environment. The MOWF in either south Gilroy or east Gilroy and the MOWS near Turner Island Road would introduce new sources of nighttime light and glare into an otherwise rural environment.

Construction of the project could permanently affect social relationships and perceptions of quality of life by displacing residents, businesses, and community and public facilities. Alternative 2 would result in the greatest number of property acquisitions and displacements compared to Alternatives 1, 3, and 4. There would be eight community and public facility displacements under Alternative 1, nine displacements under Alternative 2, six displacements under Alternative 3, and one displacement under Alternative 4. 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 residences and businesses within the same community.

Construction of the project could result in short-term economic losses associated with school district funding, agricultural production, and property tax revenue. However, any short-term economic losses are expected to be more than offset by the short-term and long-term economic benefits of the HSR system. Increases in sales tax revenues are expected from construction spending, and long-term increases in the sales tax base would result from new economic development through improved connectivity of the region to the rest of the state resulting from HSR operations. Additionally, the project is expected to create short-term construction jobs and long-term job opportunities across many sectors of the regional economy. As a result, the project alternatives are expected to have a beneficial impact on the regional economy. Property acquisitions of Important Farmland would result in decreased agricultural production values. The greatest reduction in agricultural production value would occur under Alternative 3 at \$7.8 million, followed by Alternative 2 at \$7.3 million, \$7.15 million under Alternative 1, and \$7.12 under Alternative 4.

Construction and operations of the project would change conditions along Henry Miller Road and the adjacent GEA but would not affect waterfowl hunting in the immediate vicinity.

Project features, including IAMFs, design standards, and compliance with the Authority's project design guideline technical memoranda, and implementation of Mitigation Measure SO-MM#1 will avoid or minimize impacts on communities and neighborhoods. After consideration of these project features and design standards and mitigation, the project will avoid or minimize construction and operations impacts on communities and neighborhoods under all four project alternatives.

3.12.9 CEQA Significance Conclusions

As described in Section 3.12.4.4, 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 3.12-24 identifies the CEQA significance determinations for each impact discussed in Section 3.12.6. A summary of the significant impacts, mitigation measures, and factors supporting the significance conclusion after mitigation follows the table.



Table 3.12-24 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	Less than significant for all project alternatives: Construction activities would not physically divide established communities or require construction of new government facilities. Construction activities would take place within an existing transportation corridor. Access to neighborhoods and community and public facilities would be retained throughout construction through use of detours and signage. Construction of the project would not result in the provision of new or physically altered government facilities except for potential replacement of one fire station should other existing facilities not accommodate the services provided by the station. However, construction of one new fire station, if required, would not be expected to result in substantial physical impacts on the environment.	No mitigation measures are required.	N/A		
Impact SOCIO#2: Permanent Disruption or Division of Established Communities from Project Construction	Less than significant for all project alternatives: HSR infrastructure would not physically divide established communities or require construction of new government facilities. Rail infrastructure would occur within an existing transportation corridor. Access to neighborhoods and community and public facilities would be restored with road realignments and grade separations. Closed roads would require some out-of-way travel and changed travel patterns. The project would not result in the provision of new or physically altered government facilities except for potential replacement of one fire station should other existing facilities not accommodate the services provided by the station. However, construction of one new fire station, if required, would not be expected to result in substantial physical impacts on the environment.	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	Less than significant for all project alternatives: Project operations would not physically divide the communities along the project or result in loss of community cohesion.	No mitigation measures are required.	N/A
Children's Health and	Safety		
Impact SOCIO#4 Temporary Impacts on Children's Health and Safety	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	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 Displacement	ts and Relocations		
Impact SOCIO#6: Displacements and Relocations of Residences	Less than significant for all project alternatives: While construction 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
Economic Impacts			
Impact SOCIO#7: Displacements and Relocations of Commercial and Industrial Businesses	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#8: Displacements and Relocations of Agricultural Properties	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#9: Displacements and Relocations of Community and Public Facilities	The impact under CEQA would be less than significant for all project alternatives.	No mitigation measures are required.	N/A
Impact SOCIO#10: Temporary Impacts on Employment	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#11: Permanent Impacts on School District Funding	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: Temporary Impacts on Agriculture Economy	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: Permanent Impacts on Agriculture Economy	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#14: Permanent Impacts on Property Tax Revenues from Property Acquisition	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#15: 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.
Impact SOCIO#16: Temporary Impacts on Private Recreational Use (Waterfowl Hunting) in Important Bird Areas	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#17: Permanent Impacts on Regional Employment	No impact	No mitigation measures are required.	N/A
Impact SOCIO#18: Permanent Impacts on Property Taxes 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.
Impact SOCIO#19: Impacts on Private Recreational Use within Audubon Important Bird Areas	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