3.12 Socioeconomics and Communities

3.12.1 Introduction

Socioeconomics and Communities

The communities adjacent to the corridor alignment would bear the majority of the benefits and burdens of the proposed project. Impacts on important community facilities and socioeconomics are evaluated in order to avoid impacts, if possible, and to disclose impacts when they cannot be avoided.

This section describes socioeconomics and communities within the Palmdale to Burbank Project Section of the California High-Speed Rail (HSR) System and identifies impacts that would result from implementation of the project's six Build Alternatives. To provide baseline socioeconomics characteristics throughout the study area, the analysis considers demographic information for unincorporated communities of Los Angeles County and the cities of Palmdale, Santa Clarita, Los Angeles, and Burbank. The information contained in this section is based on the *Palmdale to Burbank Project Section: Community Impact Assessment* (Community Impact Assessment) (Authority 2019a) and the *Palmdale to Burbank Project Section: Draft Relocation Impact Report* (Draft Relocation Impact Report) (Authority 2019b).

The Community Impact Assessment (Authority 2019a) and Draft Relocation Impact Report (Authority 2019b) are based on a variety of reports and data sources. For these reports, the Authority collected data from the most recent available sources at the time the studies were initiated in 2016, including the United States Census Bureau (U.S. Census), California Employment Development Department, California State Board of Equalization, California Department of Finance, county and city planning agencies, and councils of government. In addition, information on community facilities was verified through aerial photographs, geographic information system data sets, and field investigations.

The following appendices are provided in Volume 2 of this Draft Environmental Impact Report/Environmental Impact Statement (EIR/EIS) in support of this Socioeconomics and Communities section:

- Appendix 2-E, Impact Avoidance and Minimization Features (IAMF), lists IAMFs included as applicable in each of the Build Alternatives for purposes of the environmental impact analysis.
- Appendix 2-H, Regional and Local Policy Consistency Analysis, provides a Regional and Local Policy Consistency Table, which lists the socioeconomics and communities' goals and policies applicable to the Palmdale to Burbank Project Section and notes the Build Alternatives' consistency or inconsistency with each.
- Appendix 3.1-B, United States Forest Service (USFS) Policy Consistency Analysis, assesses the consistency of the Palmdale to Burbank Project Section with applicable laws, regulations, plans, and policies governing proposed uses and activities within the Angeles National Forest (ANF) and the San Gabriel Mountains National Monument (SGNMN).
- Appendix 3.12-A, Residential, Business, and Mobile Home Relocation and Assistance Brochures.
- Appendix 3.12-B, Effects on School District Funding and Transportation Bus Routes.
- Appendix 3.12-C, Children's Health and Safety Risk Assessment.

Additional information on socioeconomics and community impacts, regional and local goals and policies, consistency with goals and policies, design standards, and mitigation measures and IAMFs applicable to the Palmdale to Burbank Project Section can be found in the following sections:

- Section 3.2, Transportation, analyzes transportation-related community impacts such as increased traffic during construction.

- Section 3.3, Air Quality and Global Climate Change, analyzes impacts on communities from fugitive dust during construction.
- Section 3.4, Noise and Vibration, analyzes impacts on communities from noise and vibration.
- Section 3.5, Electromagnetic Interference (EMI) and Electromagnetic Fields (EMF), analyzes impacts from EMI and EMF resulting from construction and operations of the Palmdale to Burbank Project Section.
- 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, describes potential safety and security impacts on communities including impacts on emergency service providers from construction and operation of the Palmdale to Burbank Project Section.
- Section 3.13, Station Planning, Land Use, and Development, analyzes both temporary and permanent changes in land use that would result from implementation of the Palmdale to Burbank Project Section.
- Section 3.14, Agricultural Farmland and Forest Land, identifies existing important agricultural lands and impacts on agricultural land uses that would result from implementation of the Palmdale to Burbank Project Section.
- Section 3.15, Parks, Recreation, and Open Space, identifies existing parks and recreation facilities located near the Palmdale to Burbank Project Section area and analyzes impacts on these parks.
- Section 3.16, Aesthetics and Visual Quality, analyzes impacts on communities from construction activities involving lighting and glare.
- Section 3.18, Regional Growth, discusses project-induced growth trends and development patterns that could result from the Palmdale to Burbank Project Section.
- Section 3.19, Cumulative Impacts, analyzes cumulative impacts to communities associated with implementation of the Palmdale to Burbank Project Section.
- Chapter 5, Environmental Justice, analyzes the potential for identified adverse impacts to disproportionately affect minority and low-income populations.

3.12.1.1 Definition of Resources

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

- **Communities**—"Communities" are groups of people living in the same city, town, or neighborhood who exhibit behavior patterns expressed through daily social interactions, the use of local facilities, participation in local organizations, and involvement in activities that satisfy the population's economic and social needs.
- **Cohesion**—The term "cohesion" refers to the degree of interaction among the individuals, groups, and institutions that make up a community.
- **Displacement and Relocations**—The term "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 a transportation project. The term "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**—"Economic impacts" are changes in employment, business productivity (including agricultural productivity), and public funding. Public funding can be affected by property acquisition as well as displacements and relocations of residences and businesses, which in turn can alter school district funding, and property and sales tax revenues.

3.12.2 Laws, Regulations, and Orders

3.12.2.1 Federal

Federal Railroad Administration Procedures for Considering Environmental Impacts (64 Federal Register 28545)

On May 26, 1999, the Federal Railroad Administration (FRA) released Procedures for Considering Environmental Impacts (FRA 1999).[1] These FRA procedures supplement the Council on Environmental Quality (CEQ) Regulations (40 Code of Federal Regulations [C.F.R.] Part 1500 et seq.)[2] 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 United States Code [U.S.C.] 4321 et seq.). 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." These FRA procedures state that an EIS should consider possible impacts on communities.

Improving Access to Services for Persons with Limited English Proficiency (U.S. Presidential Executive Order [USEO] 13166)

USEO 13166 requires each federal agency to ensure that recipients of federal financial assistance provide meaningful access to their programs and activities by Limited English Proficiency (LEP) applicants and beneficiaries.

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

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

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

The Americans with Disabilities Act prohibits discrimination against persons with disabilities 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) ensures that persons displaced as a result of a federal action or by an undertaking involving federal funds are treated fairly, consistently, and equitably. This helps to ensure persons would not suffer disproportionate injuries as a result of projects designed for the benefit of the public.

---

[1] 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.

[2] The CEQ issued new regulations, effective September 14, 2020, updating the NEPA implementing procedures at 40 C.F.R. 1500. 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 CEQ regulations in this environmental document refer to the 1978 regulations, pursuant to 40 C.F.R. 1506.13 (2020) and the preamble at 85 Federal Register 43340.

United States Environmental Protection Agency School Siting Guidelines

In December 2007, the Energy Independence and Security Act was enacted by Congress and included a requirement that U.S. Environmental Protection Agency develop guidelines (currently available at https://www.epa.gov/schools/school-siting-guidelines) for the siting of school facilities including the following considerations: 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; modes of transportation available to students and staff; efficient use of energy; and potential use of a school at the site as an emergency shelter. These guidelines are intended to assist local school districts and community members with understanding environmental factors in making school siting decisions.

Although state agencies, such as the California High-Speed Rail Authority (Authority), are not subject to local plans, regulations, and requirements, the Authority may choose to consider factors in the U.S. Environmental Protection Agency guidelines when assessing the mitigation measures developed to minimize effects on existing or planned schools adjacent to the California HSR System.

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

The Farmland Protection Policy Act (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 Resource Conservation Service, 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 effects 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 C.F.R. Part 658).

For the purposes 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; each state may set its own criteria for classification in each category. Federal farmland classification criteria may differ from those developed by the California Department of Conservation, which are described in Section 3.12.2.2. Farmland subject to FPPA requirements includes forestland, pastureland, cropland, or other land, but does 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, or any farmland of statewide or local importance.
- Farmland that has already been converted to industrial, residential, or commercial use 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 aimed to ensure that federal programs, to the extent practical, are consistent 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. Part 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 from the Natural Resources Conservation Service (NRCS).

United States Forest Service Authorities

Socioeconomics and community impacts within the ANF, including the SGMNM, are guided by several federal laws and their implementing regulations, policies, plans, and orders. The primary laws governing socioeconomics and communities are the Federal Land Policy and Management Act, the National Forest Management Act, and the Antiquities Act of 1906. Appendix 3.1-B, USFS Policy Consistency Analysis, provides an analysis of the consistency of the six Build Alternatives with these laws, regulations, policies, plans, and orders.

3.12.2.2 State

California Relocation Act (California Government Code [Cal. Gov. Code] Section 7260 et seq.)

In parallel with the federal law, the California Relocation Act requires state and local governments to provide relocation assistance and benefits to displaced persons as a result of any project(s) undertaken by state or local governments that do not involve federal funds. However, because the Palmdale to Burbank Project Section will receive federal funding, the federal Uniform Act takes precedence.

California High-Speed Rail Authority Title VI Plan

In March 2012, the Authority adopted a policy and plan to ensure that the California HSR System complies with Title VI of the Civil Rights Act of 1964.[3] The policy states:

- The Authority is committed to ensuring that no person in the state of California is excluded from participation in, or denied the benefits of, its programs, activities, and services on the grounds of race, color, national origin, age, sex, or disability as afforded by Title VI of the Civil Rights Act of 1964 and related statutes.
- The Authority, as a federal grant recipient, is required by FRA to conform to Title VI of the Civil Rights Act of 1964 and related statutes. The Authority's subrecipients and contractors are required to prevent discrimination and ensure nondiscrimination in their programs, activities, and services.
- As permitted and authorized by Title VI, the Authority will administer a Title VI Program in accordance with the spirit and intent of the nondiscrimination laws and regulations. The Title VI Plan includes a commitment to inclusive public involvement of all persons affected by the high-speed train project (Authority 2012).

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

In May 2012, the Authority adopted a policy and plan to ensure that the California HSR Program complies with the requirements of USEO 13166. The policy states:

- It is the policy of the Authority to communicate effectively and provide LEP individuals with meaningful access to all the Authority's programs, services, and activities. The Authority will provide free language assistance services to LEP individuals encountered or whenever an LEP individual requests language assistance services.
- The Authority will treat LEP individuals with dignity and respect. Language assistance will be provided through a variety of methods, including staff interpreters, translation and interpreter service contracts, and formal arrangements with local organizations providing interpretation or translation services or telephonic interpreter services.

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

[3] Pub.L. 88–352, 78 Stat. 241

California Land Conservation Act of 1965 (Cal. Gov. Code Section 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 a contract between local government and the landowner. The contract restricts the land to agricultural and open space uses and consistent uses defined in state law and local ordinances. The local government establishes an agricultural preserve defining the boundary within which a city or county will enter contract(s) 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, and are renewed automatically each year, maintaining a continuous 10-year contract unless the landowner or local government files to initiate nonrenewal. Should that occur, the Williamson Act would terminate nine 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 lands under Williamson Act contracts (Cal. Gov. Code Section 51290–51295):

- State policy is to avoid locating federal, state, or local public improvements and improvements of public utilities, and to avoid acquisition of land, in agricultural preserves.
- State policy is to locate public improvements that are in agricultural preserves on land other than land under Williamson Act contract.
- State policy is that any agency or entity, in evaluating the relative costs of parcels of land and the development of such proposed improvements, 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

This section addresses regional, county, and city plans (including general, community, and regional plans); municipal codes; comprehensive plans; and specific plans applicable to the Palmdale to Burbank Project Section. Table 3.12-1 provides an overview of the regional and local general plans that contain goals, objectives, and policies relevant to socioeconomics and communities.

Table 3.12-1 Summary of Regional and Local Plans

Regional/Local Plan	Summary
City of Palmdale	
City of Palmdale General Plan (1993)	The *Palmdale General Plan* comprises several elements that pertain to socioeconomics and communities, including Land Use; Noise; Circulation; Environmental Resources; Housing; Public Services; Parks, Recreation and Trails; and Public Safety. These elements cover topics including transportation, housing, open space, and community facilities. In particular, the Land Use Element establishes a guide for long-range growth and development of the city. The Land Use Element serves to inform the public of the city's land-use goals, objectives, and policies for long-term development, guides day-to-day operational decisions of city staff, and establishes land-use classifications for land within the city. The Land Use Element promotes a stable and diversified economic base and development of a community identity.

Regional/Local Plan	Summary
City of Palmdale Avenue S Corridor Area Plan (1998)	The *City of Palmdale Avenue S Corridor Area Plan* establishes goals, objectives, and policies to: create a cohesive neighborhood with orderly development, provide for adequate circulation and infrastructure, protect public safety from seismic activity and other hazards, and enhance the streetscape through landscaping and design standards.
Los Angeles County and Unincorporated Los Angeles County	
Los Angeles County General Plan 2035 (2015)	The Land Use Element contains general conditions and standards for development to implement the *Los Angeles County General Plan* policy regarding regional land-use concerns and to guide the decision-making process in the absence of applicable community-level planning. The General Plan includes policies aimed at expanding transportation options that reduce automobile dependence and increase transit access for underserved transit users, such as seniors, students, low-income households, and persons with disabilities.
Los Angeles County Antelope Valley Area Plan (2015)	The *Los Angeles County Antelope Valley Area Plan* covers the county's largest planning area, which spans approximately 1,800 square miles, including portions of the Mojave Desert and most of the San Gabriel Mountains and ANF. Among other outcomes, the plan's last update dramatically expanded in size the county's *Significant Ecological Areas* in the Antelope Valley. This plan includes policies that generally support the development of rail and policies that specifically encourage development of the California HSR System with a station in Palmdale. Moreover, the plan calls for regional transportation system development to consider and mitigate impacts on existing communities and to minimize land-use conflicts.
Santa Clarita Valley Area Plan (2012)	The *Santa Clarita Valley Area Plan* provides goals, objectives, policies, and implementation actions that apply only to the unincorporated portions of the Santa Clarita Valley. However, the plan is a component of "One Valley One Vision," a joint planning effort between the County and the City of Santa Clarita. The Circulation Element of the plan includes goals and policies that support expansion of passenger rail service through the Santa Clarita Valley and encourage interagency cooperation related to rail service in the region. Additionally, the Economic Development Element encourages economic development by supporting employment opportunities and increased sales tax generation and attracting external economic activity.
San Gabriel/Verdugo Mountains Scenic Preservation Specific Plan (2004)	The *San Gabriel/Verdugo Mountains Scenic Preservation Specific Plan* outlines a strategy to preserve, protect, and enhance both natural and cultural resources in the San Gabriel/Verdugo Mountains area. Policies established by the plan help to protect well-being and enjoyment of nearby communities.
City of Los Angeles	
City of Los Angeles General Plan (2001)	The *City of Los Angeles General Plan* is a comprehensive, long-range declaration of purposes, policies, and programs for the development of the City. The General Plan consists of 11 elements; 10 citywide elements and the Land Use Element or plan for each of the City's 35 Community Planning Areas. The City's General Plan sets forth a conceptual relationship between land use and transportation on a citywide basis. The City aims to prioritize transportation decisions based upon outcomes of safety, public health, equity, access, social and economic benefits.
City of Los Angeles Plan for a Healthy Los Angeles (2015)	The *City of Los Angeles Plan for a Healthy Los Angeles* is an update of the General Plan Health and Wellness Element. The plan establishes goals and policies intended to care for the health and well-being of communities and individuals within the City of Los Angeles.

Regional/Local Plan	Summary
Sunland-Tujunga-Lake View Terrace-Shadow Hills-East La Tuna Canyon Community Plan (1997)	This Community Plan is part of the *City of Los Angeles General Plan*. More than half of the land within this Community Plan Area is planned for residential use, and most residential land uses are low density, single-family developments. This Community Plan identifies a significant amount of open space. The Community Plan contains policies to promote an arrangement of land uses, streets, and services that will encourage and contribute to the economic, social, and physical health of the community.
Sylmar Community Plan (1997)	The *Sylmar Community Plan* is part of the *City of Los Angeles General Plan*. This plan was developed in the context of promoting a vision of Sylmar as a community that maximizes the development opportunities of the future rail transit system and supports intermodal mass transportation planning to implement linkages to future rail service. Additionally, the plan outlines a vision for Sylmar's long-term physical and economic development and community enhancement.
Arleta-Pacoima Community Plan (1996)	The *Arleta-Pacoima Community Plan* is part of the *City of Los Angeles General Plan* and consists of five major subareas: Arleta, Pacoima, Hansen Dam, Northeast Valley Enterprise Zone, and the Earthquake Disaster Assistance Project Area. This Community Plan contains a mix of residential, commercial, industrial, open space, and public facilities land uses. The largest share of land use within the Community Plan Area is residential, consisting primarily of low-density residential development. This plan has goals to improve function, design, and economic vitality of commercial corridors. Additionally, this plan encourages the creation of jobs to improve the economic and physical condition of the community.
Sun Valley-La Tuna Canyon Community Plan (1999)	The *Sun Valley-La Tuna Canyon Community Plan* is part of the *City of Los Angeles General Plan*. The Community Plan encourages park and ride facilities to interface with rail facilities and development of an intermodal public transportation plan to implement linkages to rail service. The plan has goals to improve function, design, and economic vitality of commercial corridors. Additionally, the plan encourages the creation of jobs to improve the economic and physical condition of the community.
City of Burbank	
Burbank 2035 General Plan (2013)	The *Burbank 2035 General Plan* establishes policies to guide future development and designates appropriate locations for different land uses including open space, parks, residences, commercial uses, industry, schools, and other public uses. Additionally, this plan supports an efficient public transit network including high-speed rail through Burbank. Policies in this plan call for the City to advocate for improved regional rail services linking Burbank's employment and residential centers to the rest of the region.
North San Fernando Boulevard Master Plan (2012)	The *North San Fernando Boulevard Master Plan* is a policy document that provides a strategy to guide future development and streetscape improvements along the segment of North San Fernando Boulevard between Interstate 5 and Burbank Boulevard.

Sources: City of Burbank, 2013; City of Los Angeles, 1996, 1997a, 1997b, 1999, 2001, 2003, 2016; City of Palmdale, 1993, 1998; Los Angeles County, 2004, 2015a, 2015b
Although portions of San Fernando and Santa Clarita fall within the resource study areas for population and community impacts and economic impacts, no surface footprint would be located in either city and no direct impacts would occur. Therefore, planning documents for these cities are not included in this table.

3.12.3 Consistency with Plans and Laws

As indicated in Section 3.1.4.3, Consistency with Plans and Laws, the California Environmental Quality Act (CEQA) and CEQ regulations require a discussion of inconsistencies or conflicts between a proposed undertaking and federal, state, regional, or local plans and laws. As such, this Draft EIR/EIS describes the inconsistency of each of the six Build Alternatives with federal, state, regional, and local plans and laws to provide planning context.

The Authority, as the lead state and federal agency proposing to construct and operate the California HSR System, is required to comply with all federal and state laws and regulations and to secure all applicable federal and state permits prior to initiating construction on the selected Build Alternative. Therefore, there would be no inconsistencies between the six Build Alternatives and these federal and state laws and regulations.

The Authority is a state agency and therefore is not required to comply with local land use and zoning regulations; however, it has endeavored to design and construct the California HSR System so that it is consistent with land use and zoning regulations. For example, the proposed Build Alternatives will incorporate IAMFs that require the contractor to prepare a plan to demonstrate how construction socioeconomic and community impacts will be maintained below applicable standards.

Appendix 2-H provides a Regional and Local Policy Consistency Table, which lists the socioeconomics and community goals and policies applicable to the Palmdale to Burbank Project Section and notes the consistency or inconsistency of each Build Alternative. The Authority reviewed 12 plans. Each of the six Build Alternatives is consistent with 51 policies and are inconsistent with two policies. The Palmdale to Burbank Project Section Build Alternatives are inconsistent with the following policies.

- **City of Los Angeles Plan for a Healthy Los Angeles Policy 1.7**—Displacement and Health: Reduce the harmful health impacts of displacement on individuals, families, and communities by pursuing strategies to create opportunities for existing residents to benefit from local revitalization efforts by: creating local employment and economic opportunities for low-income residents and local small businesses; expanding and preserving existing housing opportunities available to low-income residents; preserving cultural and social resources; and creating and implementing tools to evaluate and mitigate the potential displacement caused by large-scale investment and development.
    - **Inconsistent for the Refined SR14, SR14A, E1, and E1A Build Alternatives.** In the long term, the areas around the Palmdale and Burbank Stations would likely be revitalized, bringing economic benefits to their communities. In the short term, the project would result in a substantial number of residential and nonresidential displacements (including displacement of environmental justice populations). In Sun Valley, insufficient availability of replacement units to accommodate all displaced residents was identified.
    - **Inconsistent for the E2 and E2A Build Alternatives.** In addition to Sun Valley, Lake View Terrace would also have insufficient replacement units available to accommodate all displaced residents for the E2 and E2A Build Alternatives.
- **Sunland-Tujunga-Lake View Terrace-Shadow Hills-East La Tuna Canyon Community Plan Policy 1.1.4**—The City should promote neighborhood preservation in existing residential neighborhoods.
    - **Inconsistent for the E2 and E2A Build Alternatives.** Wherever possible, project features would use existing roads and previously developed areas, thereby minimizing the inconsistent land uses. However, the E2 and E2A Build Alternative would displace existing residential land within neighborhoods (Lake View Terrace and Shadow Hills) and convert residential uses to transportation use to accommodate construction staging, rail alignment, utility easement, and access. Therefore, the E2 and E2A Build Alternatives would be inconsistent with this goal.

Despite the inconsistencies, the project is consistent with the majority of regional and local policies and plans. Although it may not be possible to meet all regional and local policies relevant to socioeconomics and communities as outlined in Table 3.12-1, IAMFs and mitigation measures will generally minimize socioeconomic and community impacts and would ultimately meet the overall objectives of the local policies.

3.12.4 Methods for Evaluating Impacts

The following sections summarize the resource study areas (RSA) and the methods used to analyze impacts on socioeconomics and communities.

3.12.4.1 Definition of Resource Study Areas

As defined in Section 3.1, Introduction, RSAs are the geographic boundaries in which the environmental investigations specific to each resource topic were conducted. Four RSAs were used to evaluate socioeconomic and community resources: population and community RSA; displacement relocation RSA; economic RSA; and children's health and safety RSA. Economic effects on fiscal revenues, job creation, school district funding, and agricultural production would have broad economic implications outside of the immediate Build Alternative footprint. Impacts on communities, including population, housing, business, and community facilities, would occur within or adjacent to the Build Alternative footprint as a direct result of project construction and operation. As described in the Community Impact Assessment (Authority 2019a), information was verified by aerial photographs, global information system data sets, and field investigations. Community outreach conducted by the Authority was also used to inform this analysis.

Population and Community Resource Study Area

This analysis considers the potential direct and indirect impacts of the project on the population, communities, and community facilities within a 0.5-mile buffer around the Build Alternative footprint, including any overlap with the U.S. Census block groups along this buffer. Even if the buffer only intersects a portion of the block group, the entire block group is included in the population and community RSA. Figure 3.12-1 through Figure 3.12-12 depict the population and community RSA by plotting the 0.5-mile buffer around the Build Alternative footprint over a map of U.S. Census block groups. The RSA is completely within Los Angeles County. Therefore, discussion of regional demographics and housing characteristics uses census data for Los Angeles County and the following six cities contained within the RSA: Lancaster, Palmdale, Santa Clarita, Los Angeles, San Fernando, and Burbank. Within the city of Los Angeles, the Build Alternative footprint overlaps the unincorporated communities of Acton, Agua Dulce (depicted later in the document on Figure 3.12-13), and the following neighborhoods: Sylmar, Pacoima, Sun Valley, Lake View Terrace, and Shadow Hills (depicted later in the document on Figure 3.12-14).

Although the Build Alternative footprint does not overlap with the city of San Fernando (in fact, no facilities or construction within San Fernando are proposed), the 0.5-mile buffer extends into San Fernando city limits. Also, no aboveground portion of any Build Alternative would be within the boundaries of the city of Santa Clarita. However, below-ground ancillary features of the California HSR System (i.e., utility connections) would be within the boundaries of the city of Santa Clarita. Although San Fernando and Santa Clarita are included in the RSA, and may be indirectly affected by the project, only those communities within the Build Alternative footprint have the potential to be directly affected by the project.

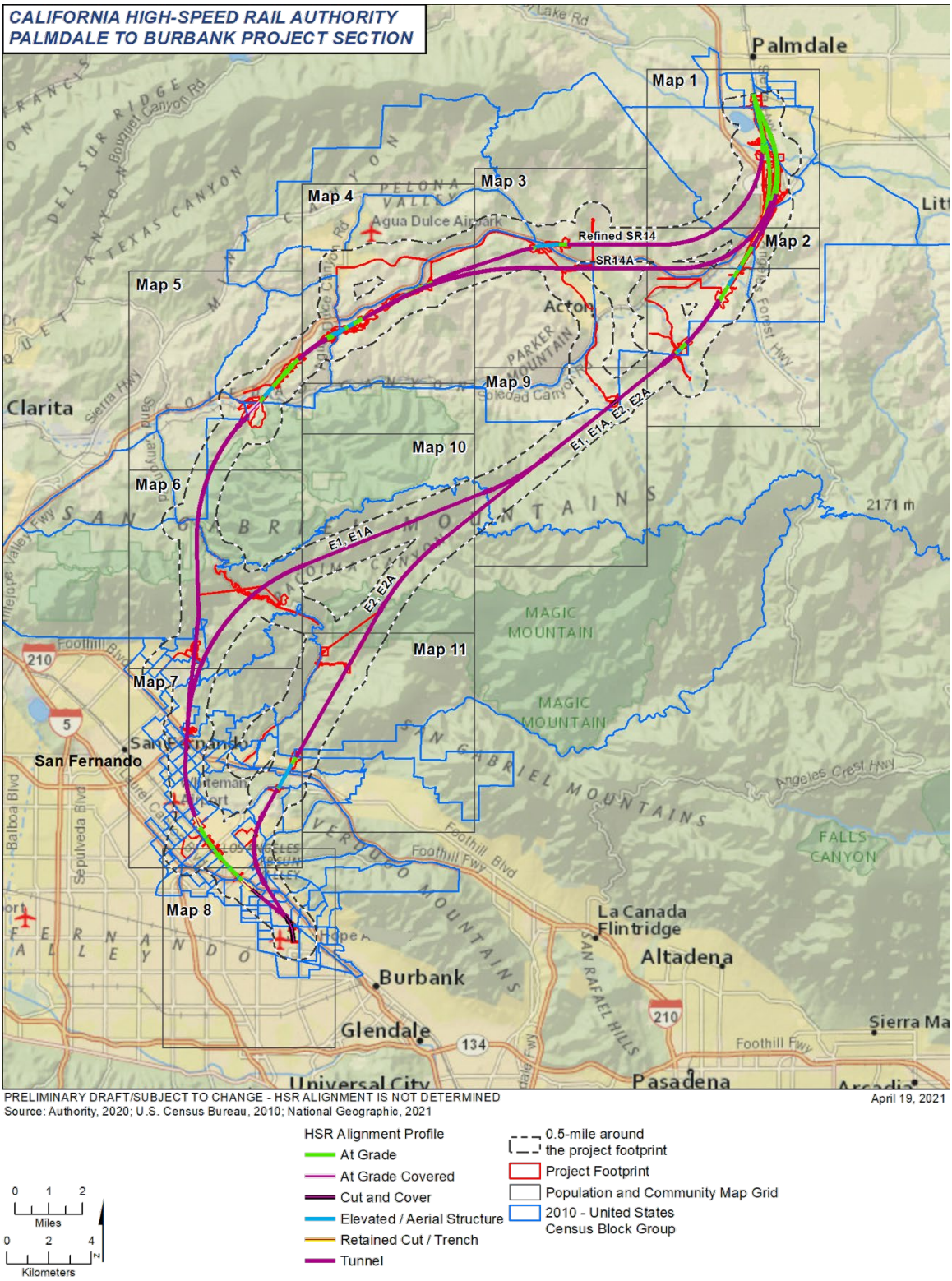

Figure 3.12-1 Population and Community Resource Study Area Overview

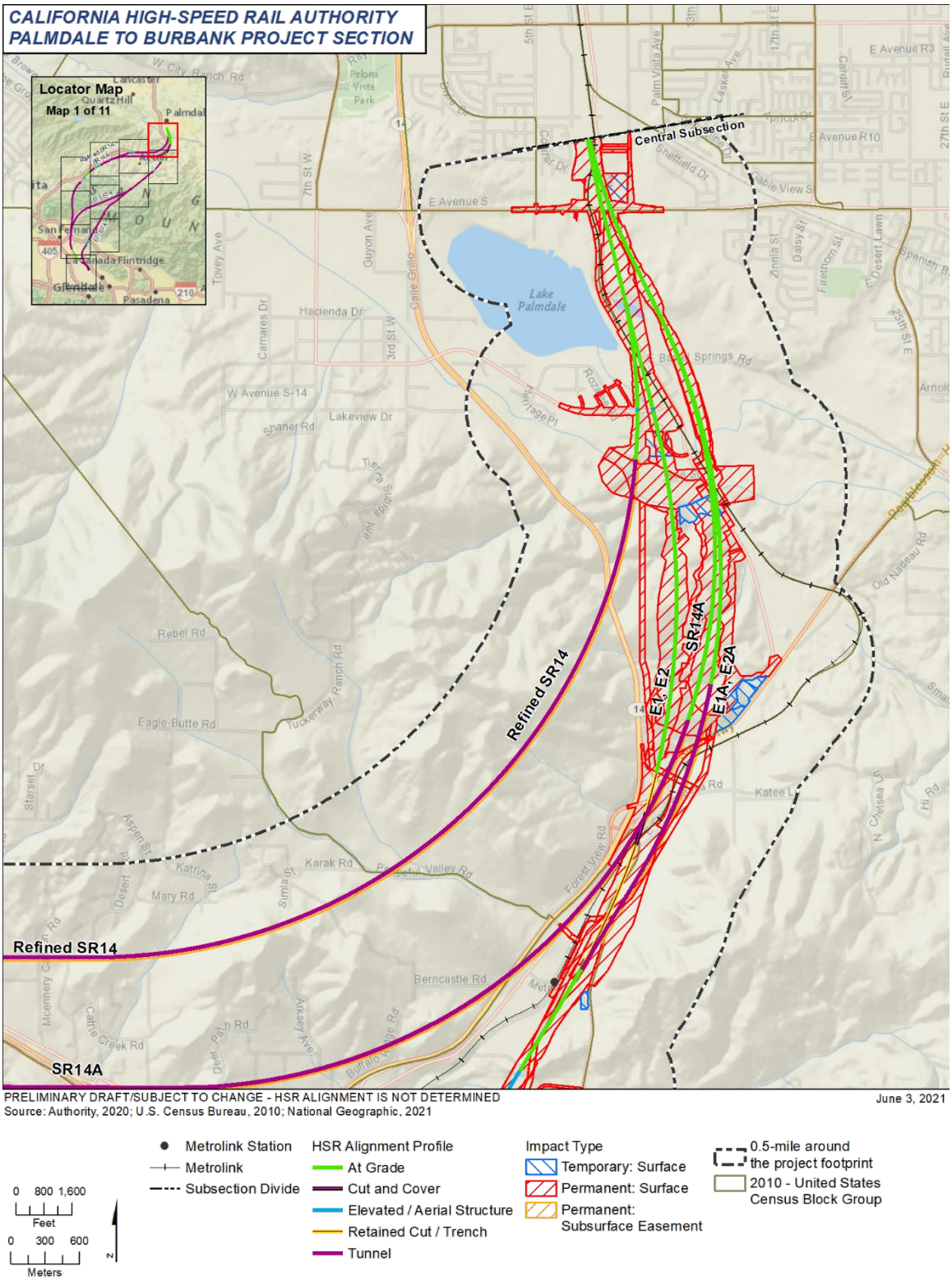

Figure 3.12-2 Population and Community Resource Study Area (Map 1 of 11)

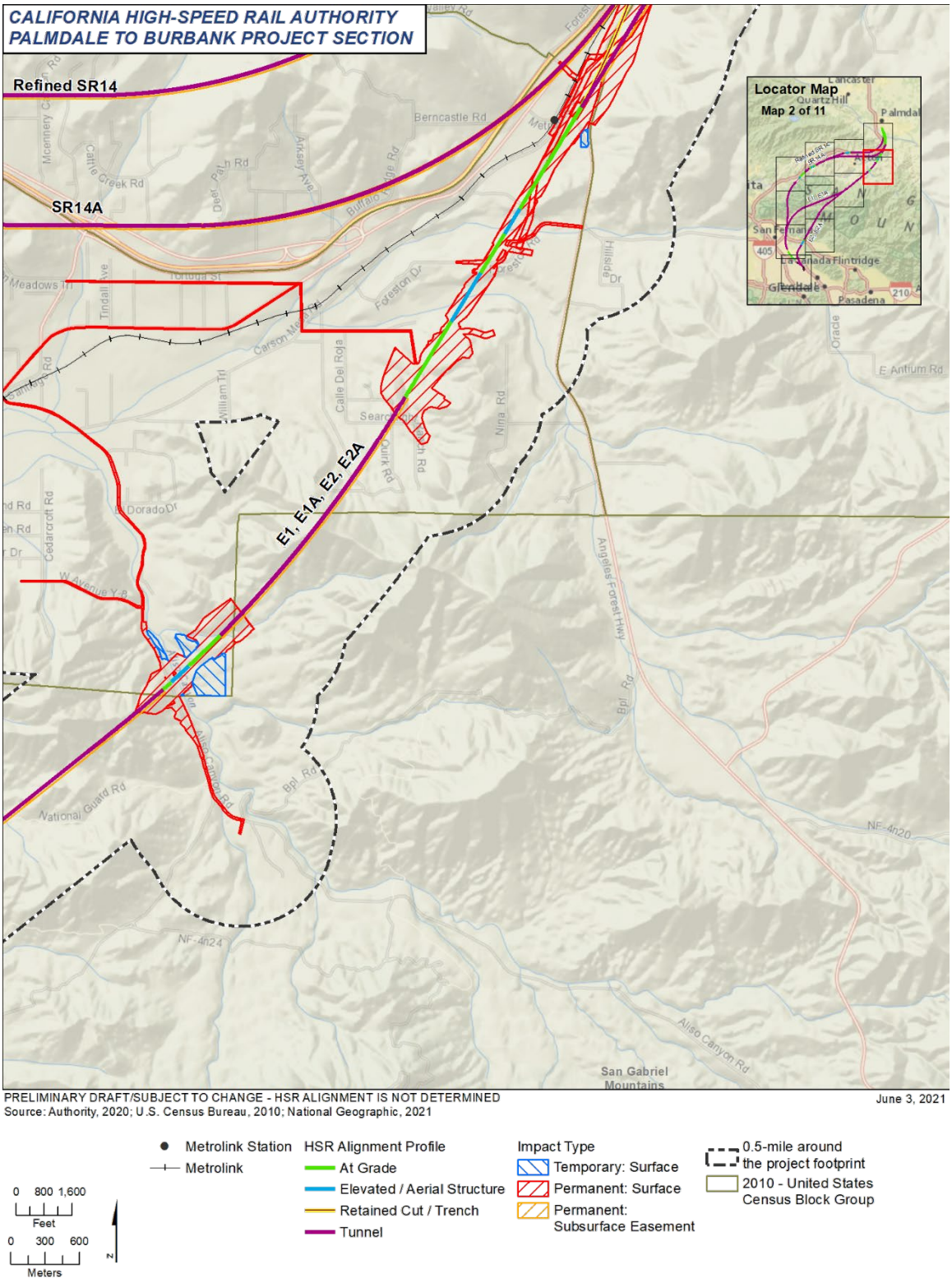

Figure 3.12-3 Population and Community Resource Study Area (Map 2 of 11)

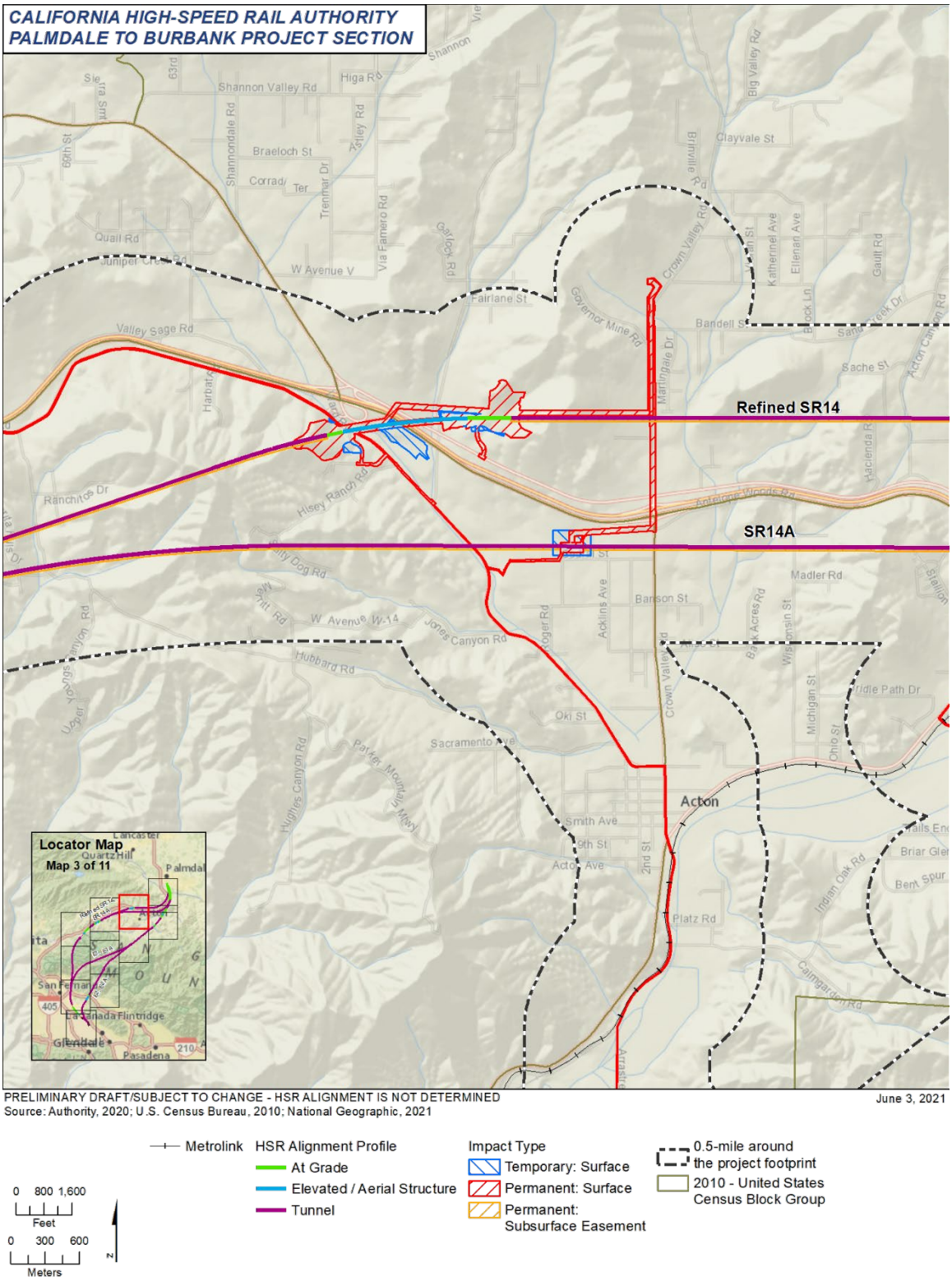

Figure 3.12-4 Population and Community Resource Study Area (Map 3 of 11)

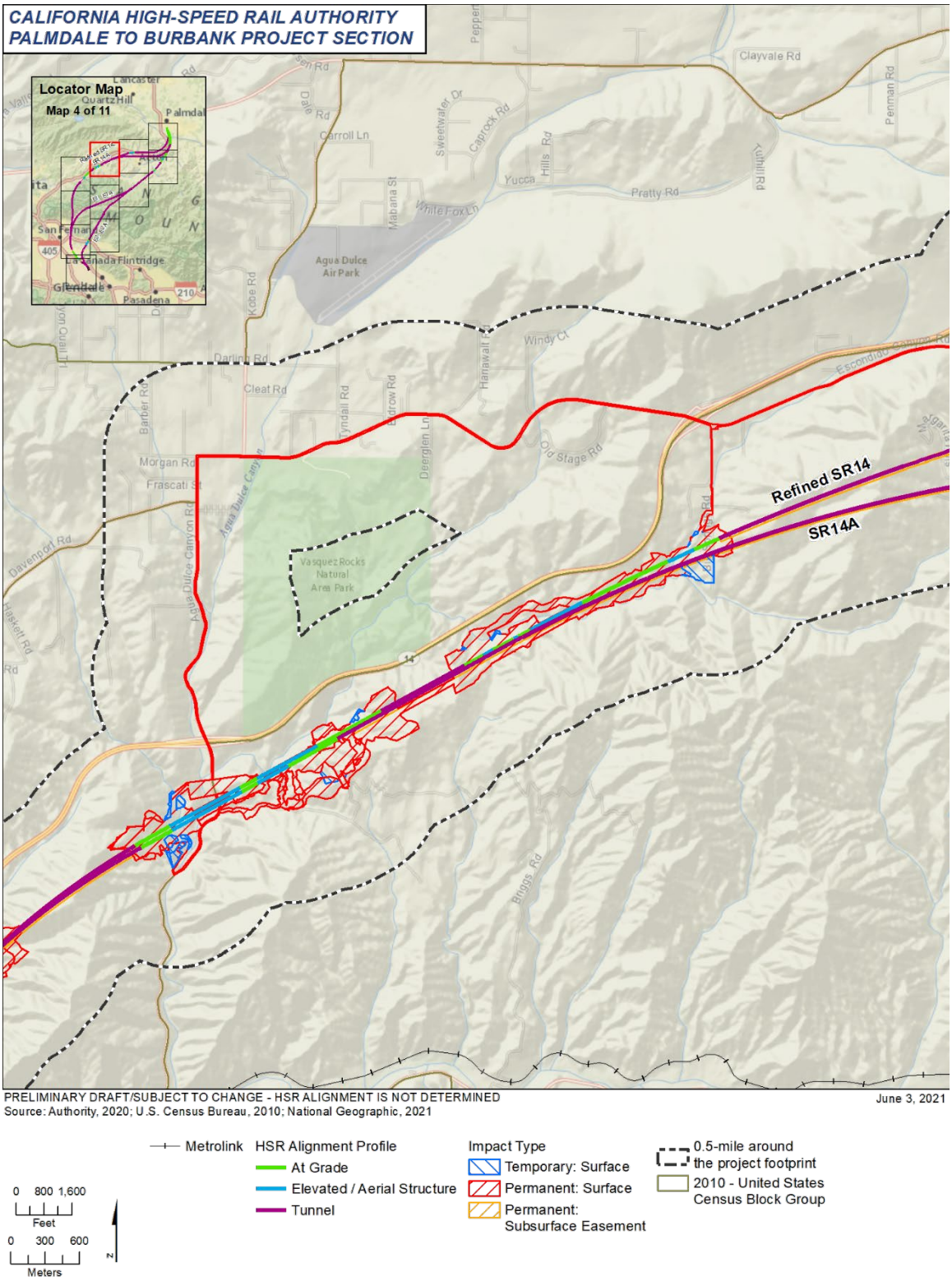

Figure 3.12-5 Population and Community Resource Study Area (Map 4 of 11)

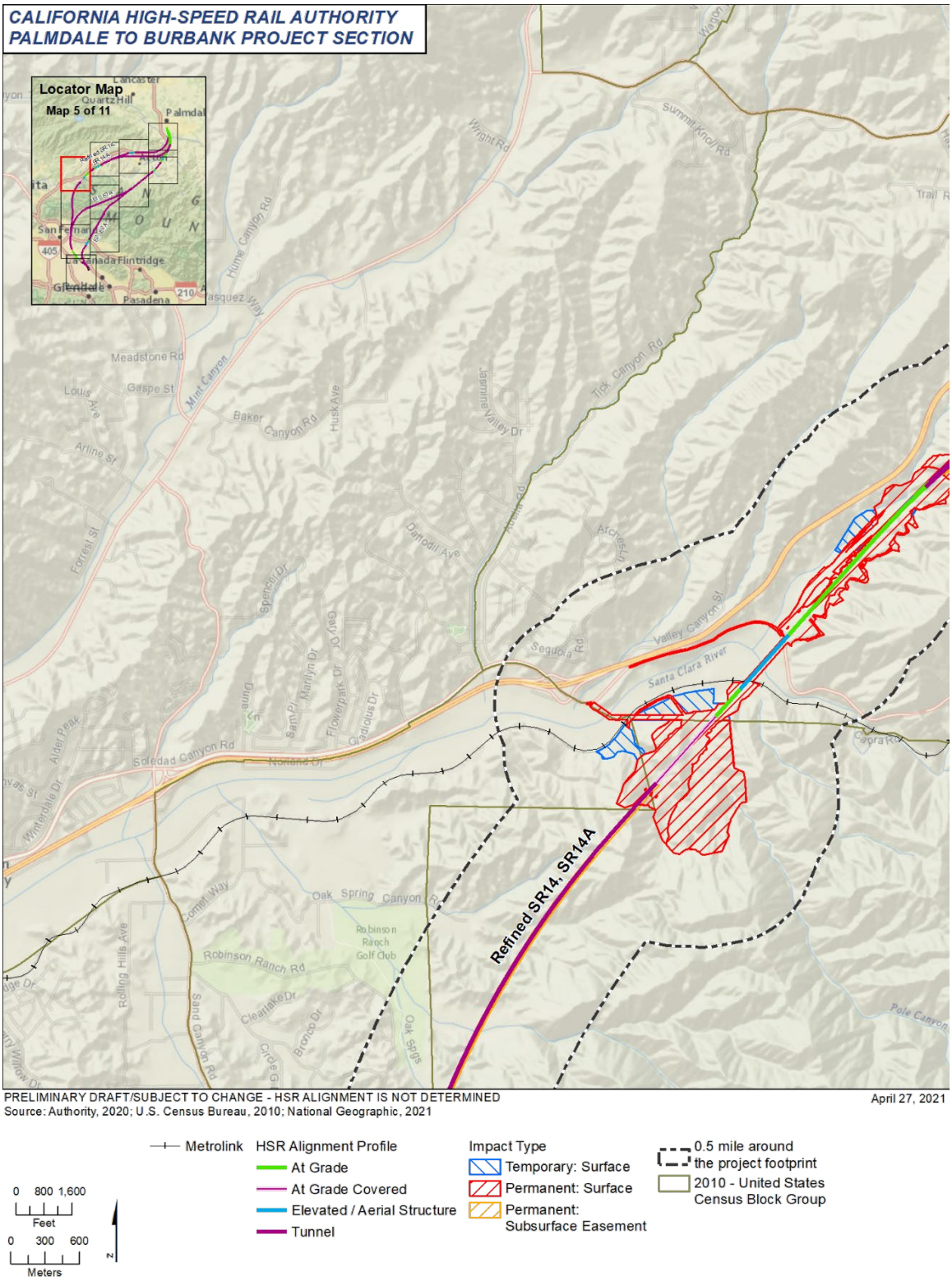

Figure 3.12-6 Population and Community Resource Study Area (Map 5 of 11)

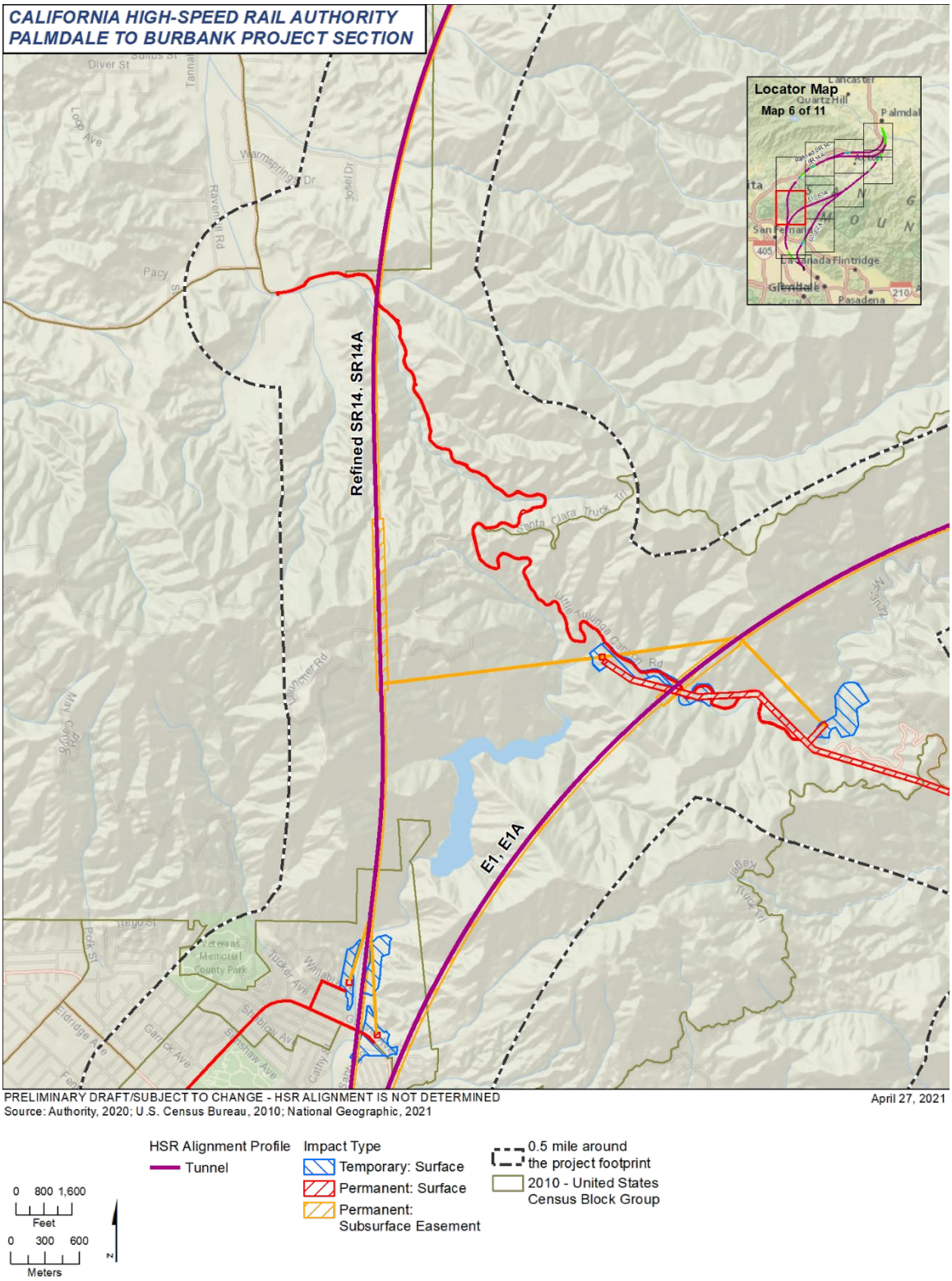

Figure 3.12-7 Population and Community Resource Study Area (Map 6 of 11)

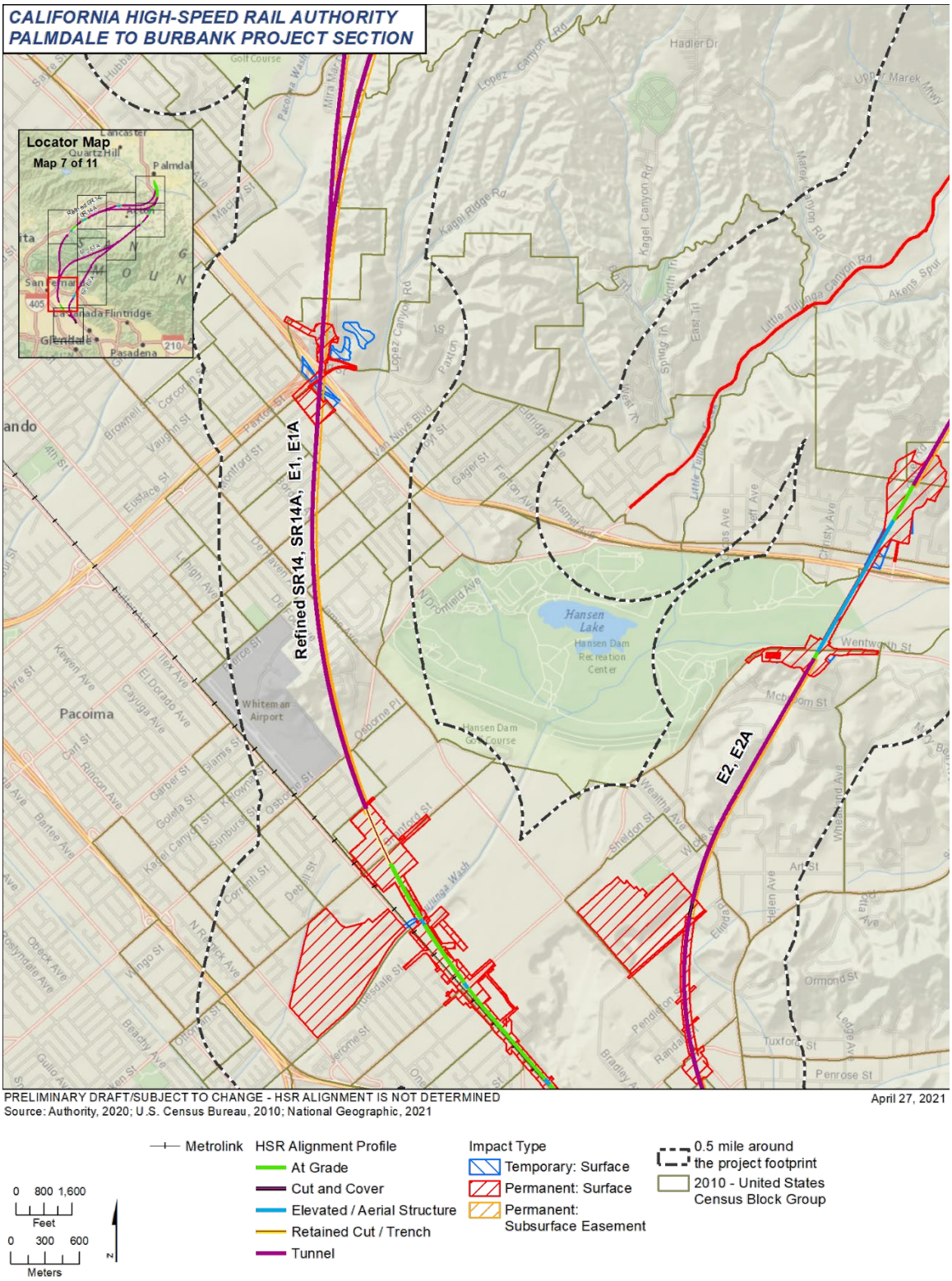

Figure 3.12-8 Population and Community Resource Study Area (Map 7 of 11)

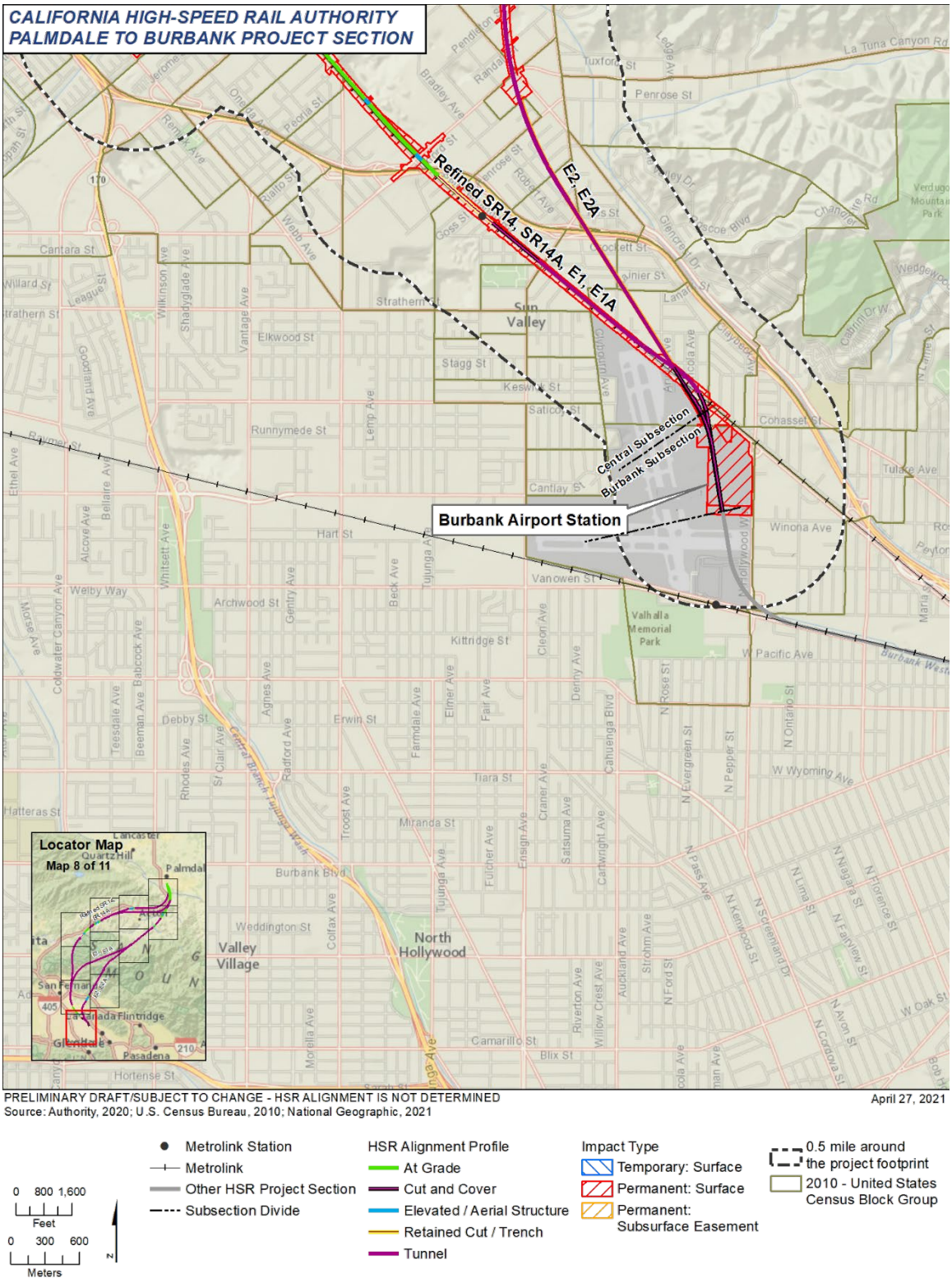

Figure 3.12-9 Population and Community Resource Study Area (Map 8 of 11)

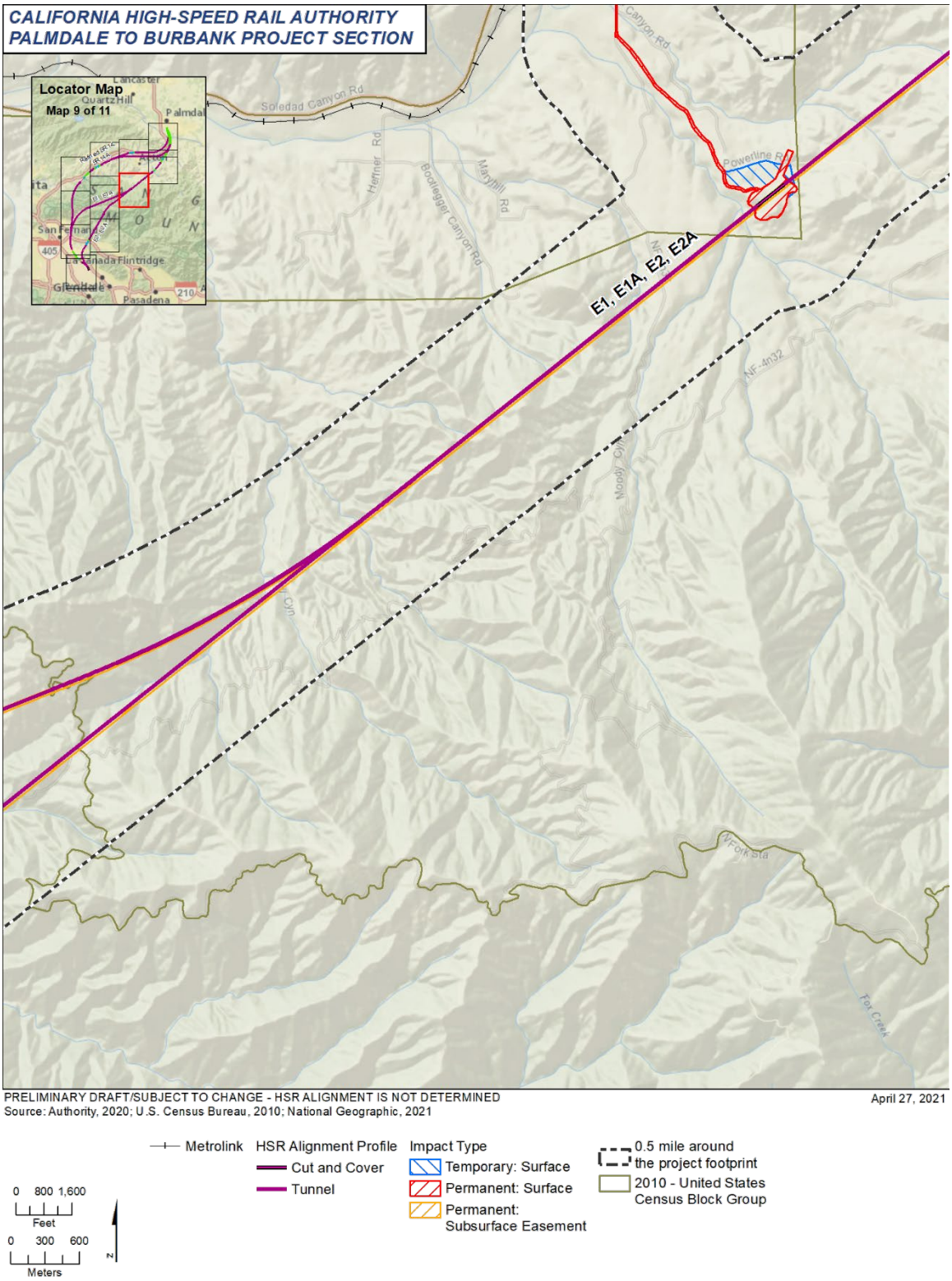

Figure 3.12-10 Population and Community Resource Study Area (Map 9 of 11)

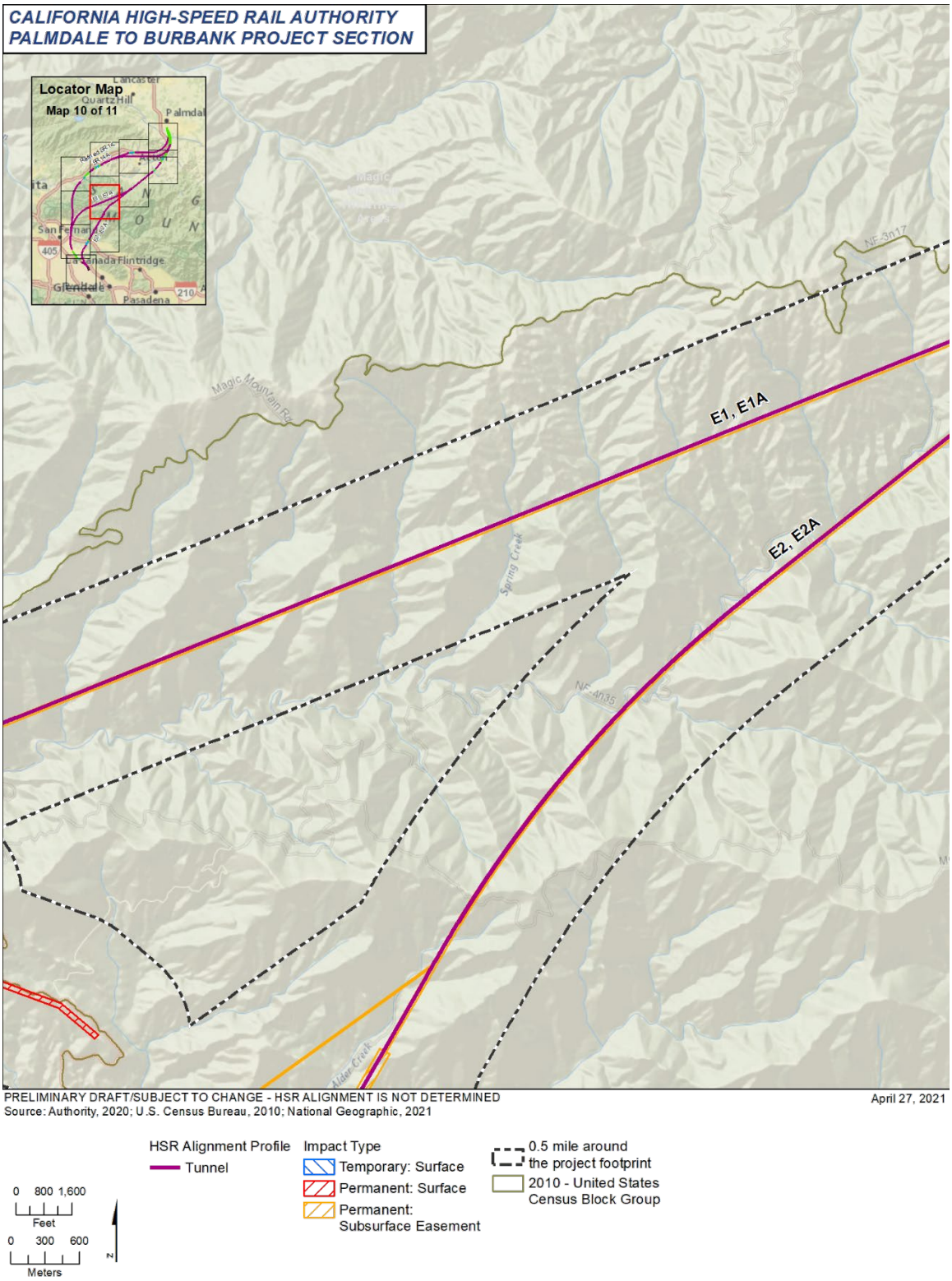

Figure 3.12-11 Population and Community Resource Study Area (Map 10 of 11)

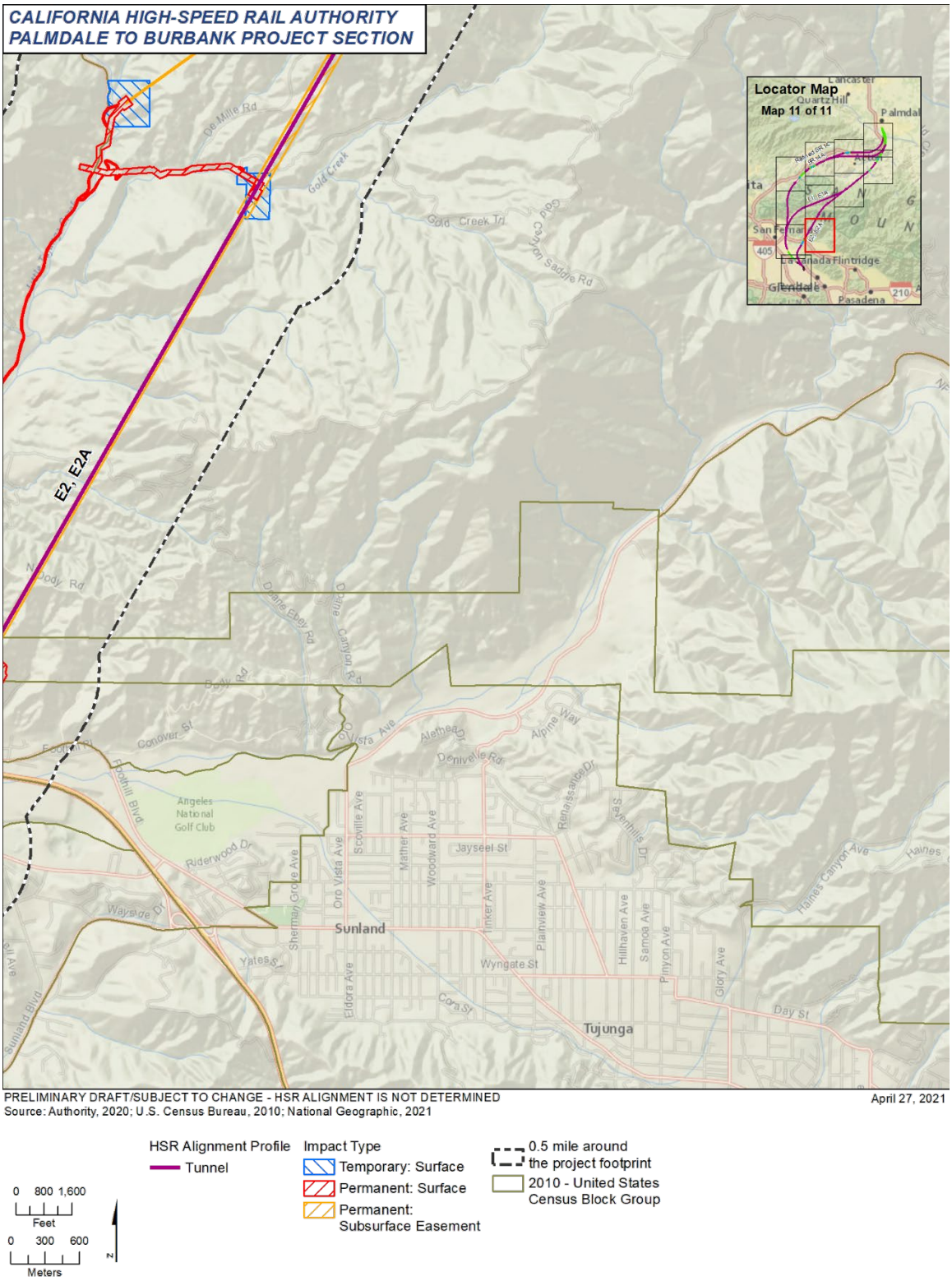

Figure 3.12-12 Population and Community Resource Study Area (Map 11 of 11)

Displacement and Relocation Resource Study Area

This analysis considers displacement and relocation impacts on surrounding communities. The study area for the displacements analysis includes the total area that would be disturbed during construction and/or used during operations. The right-of-way includes the areas needed for the project components, and portions of parcels beyond the necessary right-of-way that would need to be acquired for management and maintenance activities. Where the remaining portion would be too small to sustain the parcel's current use without other major modifications, those acquisitions would be considered full acquisitions. Other parcels may be acquired for storage or stockpiling of construction materials and equipment. Properties that would be acquired for the rights-of-way of each Build Alternative are further described in the Draft Relocation Impact Report (Authority 2019b).

For the purposes of this analysis, the displacement and relocation RSA comprises all the cities and unincorporated communities where displacements would occur from construction of any of the HSR alternatives. These specifically include the cities of Palmdale, Burbank, and the city of Los Angeles neighborhoods of Lake View Terrace, Shadow Hills, Pacoima, and Sun Valley (depicted later in document on Figure 3.12-14). The following unincorporated Los Angeles County communities are also included within the RSA: Acton, Agua Dulce, Southeast Antelope Valley, and Tujunga Canyons. The replacement area is defined as the area containing the cities, neighborhoods, and communities affected by the Build Alternative footprint, and nearby cities, neighborhoods, and communities that may provide additional replacement site options.

Economic Resource Study Areas

This section considers both regional and local economic impacts of the project, including impacts on city and county tax revenues, job creation, school district funding, and agricultural production. Therefore, the RSA for economic impacts is Los Angeles County. Within this economic RSA, this analysis describes the cities of Lancaster, Palmdale, Los Angeles, and Burbank in detail because of their physical proximity to the proposed HSR station areas. Potential effects on employment are evaluated for all of Los Angeles County.

Children's Health and Safety Resource Study Area

This analysis evaluates a variety of resource topics for their potential to result in health and safety effects on children. For the purposes of this analysis, children are defined as the population within the study area age 19 or younger. The RSA for this analysis includes schools, daycare facilities, and recreation areas where children are likely to congregate within 1,000 feet of the Build Alternative footprint. Within this RSA, the effects of noise, air quality, traffic, and hazardous materials could affect children based on impact criteria for those resources.

3.12.4.2 Impact Avoidance and Minimization Features

IAMFs are project features the Authority has incorporated into each of the six Build Alternatives for purposes of the environmental impact analysis. The full text of the IAMFs that are applicable to the Palmdale to Burbank Project Section is provided in Volume 2, Appendix 2-E, Impact Avoidance and Minimization Features.

The following IAMFs were incorporated into the socioeconomics and communities analysis:

- **SOCIO IAMF#1**: Construction Management Plan—This IAMF describes the Authority's commitment to prepare a construction management plan (CMP) for construction. Prior to construction, the contractor will prepare a CMP, including measures to minimize impacts on low-income households and minority populations.
- **SOCIO-IAMF#2**: Compliance with Uniform Relocation Assistance and Real Property Acquisition Policies Act—This IAMF describes the Authority's commitment to comply with the Uniform Act, as amended. The provisions of the Uniform Act, a federally mandated program, will apply to all acquisitions of real property or displacements of persons resulting from this federally assisted project.

- **SOCIO-IAMF#3**: Relocation Mitigation Plan—This IAMF describes the Authority's commitment to prepare a relocation mitigation plan prior to construction. Before any acquisitions occur, the Authority will develop a relocation mitigation plan, in consultation with affected cities, counties, and property owners. In addition to establishing a program to minimize the economic disruption related to relocation, the relocation mitigation plan will be written in a style that also enables it to be used as a public information document.

In addition to the Socioeconomics and Communities IAMFs described above, the following IAMFs are applicable to socioeconomics and communities:

- **NV-IAMF#1**: Noise and Vibration
- **AQ-IAMF#1**: Fugitive Dust Emissions
- **AQ-IAMF#2**: Selection of Coatings
- **AQ-IAMF#6**: Reduce the Potential Impact of Concrete Batch Plants
- **HMW-IAMF#5**: Demolition Plans
- **HMW-IAMF#6**: Spill Prevention
- **PUE-IAMF#2**: Irrigation Facility Relocation
- **PUE-IAMF#4**: Utilities and Energy
- **SS-IAMF#1**: Construction Safety Transportation Management Plan
- **SS-IAMF#2**: Safety and Security Management Plan
- **TR-IAMF#2**: Construction Transportation Plan
- **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

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

3.12.4.3 Methods for NEPA and CEQA Impact Analysis

Overview of Impact Analysis

This section describes the sources and methods the Authority used to analyze potential project impacts on socioeconomics and communities. These methods apply to both NEPA and CEQA analyses unless otherwise indicated. Refer to Section 3.12.4.4, Method for Evaluating Impacts under NEPA, and Section 3.12.4.5, Method for Determining Significance under CEQA, for a description of the general framework for evaluating impacts under NEPA and CEQA.

Disruption or Division of Established Communities

For the purposes of this analysis, a community is a population rooted in one place where the daily life of each member involves contact with and dependence on other members. Communities within the RSA were identified through a review of local and regional plans, census information, and aerial imagery. Community cohesion is defined as the degree of interaction among the individuals, groups, and institutions that make up a community (Caltrans 2011). Infrastructure and transportation projects can create physical barriers that restrict movement and visibility between parts of a community. Additionally, infrastructure and transportation projects can produce

psychological barriers when the perceived cohesiveness or connectedness of a community is diminished. This analysis considers the potential for community division effects to occur within an established community. Although evaluating a perceived psychological barrier relies on subjective interpretation, the division of a community can be readily apparent and/or visually identifiable (e.g., when a road or wall bisects an existing neighborhood).

This section evaluates community disruption and division from construction of the Palmdale to Burbank Project Section by analyzing areas where the Build Alternative footprint would be constructed within or near established communities. Although community impacts may persist during the operations phase, this analysis considers all community division and disruption impacts to be construction impacts because they would originate during construction; no new community impacts would occur during project operation.

The analysis of community disruption and division considers potential land-use impacts, changes to visual quality, increases in noise, increases in traffic, and growth-related effects. The analysis of community cohesion considers effects from the displacement and/or relocation of residences, businesses and community facilities, or alteration of the physical shape, character, or function of communities. Impacts on access to facilities and services, including those facilities considered to be an important source of community character or community cohesion, are also evaluated.

Baseline information for this analysis includes review of aerial photographs and geographic information system datasets showing the spatial relationship between the proposed alternative footprints and existing community facilities, and the review of regional and local plans (see Section 3.12.2.3) to identify unique attributes of affected communities. The footprint for each Build Alternative was overlain on an aerial map of each identified community in the RSA to identify temporary or permanent barriers that would be created by the project and whether such barriers would isolate portions of a community, separate residents from important community facilities or services, or alter the current level of access to such resources. This analysis considers impacts associated with the project at the community and neighborhood level in order to capture localized impacts.

Displacement and Relocation of Local Residents, Businesses, and Community Facilities

The project would traverse a spectrum of communities, ranging from rural residential areas to more densely populated suburban and urban areas. Where ancillary features (e.g., access roads) would be necessary, existing infrastructure would be used whenever feasible. Within the cities of Palmdale, Los Angeles, and Burbank, the project would be located predominantly along existing rail corridors. In other areas, engineering constraints and avoidance of environmental impacts require deviation from these corridors, and the Build Alternatives would traverse existing neighborhoods and communities. In many cases, the project alignment would be able to cross underneath communities in bored tunnels. In some locations, deviation from existing rail corridors would require at-grade construction, property acquisitions, and relocation of households, businesses, or community facilities.

Land use displacements were determined by evaluating the extent to which the project would impact land uses within the footprint and identifying those properties where the current use would not be able to continue after construction. For this analysis, project design files showing the extent of the project were imported into a geographic information systems dataset along with parcel boundary data from the Los Angeles County Assessor to identify situations where the proposed project facilities would affect a building, driveway, parking lot, or other key feature of a property that may affect that feature's viability after construction.

Based on the nature of impacts, the Authority determined where a full acquisition, partial acquisition, permanent easement (surface, subterranean, or aerial), temporary easement, or some combination of these would be required. These decisions were based on experience acquiring properties affected by other regional transportation projects. Generally, full acquisitions were designated where a significant portion of the structure or structures comprising the property's principal dwelling or business facility would be within the area to be acquired for the HSR right-of-way or for an extended period during construction. Similarly, where a property's

structures would not be affected, but any physical component critical to a property's intended use (such as parking, access, or open space used for storage of goods or equipment) would be acquired, the acquisition would be considered a full acquisition.

If the area required for the project appeared not to be critical to the property's primary function as a residence or business and/or the remaining portion of the property could be reconfigured to continue serving its purpose without significant disruption to occupants, a partial acquisition was determined. In some instances, aerial or subsurface rights for utility facilities or support structures were required, but little to no impact on surface operations would persist after construction (i.e., no displacement). In some circumstances, temporary rights might be required from property owners for materials storage, construction activities, or access, but these activities would not impact the primary function of the property or cause undue disruption to the occupants, and the area could revert to its former use after construction activities were completed. In all cases, depending on the acquisition required from each property, the Authority determined whether the acquisition would result in the displacement of some or all of the land uses. These determinations were added to the impacted parcels layer for use in later identifying the number and type of displacements.

Identifying potential replacement sites for residential, commercial, and industrial displacements required a search for properties currently for sale or lease within the project's replacement area cities. Available units were tallied for each city within the replacement area and compared with the number of displacements in those cities. This process is referred to here as a "gap analysis." For the purposes of this analysis, a larger number of displacement sites than are required to accommodate the displacements constitutes a surplus; an insufficient number of replacement sites is a deficit. For further discussion of the methodology used to analyze displacement and relocation, refer to Section 4.2 of the Draft Relocation Impact Report (Authority 2019b).

Economic Effects

There are four types of economic impacts considered in this analysis: property and sales tax revenue changes, employment, changes in school district funding, and economic effects on agriculture (Authority 2017).

Property and Sales Tax Revenue Changes

Property Tax

Los Angeles County Assessor parcel data reflecting the assessed value of all acquired parcels for each alternative were used to determine property tax impacts from HSR parcel acquisitions. In addition, there would be partial acquisitions that would not substantially affect ongoing use of a property but may reduce the assessed value for future property tax purposes. For the "partial acquisition" parcels identified, this analysis assumed that the decrease in land and improvement value from a partial acquisition would be equal to the actual land area ratio being acquired (Authority 2019a).

Because the percent of taxes allocated to the cities, county, and school districts varies substantially by tax rate area (there are typically multiple tax rate areas within a city), this analysis used a midpoint for the city allocation of taxes for the cities of Burbank and Los Angeles, and the typical county tax rate for those same cities and the unincorporated areas between Palmdale and Santa Clarita.

Sales Tax

To calculate sales tax revenue changes in the community, the analysis uses project expenditures and displacements identified in the Draft Relocation Impact Report (Authority 2019b).

To estimate the loss in sales tax revenues to local governments, this analysis uses the following tax rates: the State allocation of 1 percent to local municipalities, 0.25 percent to the county, and 1.5 percent total for Proposition A, Proposition C, and Measure R voter-approved add-on sales taxes for local transportation improvements in Los Angeles County. In addition, there is a total local tax share of 2.87 percent (Authority 2019a). For additional information, including qualitative discussion of changes in sales tax revenue resulting from commercial and

industrial business displacement, and calculated annual sales tax revenue associated with construction of the Palmdale to Burbank Project Section, refer to Appendix C, Economic Analysis, of the Community Impact Assessment (Authority 2019a).

Employment

To evaluate job creation during the construction and operation periods of the project, the Bureau of Economic Analysis' Regional Input-Output Modeling System (RIMS) II model and bill-of-goods method (see Appendix 3.18-A, RIMS II Modeling Details) for Los Angeles, was used to estimate the region-wide potential direct, indirect, and induced job creation resulting from project spending in the construction and manufacturing sectors.[4] The RIMS II modeling performed in support of the construction analysis for evaluating regional growth is based on a set of capital cost estimates that have since been revised and adjusted between approximately 4% and 10% less (average -6.6%). These revisions are relatively small and do not change the overall impact conclusions of the Palmdale to Burbank Draft EIR/EIS. Changes in employment associated with operations and maintenance of the project and other changes in employment generation as a result of the project's changes to connectivity and growth in the overall regional economy were estimated based on Appendix 6-A, High-Speed Rail Operating and Maintenance Cost for Use in EIR/EIS Project-Level Analysis. This analysis also includes the evaluation of whether job growth would require new public facilities, and if construction of these facilities would result in environmental impacts. For further discussion of employment impacts and the methodology for analyzing such impacts, refer to Section 3.18, Regional Growth, and Appendix 3.18-A, RIMS II Modeling Details.

Changes in School District Funding

The Palmdale to Burbank Project Section has the potential to affect local property tax revenues allocated to school districts by removing land acquired for right-of-way from the property tax assessment roll. It could also affect average daily attendance-based funding sources by potential relocation of students outside of their current school districts. Therefore, the school district funding analysis focuses on the Palmdale to Burbank Project Section's potential impacts on these key revenue streams.

Total student displacements in each district were estimated and compared with the number of vacant housing units in that district to determine whether a large number of displaced residents may be forced to relocate outside of their current school district. Where displaced residents would have to relocate to homes in a different school district, changes in school district funding may occur.

Reduced property tax revenues to local school districts resulting from the permanent removal of privately owned properties from tax rolls were estimated for all permanent property acquisitions. These impacts were estimated quantitatively as the estimated reduction in property tax revenue for local school district budgets.

In addition, 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 Build Alternative 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.

Economic Effects on Agriculture

Agricultural properties were identified using the same data and methodology used to identify residential displacements (described above). However, as discussed in Section 3.14, Agricultural

[4] Construction is assumed to take place from 2020 to 2027 for the Refined SR14 and E1 Build Alternatives and from 2020 to 2028 for the E2 Build Alternative. For each Build Alternative, 2023 is assumed to be the peak year of construction. For the purposes of this analysis, delays are not expected to change the magnitude of impacts. Operations would commence upon completion of construction.

Farmland and Forest Land, there are no Williamson Act, Farmland Security Zone, Timberland Protection, or any other agricultural preservation contract lands within the RSA. An electrical utility line associated with the Refined SR14 and SR14A Build Alternatives would span an area of Important Farmland, but would not convert this land to a non-agricultural use. No other project features would be located on Important Farmland and no agricultural facilities would be displaced. Therefore, economic effects on agriculture are discussed qualitatively within this section, but no calculation of the reduction in agricultural projection was necessary.

The E1, E1A, E2, and E2A Build Alternatives would include aboveground alignment that would traverse grazing land south of Blum Ranch. and the Refined SR14, SR14A, E1, and E1A Build Alternatives would locate construction staging areas on grazing land in Sylmar east of Veterans Memorial County Park and near the I- 210/SR 118 interchange. As evaluated in Section 3.14, Agricultural Farmland and Forest Land, livestock in each of these areas are unconfined and can roam about freely. Additionally, because there are no physical qualifications, such as soil quality, for land to qualify as grazing land beyond livestock grazing on the land, livestock could easily move to other open lands without impacting animal husbandry operations.

Children's Health and Safety

In accordance with EO 13045, the Authority conducted a demographic analysis, review of project alternatives in relation to schools and childcare facilities, and a qualitative assessment of whether the project would result in children's environmental health and safety risks. The environmental documentation prepared in support of this Draft EIR/EIS was used to support this analysis. Project effects pertaining to the following environmental topics were deemed to pose the greatest threat to children's health and safety (provided in order of the resource topic section numbering used in this Draft EIR/EIS):

- Section 3.2, Transportation
- Section 3.3, Air Quality and Global Climate Change
- Section 3.4, Noise and Vibration
- Section 3.5, Electromagnetic Fields and Electromagnetic Interference (EMF/EMI)
- Section 3.10, Hazardous Materials and Wastes
- Section 3.11, Safety and Security
- Section 3.15, Parks, Recreation, and Open Space
- Section 3.19, Cumulative Impacts

Accordingly, this analysis evaluates these topics for their potential to result in health and safety effects on children. Effects on children's health and safety are defined as follows (the associated resources are provided in parentheses):

- Potential safety risks to children, especially where the alternatives are located near areas where children congregate (Transportation; EMF and EMI; Safety and Security; Parks Recreation and Open Space; and Cumulative Impacts).
- Potential respiratory impacts, including asthma from air pollutant emissions and generation of fugitive dust (Air Quality and Global Climate Change).
- Potential noise impacts on health and learning, especially in areas where children congregate, such as schools, park, and residential areas (Noise and Vibration).
- Impacts from the use of chemicals, such as dust suppression methods and hazardous materials (Hazardous Materials and Wastes).

Children's health and safety is discussed in detail in Appendix 3.12-C, Children's Health and Safety Risk Assessment.

3.12.4.4 Method for Evaluating Impacts under NEPA

CEQ NEPA regulations (40 C.F.R. Parts 1500–1508) provide the basis for evaluating project effects (Section 3.1.4.4). As described in Section 1508.27 of these regulations, the criteria of context and intensity are considered together when determining the severity of the change

introduced by the Palmdale to Burbank Project Section. “Context” is defined as the affected environment in which a proposed project occurs. “Intensity” refers to the severity of the effect, which is examined in terms of the type, quality, and sensitivity of the resource involved; location and extent of the effect; duration of the effect (short- or long-term); and other considerations of context. Beneficial effects are also considered. When no measurable effect exists, no impact is found to occur. For the purposes of NEPA compliance, the same methods used to identify and evaluate impacts under CEQA are applied here.

3.12.4.5 Method for Determining Significance under CEQA

The Authority is using the following thresholds to determine if a significant impact on socioeconomics and communities would occur as a result of the project. A significant impact is one that would:

- Physically divide an established community
- Displace substantial numbers of existing people or housing units, necessitating the construction of replacement housing elsewhere
- Result in substantial adverse 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 would 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, by themselves, are not treated as significant effects on the environment. Therefore, no CEQA significance criteria are provided for economic impacts. Section 15064(e) of the CEQA Guidelines also notes that “economic or social changes may be used, however, to determine that a physical change shall be regarded as a significant effect on the environment.”

3.12.5 Affected Environment

The affected environment section describes the existing demographic and economic conditions in the region, communities, and within the socioeconomics RSAs for the Palmdale to Burbank Project Section. As discussed in Section 3.12.4.1, the RSAs for socioeconomics impacts include Los Angeles County; the cities of Lancaster, Palmdale, Santa Clarita, Los Angeles, San Fernando, and Burbank; and the unincorporated communities of Acton and Agua Dulce, as well as the following neighborhoods: Sylmar, Pacoima, Sun Valley, Lake View Terrace, and Shadow Hills.

The affected environment is described for three settings: social, housing, and economics. The discussion for each of these settings focuses on the differences among communities within the relevant RSA. This allows for comparison across communities to highlight specific issues that are important in evaluating the context in which impacts may occur. The areas pertaining to the social and housing settings are shown on Figure 3.12-1 through Figure 3.12-12, and on Figure 3.12-13 and Figure 3.12-14 shown later in the document. The areas pertaining to the economic setting are shown in Figure 3.12-15 through Figure 3.12-18 depicted later in the document; as shown in these figures, within this economic RSA, the cities of Lancaster, Palmdale, Los Angeles, and Burbank are described in detail because of their physical proximity to the proposed HSR station areas. The Community Impact Assessment (Authority 2019a) provides detailed information regarding the affected environment for socioeconomics and communities.

3.12.5.1 Social Setting

This section provides an overview of regional demographic characteristics and population trends within the population and community RSA. Specific demographic characteristics, population trends, and existing levels of community cohesion within the population and community RSA are described below. Factors such as age, household, and disability characteristics help to identify any special relocation needs and the availability of replacement housing. Race and income

information help to identify disadvantaged communities (for further discussion regarding disadvantaged communities, refer to Chapter 5, Environmental Justice.

Table 3.12-2 summarizes the existing population and projected population growth for Los Angeles County and cities within the population and community RSA. Table 3.12-3 summarizes population density, which serves as an indicator of the comparative scale and character of a community. Demographic characteristics and population trends are provided for the city of Lancaster and the city of Palmdale for further context; however, impact evaluations pertaining to socioeconomics and communities for the cities of Lancaster and Palmdale are discussed in the Bakersfield to Palmdale Project Section EIR/EIS.

Table 3.12-2 Existing and Projected Population, County and Cities in the Resource Study Area, 2015-2040

Jurisdiction	U.S. Census 2010	Estimated 2015 Population	Projected Population in 2040	Projected Growth from 2015 to 2040	
				Number of Persons	Percent (%)
Los Angeles County (inclusive of all incorporated cities)	9,818,605	10,170,292	11,514,000	1,343,708	13
City of Lancaster	156,633	161,103	209,900	48,787	30
City of Palmdale	152,750	158,351	201,500	43,149	27
City of Santa Clarita	176,320	182,371	262,200	79,829	43
City of Los Angeles	3,792,621	3,971,883	4,609,400	637,517	16
City of San Fernando	23,645	24,931	26,900	1,969	8
City of Burbank	103,340	105,319	118,700	13,381	13

Sources: U.S. Census, 2015a; Southern California Association of Governments, 2016

Table 3.12-3 Regional Population Density, 2015

Jurisdiction	Estimated 2015 Population	Area (Square miles)[1]	Density (Persons per square mile)
Los Angeles County (inclusive of all incorporated cities)	10,170,292	4,058	2,506
City of Lancaster	161,103	95	1,703
City of Palmdale	158,351	106	1,494
City of Santa Clarita	182,371	53	3,461
City of Los Angeles	3,971,883	469	8,474
City of San Fernando	24,931	2	10,388
City of Burbank	105,319	17	6,087

Source: U.S. Census Bureau, 2015b
[1] Land area is updated by the U.S. Census every 10 years; the area shown here is from the 2010 Census.
Values have been rounded to the nearest whole number.

As of 2015, the population of Los Angeles County was estimated at more than 10.1 million, making Los Angeles the most populous county in the United States. As shown in Table 3.12-2, Los Angeles County is projected to grow by approximately 1.3 million persons (13 percent)

between 2015 and 2040. Los Angeles County's density of 2,506 people per square mile (Table 3.12-3) does not necessarily reflect the density of the population and community RSA because population density varies widely between the densely populated Los Angeles Basin and the sparsely populated San Gabriel Mountains and the Antelope Valley.

As shown in Table 3.12-3, the northern portions of the population and community RSA are less densely populated than the southern portions; Palmdale has a population density of approximately 1,494 persons per square mile while the comparable figure for Burbank is approximately 6,087 people per square mile. Burbank is an established urban center with a long-standing connection to the entertainment industry, whereas the cities of Lancaster and Palmdale are younger, developing urban centers that were incorporated as recently as 1977 and 1962, respectively. Although Lancaster and Palmdale have relatively low population densities, both cities are expected to experience growth of approximately 30 and 27 percent, respectively, by 2040, the most of any city in the population and community RSA, except Santa Clarita. In between Palmdale and Burbank, the Build Alternatives would traverse unincorporated lands and communities that are less densely populated within the ANF, including the communities of Acton and Agua Dulce (depicted later in the document on Figure 3.12-13).

Table 3.12-4 summarizes racial and ethnic characteristics within Los Angeles County and communities in the RSA. Like much of Southern California, the communities and cities within the RSA have substantial non-White and Hispanic populations (minorities). Compared to the other cities in the RSA, Santa Clarita and Burbank have a smaller proportion of their total population that is minority (47.6 percent and 43.3 percent, respectively) than the average for Los Angeles County (72.8 percent). The city of San Fernando has the highest minority percentage at 93.5 percent. Palmdale also has a high minority percentage at 77.1 percent. The cities of San Fernando and Los Angeles all have larger percentage Hispanic populations than the average for Los Angeles County.

Table 3.12-4 Regional Race and Ethnicity, 2015

Jurisdiction	Race (Percent of Total)						Ethnicity (Percent of Total)	Percent Minority[2]
	White	Black or African American	American Indian and Alaska Native	Asian	Native Hawaiian or Other Pacific Islander	Other[1]	Hispanic	
Los Angeles County	53.4	8.3	0.5	14.0	0.3	23.4	48.1	72.8
City of Lancaster	60.2	24.2	0.7	4.2	0.5	10.3	37.7	65.8
City of Palmdale	42.4	13.8	0.7	4.4	0.1	38.6	56.6	77.1
City of Santa Clarita	73.7	2.6	0.4	9.4	0.1	13.8	31.4	47.6
City of Los Angeles	52.6	9.2	0.6	11.5	0.2	25.9	48.6	71.5
City of San Fernando	67.2	2.3	0.2	1.1	1.0	28.2	90.0	93.5
City of Burbank	73.6	1.9	0.2	11.5	0.0	12.7	35.8	43.3

Source: U.S. Census Bureau, 2015b

[1] Includes "Some other race alone" and "Two or more races."

[2] Minorities are defined as all individuals not identified as "White only" in the U.S. Census, including those who identify as Hispanic. The minority percentage was thus calculated by subtracting the portion of the population that is both white and not Hispanic from the total population.

Table 3.12-5 summarizes regional household income and low-income levels. Median household income varies among the cities in the population and community RSA. Santa Clarita has the highest median household income at $83,178 per year, and Lancaster has the lowest ($45,130 per year). Likewise, Santa Clarita has the lowest percentage of households living in poverty (9.3 percent), and Lancaster has the highest (22.7 percent). Lancaster, Palmdale, and the city of Los Angeles each have higher low-income rates than the countywide average of 18.4 percent.

Table 3.12-5 Regional Household Income, 2015

Jurisdiction	Median Household Income	Percent of Low-Income Households
Los Angeles County	$55,870	18.4
City of Lancaster	$45,130	22.7
City of Palmdale	$54,921	21.3
City of Santa Clarita	$83,178	9.3
City of Los Angeles	$49,682	22.4
City of San Fernando	$55,044	18.3
City of Burbank	$66,111	10.1

Source: U.S. Census, 2015b

Table 3.12-6 provides a breakdown of the sensitive population percentages in Los Angeles County and each of the cities within the RSA. Sensitive populations include the elderly (over age 65), the disabled, low-income, female heads of households, and linguistically isolated residents. Compared to Los Angeles County, a higher proportion of sensitive populations are present in the city of Palmdale (low-income and female heads of households), the city of Los Angeles (low-income, linguistically isolated residents, and female heads of households), the city of Burbank (the elderly), and the city of San Fernando (linguistically isolated residents and the disabled).

Table 3.12-6 Sensitive Populations in Areas of Residential Displacements, 2015

Jurisdiction	Low-Income	Elderly (Age 65 Years or Older)	LEP Households	Female Head of Household	Disabled
Los Angeles County	18.4%	11.6%	14.0%	15.8%	6.0%
City of Palmdale	21.3%	7.5%	10.2%	18.7%	5.3%
City of Santa Clarita	9.3%	10.8%	5.7%	12.4%	5.8%
City of Los Angeles	22.4%	10.9%	16.3%	18.2%	6.0%
City of San Fernando	18.3%	8.7%	19.0%	13.5%	10.7%
City of Burbank	10.1%	14.3%	10.0%	11.5%	6.0%

Source: U.S. Census, 2015
LEP = limited English proficiency

Refined SR14 and SR14A Build Alternatives Social Setting

Refined SR14 and SR14A Central Subsections

The Refined SR14 Central Subsection population and community RSA encompasses the southernmost portion of Palmdale including the unincorporated community of Harold, portions of unincorporated Acton and Agua Dulce (depicted on Figure 3.12-13), and several northern neighborhoods in the city of Los Angeles (depicted on Figure 3.12-14). The Central Subsection has a population density of approximately 340 persons per square mile, a minority population of

80.2 percent, and a median household income of $59,087 per year with a household poverty rate of 18.4 percent (Authority 2019a). Although the SR14A Build Alternative alignment varies from the Refined SR14 alignment, both RSAs include the same set of U.S. Census block groups. Therefore, the SR14A Build Alternative social setting is the same as for the Refined SR14 Build Alternative described below.

Unincorporated Communities of Acton and Agua Dulce

Acton is an unincorporated community located southwest of the Antelope Valley. The portion of Acton within the RSA is characterized by low-density residential neighborhoods. Many of these neighborhoods are not well connected to the town centers of Acton or Agua Dulce, another unincorporated community in Los Angeles County. One contributing source of community cohesion for these outlying areas is Vasquez High School, near the intersection of Sierra Highway and Red Rover Mine Road. The high school boasts “heavy community support and an active parent-teacher-student organization that positively contributes to campus culture” (AADSD 2017).

City of Los Angeles Neighborhoods

The Refined SR14 and SR14A Central Subsections also include the city of Los Angeles neighborhoods of Sylmar, Pacoima, and Sun Valley. Located south of the Pacoima Reservoir, the areas of Sylmar and Pacoima encompassed by the RSA are exurban communities that feature few areas to shop, dine, or socialize. The Hubert H. Humphrey Recreation Center offers Pacoima residents a variety of sports facilities including baseball/softball and soccer fields. Programs hosted by the recreation center include a teen center, folkloric dancing, summer and winter day camps, and a summer free lunch program (City of Los Angeles 2017). Farther south, the neighborhood of Sun Valley features a mix of residential communities separated by several large-scale industrial and mining areas. Facilities that foster community cohesion within Sun Valley include the Sun Valley Branch Library, the Burbank Islamic Center, Roscoe Elementary School, Glenwood Elementary School, and Sun Valley Park. Sun Valley Park, located near Vineland Avenue and Cantara Street, features sports programs for youth including baseball, soccer, and karate, and a community swimming pool (City of Los Angeles 2017). The Sun Valley Branch Library hosts many youth-oriented reading programs and adult social clubs, including a knitting club (Los Angeles Public Library 2017).

Refined SR14 and SR14A Burbank Subsections

The city of Burbank (shown on Figure 3.12-9) has a population density of approximately 6,040 people per square mile. The minority population in the subsection is about 43.3 percent, which is well below the county average of 72.8 percent.

The predominant minority group in the Refined SR14 and SR14A Burbank Subsections is people of Hispanic ethnicity. Median household income within the Refined SR14 Burbank Subsection is relatively high, ranging between approximately $64,000 and $67,000, with a household poverty rate of 10.1 percent. Residential communities within the subsection are mostly in Sun Valley to the north of San Fernando Boulevard. The area of Burbank encompassed by the Refined SR14 and SR14A Build Alternatives population and community RSA is characterized by industrial land uses, and much of the area within the population and community RSA is occupied by the Hollywood Burbank Airport.

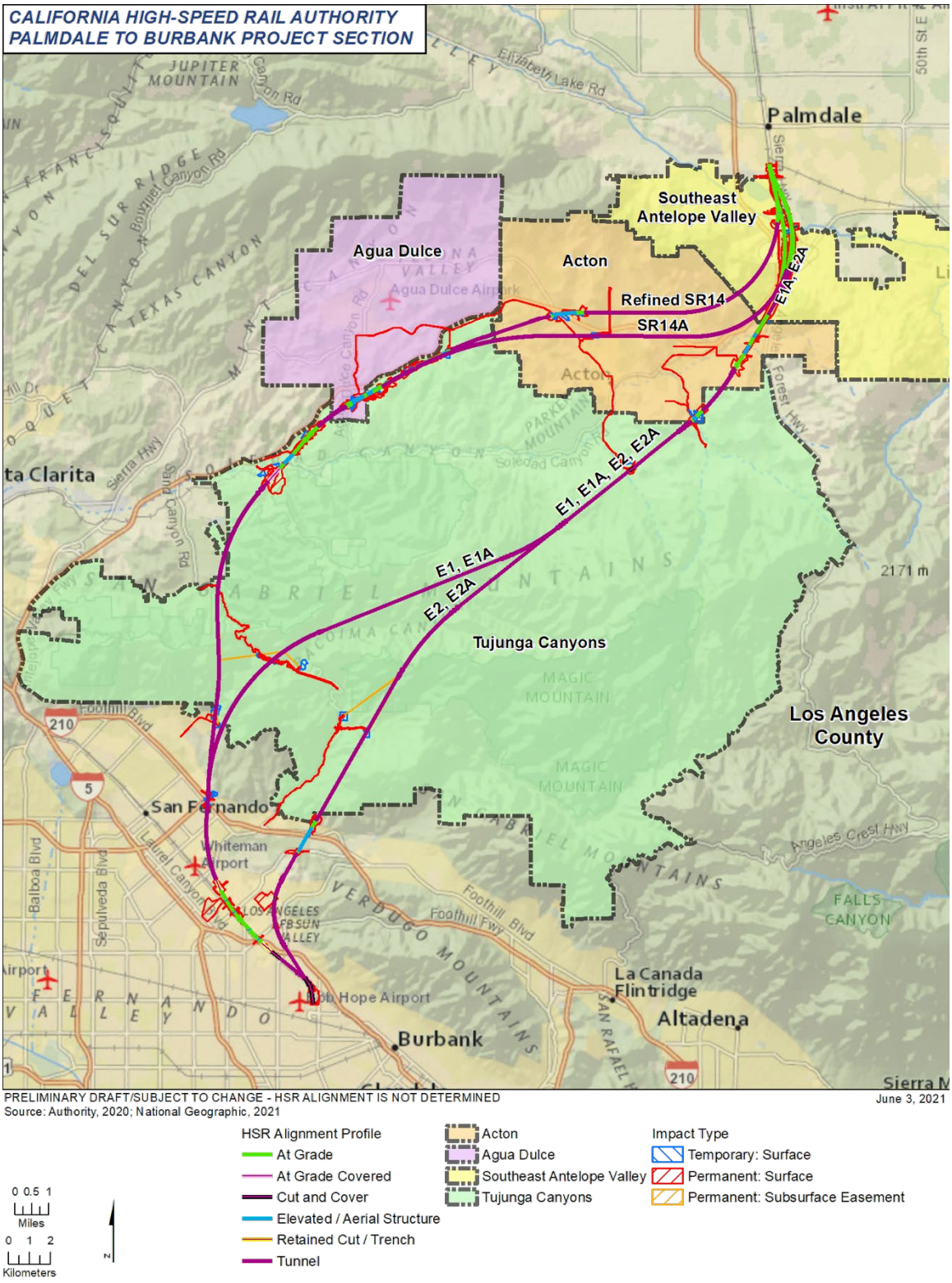

Figure 3.12-13 Unincorporated Communities Traversed by the Build Alternatives

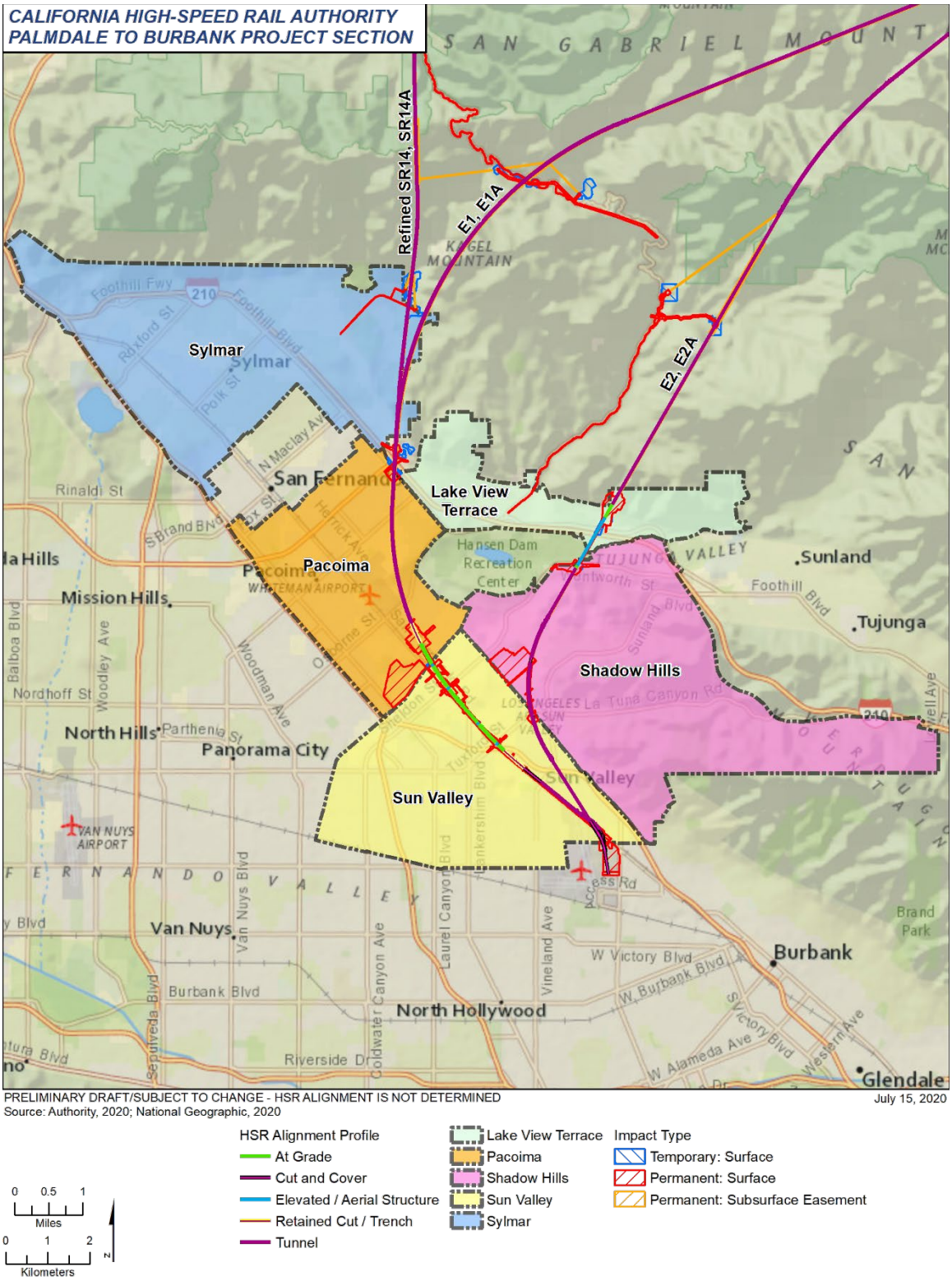

Figure 3.12-14 City of Los Angeles Neighborhoods Traversed by the Build Alternatives

E1 and E1A Build Alternatives Social Setting

Although the E1A Build Alternative alignment varies from the E1 Build Alternative alignment, both population and community RSAs include the same set of U.S. Census block groups. Therefore, the E1A Build Alternative social setting is the same as for the E1 Build Alternative described below.

In Burbank, the population and community RSA for the E1 and E1A Build Alternatives is the same as for the Refined SR14 Build Alternative, described above.[5] Therefore, only the RSA for the E1 and E1A Central Subsections is defined below. For details regarding the E1 and E1A Build Alternatives Burbank Subsection, refer to the Refined SR14 Social Setting discussion.

E1 and E1A Central Subsection

At 333 people per square mile, the E1 and E1A Central Subsections have a slightly lower population density than the Refined SR14 Central subsection. The E1 and E1A Central Subsections have a higher percentage minority population (81.7 percent) than the Refined SR14 Central Subsection (80.4 percent). As in the Refined SR14 Central Subsection, the predominant minority group within the E1 and E1A Central Subsections is people of Hispanic ethnicity. The percentage of households living in poverty within the E1 and E1A Central Subsections (approximately 17.7 percent) is higher than the percentage of households living in poverty within the Refined SR14 Central Subsection (approximately 17 percent). The E1 and E1A Central Subsections median household income (approximately $57,000) is lower than that of the Refined SR14 Central Subsection (approximately $59,000).

The population and community RSA encompass several isolated residential communities near the Southern California Edison (SCE) Vincent Substation in Acton within the northern portion of the Central Subsection (see Figure 3.12-3). Lacking commercial areas and community facilities, residents in these communities depend on access to SR 14. South of these communities, the population and community RSA covers approximately 18 miles of uninhabited land before reaching the neighborhoods of Sylmar and Pacoima. Within this portion of the Central Subsection, the E1 and E1A Build Alternatives would traverse the same communities discussed under the Refined SR14 Build Alternative social setting.

E2 and E2A Build Alternatives Social Setting

Although the E2A Build Alternative alignment varies from the E2 Build Alternative alignment, both population and community RSAs include the same set of U.S. Census block groups. Therefore, the E2A Build Alternative social setting is the same as for the E2 Build Alternative described below.

In Burbank, the population and community RSA for the E2 and E2A Build Alternatives is the same as for the Refined SR14. Therefore, only the RSA for the E2 and E2A Central Subsections are discussed below. For details regarding the E2 and E2A Burbank Subsections, refer to the Refined SR14 Social Setting discussion.

E2 and E2A Central Subsection

At 327 people per square mile, the E2 and E2A Central Subsections have a slightly lower population density than either the Refined SR14 Central Subsection or the E1 Central Subsections. The E2 and E2A Central Subsections have a lower percentage minority population (60.4 percent) than either the Refined SR14 Central Subsection (80.4 percent) or the E1 Central Subsection (81.7 percent). As with the Refined SR14 and E1 Central Subsections, the predominant minority group within the E2 and E2A Central Subsections is people of Hispanic ethnicity. The percentage of households living in poverty within the E2 and E2A Central Subsections (15.5 percent) is lower than that of either the Refined SR14 Central Subsection (16.9

[5] The E1 and E2 Burbank Subsection RSAs are identical to the Refined SR14 Burbank RSAs despite differences in the Build Alternative footprint because the 0.5-mile buffer around the footprint intersects all of the same census block groups.

percent) or the E1 Central Subsection (approximately 17.7 percent). The E2 and E2A Central Subsections median household income ($65,082) is higher than that of the Refined SR14 Central Subsection ($58,852) or the E1 Central Subsection ($57,075).

City of Los Angeles Neighborhoods

The E2 Build Alternative would continue more directly south than the Refined SR14, SR14A, E1, and E1A Build Alternatives, toward the city of Los Angeles neighborhoods of Lake View Terrace and Shadow Hills. Lake View Terrace is characterized by residential neighborhoods, many with large lots that can support horse-keeping. Most of the community facilities in Lake View Terrace are in the western part, whereas the population and community RSA encompass the eastern portion. Because of the prevalence of equestrian activities in Lake View Terrace, the Courtship Ranch equestrian facility to the east of Dominica Avenue can be considered an important element of community cohesion. The facility offers boarding for horses and trail riding facilities.

Before reaching Burbank, the E2 and E2A Build Alternatives would traverse both the Shadow Hills and Sun Valley neighborhoods. Like Lake View Terrace, Shadow Hills has a semi-rural character and features equestrian areas. Sun Valley comprises a mixture of residential, industrial, and commercial uses. In Sun Valley, the Stonehurst Recreation Center hosts adult sports leagues, youth day camps, and Friday Teen Nights (City of Los Angeles 2017d). The recreation center offers a variety of facilities including an auditorium, barbecue pits, lighted baseball diamond, community room, indoor gym with weights, equestrian center, stage, and walking paths.

3.12.5.2 Housing Setting

This section describes housing characteristics and trends within the localized displacement and relocation RSA described in Section 3.12.4.1. Housing characteristics and trends of the region (that is, Los Angeles County) are presented for context. In general, residential growth in the northern portion of the RSA (that is, the Antelope Valley) has been substantial in recent decades. Growth in the heavily urbanized portions of the displacement and relocation RSA, such as the city of Burbank, has been slower because of the area's built-out nature. Housing data and trends are provided for the city of Lancaster and the city of Palmdale for further context; however, impact evaluations pertaining to socioeconomics and communities for the cities of Lancaster and Palmdale are discussed in the Bakersfield to Palmdale Project Section EIR/EIS.

As shown in Table 3.12-7, Los Angeles County has a relatively low housing density (853 units per square mile). This is due in large part to the county's immense size of approximately 4,058 square miles, which includes sparsely populated areas such as the San Gabriel Mountains and the Antelope Valley.

Table 3.12-7 Regional Housing Characteristics (2015)

Jurisdiction	Housing Units		Occupancy (percent of total housing units)	
	Units	Housing Density (units/square mile)[1]	Vacant	Occupied
Los Angeles County	3,462,075	853	6.3	93.7
City of Lancaster	53,030	562	9.7	90.3
City of Palmdale	45,831	432	8.3	91.7
City of Santa Clarita	61,405	1,165	3.4	96.6
City of Los Angeles	1,427,355	3,046	6.9	93.1
City of San Fernando	6,453	2,723	5.3	94.7
City of Burbank	43,571	2,513	5.0	95.0

Source: U.S. Census, 2015b

Housing density varies widely among cities in the northern and southern portions of the displacement and relocation RSA. The cities of Lancaster and Palmdale each have relatively high housing densities (562 and 432 units per square mile, respectively). In addition, these cities have higher levels of vacant housing units, 9.7 percent and 8.3 percent, respectively. Relative to the county average of 6.3 percent, the city of Burbank has a low vacancy rate at 5.0 percent. Therefore, relocations would be more difficult in Burbank than in either Lancaster or Palmdale.

Table 3.12-8 illustrates characteristics of the housing stock in each of the cities within the displacement and relocation RSA. Within Los Angeles County, single-family homes (detached and attached) account for 56 percent of the housing stock. The other 44 percent comprises a range of multifamily housing units, mobile homes, boats, RVs, and vans. For cities within the displacement and relocation RSA, single-family housing units represent an even larger percentage of the housing stock. This is especially true of Lancaster (74 percent single-family) and Palmdale (82 percent single-family). Unlike the rest of the housing and business RSA, the cities of Los Angeles and Burbank each have a slight majority of multifamily units (55 percent and 51 percent respectively). Relative to the rest of the displacement and relocation RSA, these cities also have a high percentage of large multifamily housing complexes (20 units or more). Approximately 27 percent of the city of Los Angeles' housing units are in large multifamily housing complexes. Approximately 20 percent of the city of Burbank's housing units are in multifamily housing complexes. High concentrations of large housing complexes are indicative of the urban, higher-density neighborhoods in the cities of Los Angeles and Burbank. For comparison, large multifamily housing complexes account for approximately 5 percent of the housing stock in both Lancaster and Palmdale.

Table 3.12-8 Regional Housing Stock (2015)

Housing Type	Number of Housing Units (Percentage of County/City Total)						
	Los Angeles County	City of Lancaster	City of Palmdale	City of Santa Clarita	City of Los Angeles	City of San Fernando	City of Burbank
Single-Family Housing Units (detached)	1,720,032 (49.7%)	38,266 (72.2%)	36,726 (80.1%)	36,560 (59.5%)	554,006 (38.8%)	4,682 (72.6%)	19,470 (44.7%)
Single-Family Housing Units (attached)	226,435 (6.5%)	1,019 (1.9%)	649 (1.4%)	7,333 (11.9%)	86,296 (6.0%)	500 (7.7%)	1,642 (3.8%)
Multifamily Housing (2 units)	85,702 (2.5%)	622 (1.2%)	336 (0.7%)	382 (0.6%)	39,481 (2.8%)	201 (3.1%)	1,247 (2.9%)
Multifamily Housing (3-4 units)	194,399 (5.6%)	2,153 (4.1%)	966 (2.1%)	2,590 (4.2%)	81,654 (5.7%)	175 (2.7%)	3,115 (7.1%)
Multifamily Housing (5-9 units)	270,303 (7.8%)	2,849 (5.4%)	1,733 (3.8%)	4,000 (6.5%)	123,917 (8.7%)	319 (4.9%)	4,861 (10.9%)
Multifamily Housing (10-19 units)	267,561 (7.7%)	1,643 (3.1%)	1,497 (3.3%)	2,736 (4.4%)	141,108 (9.9%)	300 (4.6%)	4,450 (10.2%)
Multifamily Housing (20-49 units)	314,535 (9.1%)	3,104 (5.9%)	924 (2.0%)	1,653 (2.7%)	193,583 (13.6%)	131 (2.0%)	4,080 (9.4%)
Multifamily Housing (50+ units)	328,155 (9.5%)	0 (0%)	1,274 (2.8%)	3,887 (6.3%)	198,229 (13.9%)	96 (1.5%)	4,607 (10.6%)

Housing Type	Number of Housing Units (Percentage of County/City Total)						
	Los Angeles County	City of Lancaster	City of Palmdale	City of Santa Clarita	City of Los Angeles	City of San Fernando	City of Burbank
Mobile Homes	52,995 (1.5%)	3,301 (6.2%)	1,726 (3.8%)	2,237 (3.6%)	8,471 (0.6%)	49 (0.8%)	99 (0.2%)
Boat, RV, Van	1,958 (<0.1%)	113 (0.2%)	0 (0%)	27 (<0.1%)	610 (<0.1%)	0 (0%)	0 (0%)
Total	**3,462,075**	**53,030**	**45,831**	**61,405**	**1,427,355**	**6,453**	**43,571**

Source: U.S. Census, 2015b
< = less than

Table 3.12-9 elaborates on trends in vacancy rates among cities within the displacement and relocation RSA and details average home values and foreclosure rates. Average home values can serve as an indicator of an area's ability to provide affordable replacement housing for households that may be relocated because of project implementation. The cities of Lancaster and Palmdale each have average home values that are approximately half of the Los Angeles County average. At $722,000, the city of Burbank has the highest average home value within the displacement and relocation RSA.

Table 3.12-9 Average Home Value, Foreclosures, Total Units, and Vacancy

Jurisdiction	Average Home Value as of December 2016[1]	Homes Foreclosed per 10,000 as of December 2016[1]	2000 Total Housing Units (Vacancy Rate)	2016 Total Housing Units (Vacancy Rate)[1]
Los Angeles County	$548,000	0.67	3,270,886 (4.2%)	3,539,424 (6.2%)
City of Lancaster	$234,000	2.85	51,835 (9.3%)	53,674 (8.9%)
City of Palmdale	$260,000	1.55	37,342 (7.5%)	48,027 (7.6%)
City of Santa Clarita	$494,000	0.62	51,972 (3.1%)	64,431 (4.9%)
City of Los Angeles	$605,000	0.75	1,337,604 (4.7%)	1,459,041 (6.9%)
City of San Fernando	$426,000	1.62	5,932 (2.7%)	6,489 (5.2%)
City of Burbank	$722,000	0.36	42,852 (2.9%)	45,075 (5.2%)

Sources: ESRI, 2016; Zillow Group, 2016
[1] Data from 2016 is used since data from the 2015 project baseline year is not available.

Table 3.12-10 summarizes statistics related to household size and composition for Los Angeles County and the six cities in the displacement and relocation RSA. The U.S. Census defines a family as "a group of two people or more (one of whom is the householder) related by birth, marriage, or adoption and residing together; all such people (including related subfamily members) are considered as members of one family." A family household is a household maintained by a householder who is in a family (U.S. Census 2017).

Table 3.12-10 Regional Household Size and Composition (2015)

Jurisdiction	Ownership (% of occupied housing units)		Households	
	Renter	Owner	Total Households	Average Household Size
Los Angeles County	53.6	46.4	3,242,391	3.02
City of Lancaster	41.7	58.3	47,872	3.32
City of Palmdale	35.7	64.3	42,012	3.70
City of Santa Clarita	31.0	69.0	59,314	2.98
City of Los Angeles	62.8	37.2	1,329,372	2.84
City of San Fernando	42.5	57.5	6,111	3.92
City of Burbank	58.4	41.6	41,414	2.51

Source: U.S. Census, 2015b

Renters occupy 53.6 percent of the housing units in Los Angeles County as a whole (including both incorporated and unincorporated areas). In contrast, owners occupy most of the housing units in each of the cities within the displacement and relocation RSA.[6] Although Table 3.12-10 reports that most (62.8 percent) occupied units in the city of Los Angeles are occupied by renters, the displacement and relocation RSA covers a portion of northern Los Angeles where neighborhoods such as Sun Valley, Pacoima, and Lake View Terrace are characterized by low-density, single-family residential communities (see Figure 3.12-14). Because of the predominance of single-family residential communities, these neighborhoods are likely to have a higher percentage of homeowners than the city of Los Angeles as a whole. Aside from the city of Los Angeles, Burbank is the only other city within the displacement and relocation RSA with a majority of renters. This is also consistent with the city's dense urban environment.

Housing projections for Los Angeles County and the state of California are shown in Table 3.12-11. Compared to California, Los Angeles County is projected to experience slower growth in housing stock.

Table 3.12-11 Existing Housing Units and Projected Housing Units (2015 – 2040)

Area	2015	2040	Change	Annual Average Increase
Los Angeles County	3,504,061	3,967,556	13.2%	0.5%
State of California	13,981,826	17,436,076	20.7%	0.8%

Sources: Southern California Association of Governments, 2016; U.S. Census, 2015a

[6] These data do not account for vacant housing units.

3.12.5.3 Economic Setting

Economic Indicators

Four types of economic impacts are considered: employment, property and sales tax revenue changes, changes in school district funding, and economic effects on agriculture. The Economic Setting provides context for each of these indicators.

As discussed in Section 3.12.4, Methods for Evaluating Impacts, economic effects are analyzed on both a regional and a local scale because the economic effects on fiscal revenues, job creation, and school district funding would have regional and local economic implications. When considering regional implications, the economic RSA for the project is Los Angeles County. When considering local implications, the cities of Lancaster, Palmdale, Santa Clarita, Los Angeles, San Fernando, and Burbank comprise the economic RSA because of their proximity to the Build Alternatives. The economic RSA is shown on Figure 3.12-15 through Figure 3.12-18. Economic data and trends are provided for the city of Lancaster and the city of Palmdale for further context; however, impact evaluations pertaining to socioeconomics and communities for the cities of Lancaster and Palmdale are discussed in the Bakersfield to Palmdale Project Section EIR/EIS.

General employment data for the year 2016 for Los Angeles County and the six cities within the economic RSA are presented in Table 3.12-12. Palmdale has the highest unemployment rate in the economic RSA at 7.41 percent, and Burbank has the lowest at 4.36 percent. Industry-specific employment data are available in Section 3.18, Regional Growth.

Table 3.12-12 Employment and Unemployment Rates in the Resource Study Area (2016)

Jurisdiction	Number of Employed	Number of Unemployed	Unemployment Rate
Los Angeles County	**4,778,759**	**264,495**	**5.53%**
City of Lancaster	60,627	3,691	6.09%
City of Palmdale	60,144	4,456	7.41%
City of Santa Clarita	92,174	4,520	4.90%
City of Los Angeles	1,919,354	110,145	5.74%
City of San Fernando	11,200	700	6.25%
City of Burbank	56,183	2,449	4.36%
State of California	**18,065,043**	**1,037,683**	**5.74%**

Sources: BLS, 2016; ESRI, 2016; Infogroup, Inc, 2016
Data from 2016 is used because data from the 2015 project baseline year is not available.

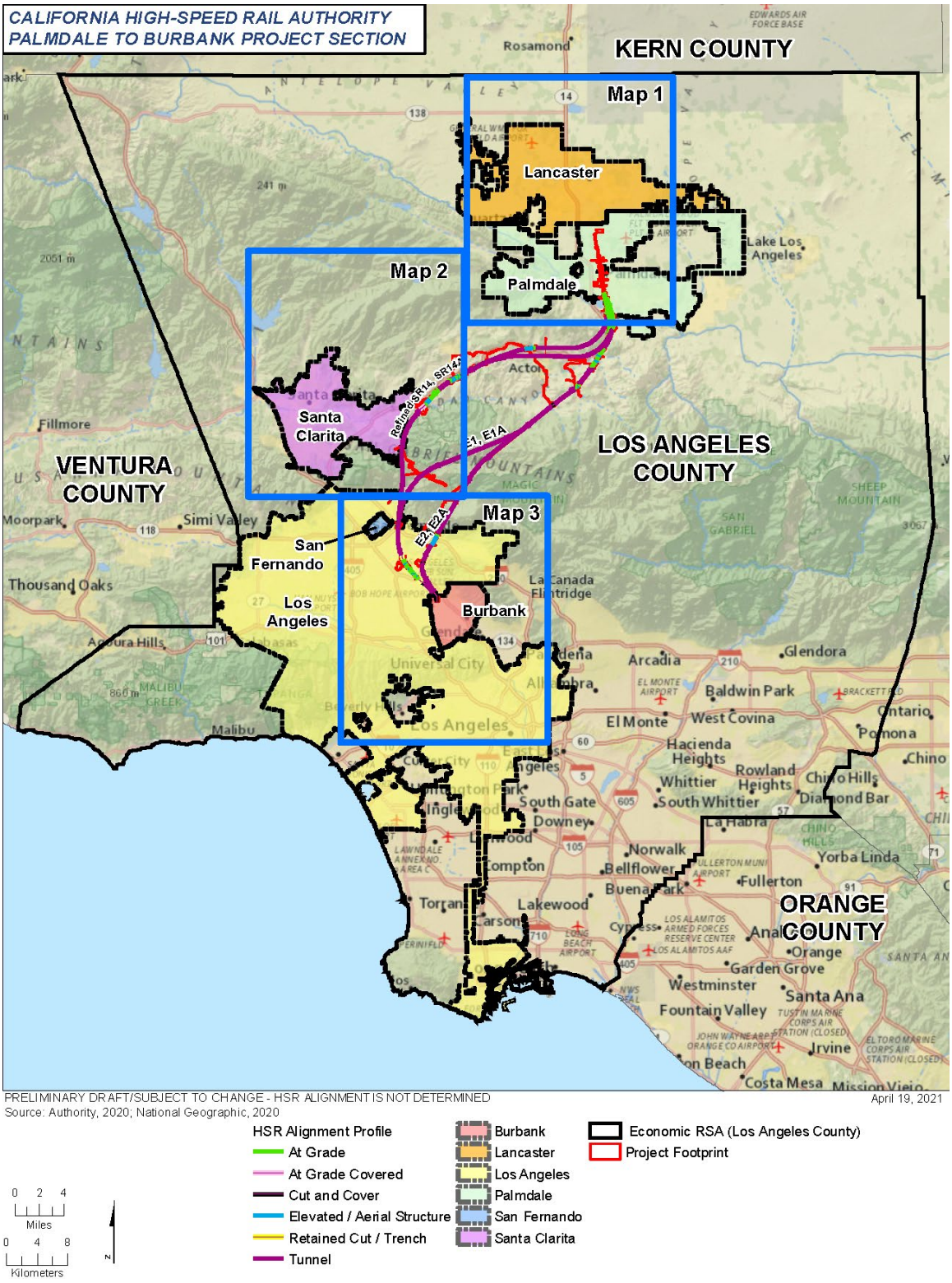

Figure 3.12-15 Economic Resource Study Area Overview

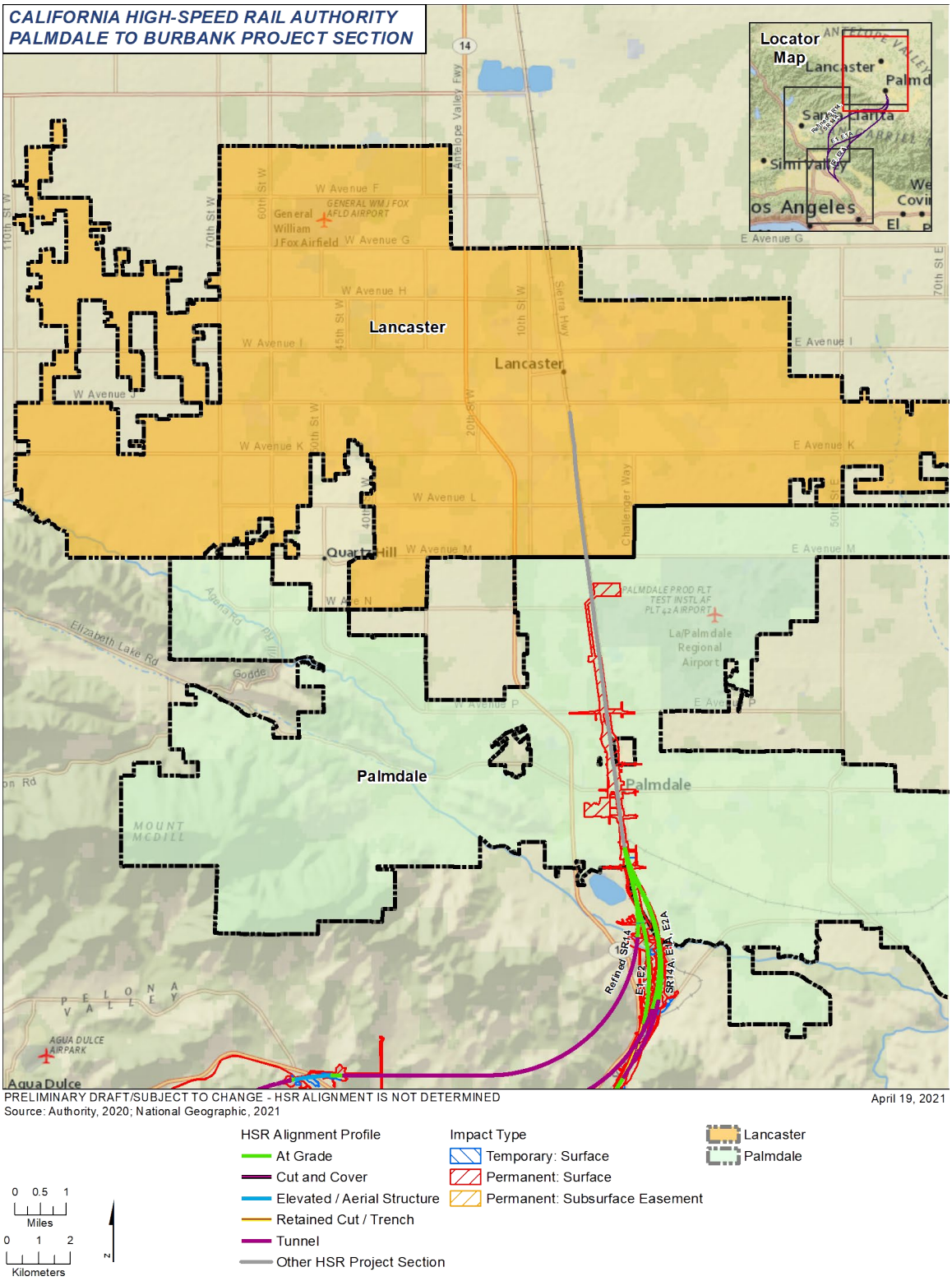

Figure 3.12-16 Economic Resource Study Area - Lancaster and Palmdale

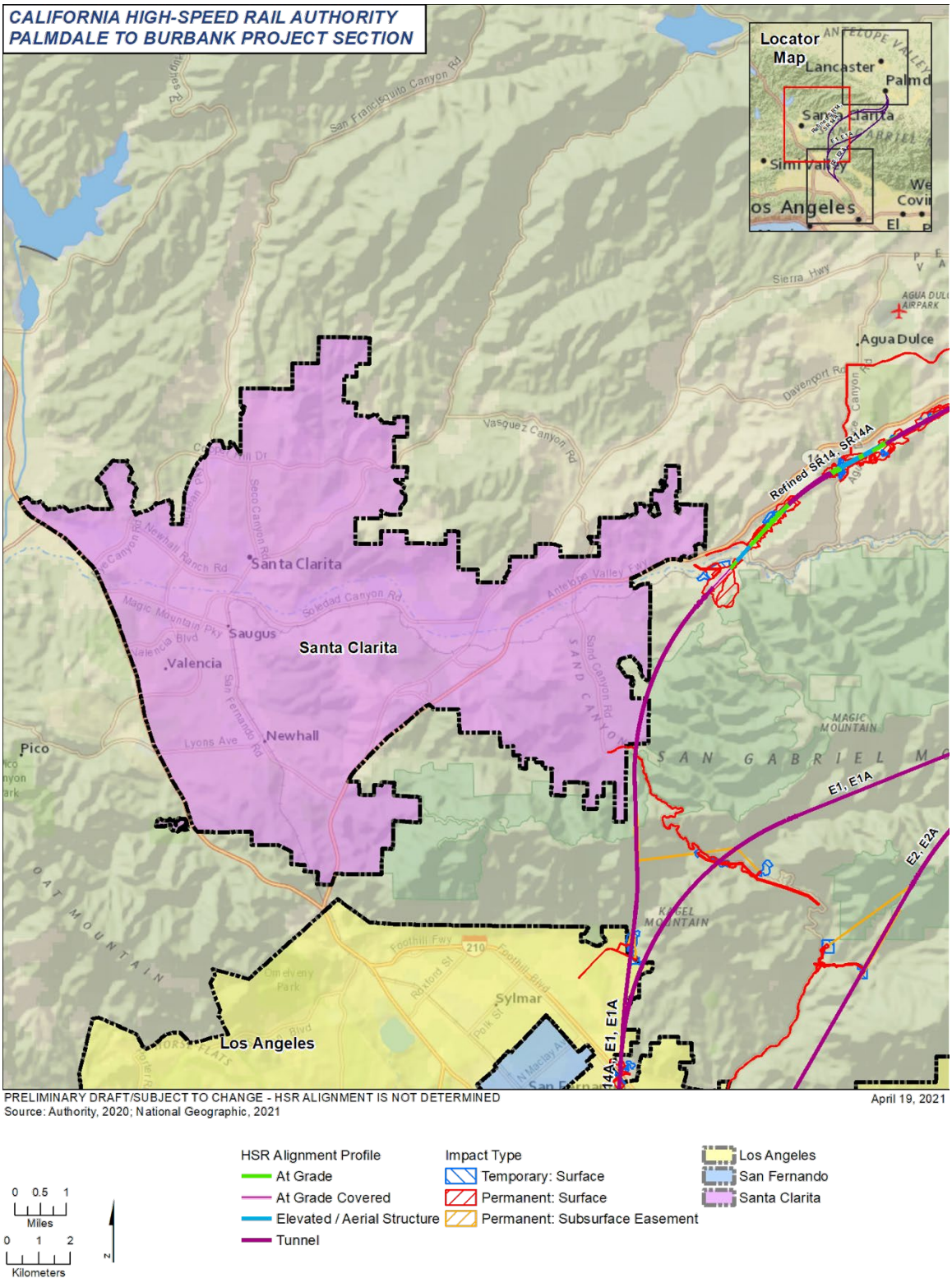

Figure 3.12-17 Economic Resource Study Area - Santa Clarita, Los Angeles, and San Fernando

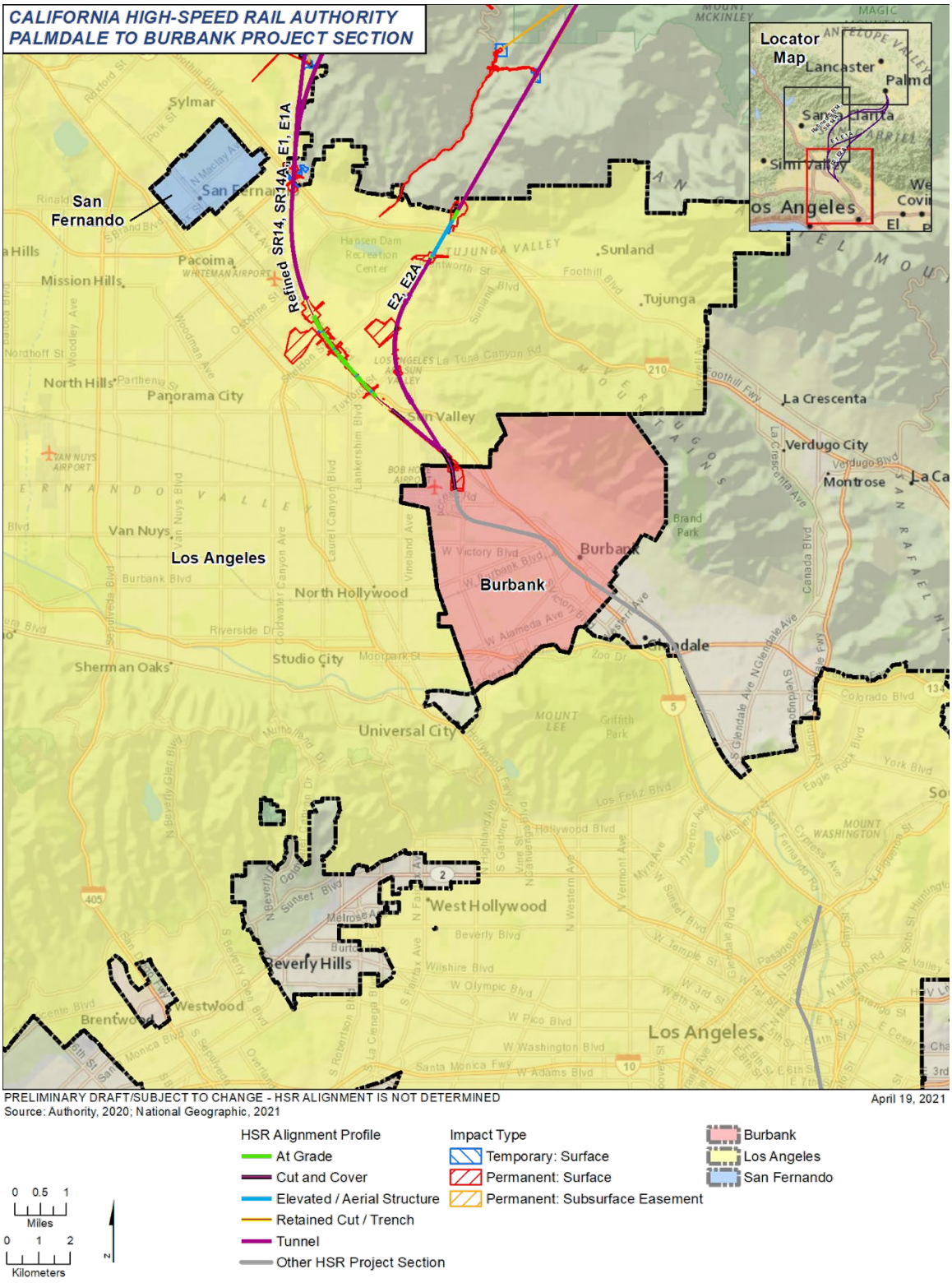

Figure 3.12-18 Economic Resource Study Area - San Fernando, Los Angeles, and Burbank

The most substantial employment centers in the Palmdale to Burbank Project Section include the Antelope Valley, which includes Lancaster and Palmdale, and the city of Burbank. The city of Los Angeles is less relevant because the Palmdale to Burbank Project Section would only traverse Los Angeles communities and neighborhoods that are either largely residential in character or have smaller-scale commercial/industrial uses.

Historically, the economic bases of the cities of Lancaster and Palmdale were tied to the aerospace industry, with many workers employed by the Edwards Air Force Base and Air Force Plant 42 (City of Lancaster 2009). Fluctuations in the world political landscape, economy, and federal program funding have affected the aerospace industry and led to workers seeking jobs in other sectors. While both cities have a goal of continuing to diversify their economic bases, many Lancaster and Palmdale residents travel outside of these cities for employment. The average daily round-trip commute times for Palmdale and Lancaster workers are 89 minutes and 67 minutes, respectively. Approximately 63,000 workers from the Palmdale/Lancaster subregion spend at least an hour each day on the road; of those, 38,000 spend two or more hours commuting each day (Antelope Valley Labor Market Study 2010). The five largest employers in the Antelope Valley are Northrop Grumman, Edwards Air Force Base, China Lake Naval Weapons Station, Los Angeles County, and Lockheed Martin (Greater Antelope Valley Economic Alliance 2020).

The city of Burbank is a major employment center in the San Fernando Valley with more than two jobs for every housing unit (City of Burbank 2013). The city's large, diverse economy is supported by a core of motion picture and media-related industries including the Walt Disney Company and Warner Brothers Entertainment. Other major employers in Burbank include Providence/St. Joseph Hospital, Burbank Unified School District, the Hollywood Burbank Airport, and the city of Burbank.

Data from the Southern California Association of Governments' *Regional Transportation Plan / Sustainable Communities Strategy* (Southern California Association of Governments 2016) were used to project regional employment numbers for the horizon year 2040. Data in this report forecast employment within the entire Southern California Association of Governments region, which includes Los Angeles, Orange, Riverside, San Bernardino, Ventura, and Imperial counties. Therefore, they are not specific to the economic RSA of Los Angeles County. However, the projections help to provide a general context for the economic RSA. Table 3.12-13 summarizes state and county employment projections. Retail trade, healthcare, and educational services are the largest industries within the economic RSA. Regionally, healthcare employment is expected to increase by 2.6 percent by 2040, and retail trade and educational services are expected to decrease by 0.7 and 0.1 percent, respectively. Healthcare is expected to be the fastest-growing industry in the region, and manufacturing is expected to experience the most rapid decline. Employment in Los Angeles County is expected to increase at a slower rate than in the entire state of California (0.5 percent and 0.7 percent, respectively). For more information on regional employment, refer to Section 3.18, Regional Growth.

Table 3.12-13 Long-Range Employment Projections (2015-2040)

Area	Employment		Change from 2015-2040	Annual Average Growth Rate
	2015	2040		
Los Angeles County	4,674,800	5,226,000	11.8%	0.5%
State of California	17,798,600	20,802,000	16.9%	0.7%

*Sources: California Department of Finance, 2016;Employment Development Department, 2016; Southern California Association of Governments, 2016**

Tax Revenues

Table 3.12-14 summarizes the total property tax and sales tax revenues generated within select cities in the economic RSA and Los Angeles County during the 2014-2015 fiscal year.

Table 3.12-14 Property Tax and Sales Tax Revenues (2014-2015)

Jurisdiction	Total Property Tax Revenue	Total Sales Tax Revenue
Los Angeles County	$4,483,370,377	$75,200,327
City of Lancaster	$17,807,307	$17,360,717
City of Palmdale	$27,811,231	$17,084,411
City of Los Angeles	$1,745,171,717	$492,934,561
City of Burbank	$46,080,193	$28,844,399

Source: California State Controller's Office, 2016

School District Funding

Table 3.12-15 presents the estimated total annual funding from property tax for each school district within the economic RSA. Estimated school district funding was calculated by multiplying the total assessed valuation within each school district by a countywide average school district apportionment of 40.69 percent of the 1 percent property tax general levy (not including additionally authorized special-purpose tax measures).

Table 3.12-15 School District Funding (2015)

School District	Average Daily Attendance (ADA)	Property Tax Revenue[1]	ADA-Based Revenue[2]	Total Revenue[3]
Antelope Valley Union High School District	19,955	$24,485,751	$222,601,823	$247,087,574
Lancaster Elementary	13,484	$11,003,571	$137,618,897	$148,622,468
Palmdale Elementary	18,258	$13,577,432	$198,254,864	$211,832,296
William S. Hart Union High School District (Santa Clarita)	21,459	$32,158,476	$193,265,613	$225,424,089
Sulphur Springs Union Elementary	5,206	$11,385,435	$44,758,352	$56,143,787
Burbank Unified School District	14,631	$45,172,109	$105,068,033	$150,240,142
Acton-Agua Dulce Unified School District	1,041	$72,394	$16,159,845	$16,232,239
Los Angeles Unified School District	501,444	$1,088,875,863	$6,061,064,275	$7,149,940,138

Source: CDE, 2016
[1] Includes revenues derived from local property taxes.
[2] Includes revenues allocated to local school districts from the state based on ADA, per Education Code Section 42238.
[3] Total revenues include revenues derived from Local Control Funding Formula sources, federal, other state, and other local revenues.
All information is for Fiscal Year 2015-2016
ADA = average daily attendance

Funding for California's public schools (K through 12) comes primarily from the state budget (60 percent), with local property taxes (23 percent) and the federal government (10 percent) as the other significant contributors. Each district has its own unique combination of federal, state, and local sources of funding, and the amounts vary, but funding for most of the school districts is

received through revenue limits. Each district receives a dollar amount per student, the revenue limit, which is measured by the average daily attendance. Revenue limit is funded by local property taxes and state funds. A percentage of the property taxes generated by real property in each district is assigned 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 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 fill up or exceed the revenue limit and no state aid is required, then the districts can keep the excess property tax revenues. This is also known as basic aid. The federal government also provides funding to the school districts. Typically, this categorical funding is distributed to the districts based upon the needs of the children and special programs. School districts can also raise funds for specific purposes (e.g., to build new facilities) by issuing bonds that need the approval of two-thirds of local voters (67 percent), or 55 percent if the bonds meet additional restrictions per Proposition 39.[7]

Agricultural Economic Setting

Agricultural land is an important resource in California. However, in Los Angeles County much of the agricultural land has been converted to nonagricultural uses over the years. Important Farmland and Grazing Land are scarce in the southern half of Los Angeles County. As discussed in Section 3.14, Agricultural Farmland and Forest Land, much of the RSA for agricultural farmland, which comprises the footprint of the six Build Alternatives including a 100-foot buffer beyond the alignment centerline, is considered Urban and Built-Up Land (FMMP 2017). There are no Williamson Act, Farmland Security Zone, Timberland Protection, or any other agricultural preservation contract lands within the agricultural farmland RSA. Agriculture-related uses in or near the economic RSA include a 9-acre vineyard located north of the SCE Vincent Substation, Blum Ranch near Aliso Canyon Road, and 9 acres of Important Farmland south of Arrastre Canyon Road; south of Blum Ranch and Sylmar (south of the Magic Mountain Wilderness Area) contain Grazing Land. Accordingly, while agricultural uses are present, they are limited in concentration and thus do not make up a substantial portion of local economic output.

3.12.6 Environmental Consequences

3.12.6.1 Overview

Build Alternatives would generally result in similar types of socioeconomic and community impacts, with differences in the severity or location of impacts depending on the proximity of the Build Alternative footprint to residential and commercial/industrial areas. The following sections address construction and operation impacts of all six Build Alternatives and highlight the specific communities or facilities that would be affected by each Build Alternative. Section 3.12.6.3, Build Alternatives, addresses community and economic impacts for all six Build Alternatives.

Impacts SOCIO#2 through SOCIO#6 would persist during the operations phase. However, because these impacts would originate during construction, they are considered construction impacts.

Construction Impacts

- Impact SOCIO#1: Temporary Disruption to Community Cohesion or Division of Existing Communities from Construction.
- Impact SOCIO#2: Permanent Disruption to Community Cohesion or Division of Established Communities from Construction.
- Impact SOCIO#3: Permanent Displacement of Community Facilities from Construction.

[7] California Proposition 39 reduces the threshold to pass local California school district bonds from two-thirds (67 percent) to a supermajority (55 percent).

- Impact SOCIO#4: Permanent Displacement of Residences from Construction.
- Impact SOCIO#5: Permanent Displacement and Relocation of Sensitive Residential Populations from Construction.
- Impact SOCIO#6: Permanent Displacement of Commercial and Industrial Businesses from Construction.
- Impact SOCIO#7: Temporary Effects on Regional Employment from Construction.
- Impact SOCIO#8: Temporary Sales Tax Revenue Gains from Construction.
- Impact SOCIO#9: Potential for Permanent Physical Deterioration from Construction.
- Impact SOCIO#10: Temporary and Permanent Effects on Agricultural Operations from Construction.
- Impact SOCIO#11: Temporary Effects on Children's Health and Safety from Construction.

Operations Impacts

- Impact SOCIO#12: Long-Term Effects on Property and Sales Tax Revenues from Operations.
- Impact SOCIO#13: Long-Term Effects on School District Funding from Operations.
- Impact SOCIO#14: Permanent Effects on Agricultural Operations from Project Operations.
- Impact SOCIO#15: Potential for Permanent Physical Deterioration from Operations.
- Impact SOCIO#16: Permanent Effects on Children's Health and Safety from Operations.

3.12.6.2 No Project Alternative

The No Project Alternative assumes that the Palmdale to Burbank Project Section would not be constructed. The No Project Alternative includes all currently known, programmed, and funded improvements to the intercity transportation system (highway, rail, and transit) and reasonably foreseeable local development projects (with funding sources already identified) expected to be developed as planned by 2040. Development under No Project Alternative conditions would primarily occur within existing urban/suburban communities within the project area, including Palmdale and the San Fernando Valley, and would generally avoid portions of the San Gabriel Mountains that preclude development because of topographical constraints or protected land designations (such as within the ANF including SGMNM).

Anticipated growth under the No Project Alternative includes other projects (as described in Chapter 2, Alternatives) that could result in adverse effects from permanent displacement of residences and commercial/industrial businesses. Because some of these future projects are in the early planning stages, specific impacts cannot always be determined, but each project would typically require compliance with CEQA, as well as with NEPA if the projects were to involve federal funding or federal approvals. The No Project Alternative would result in economic effects, disrupt or divide established communities, and/or reduce community cohesion.

Anticipated growth under the No Project Alternative includes other projects that could result in potential economic benefits and losses. Economic benefits might result from the creation of jobs and other growth that would produce tax revenue benefits. However, potential economic losses associated with community disruption or displacement would occur as a result of planned development. Projects planned under the No Build Alternative would undergo separate environmental review to determine whether the projects would have adverse economic effects.

3.12.6.3 Build Alternatives

Construction Impacts

This section evaluates the California HSR System's impacts on communities and neighborhoods. Although the six Build Alternatives would generally result in the same types of impacts (e.g., construction related disruptions, divisions of existing communities), each Build Alternative would traverse different communities. That is, community impacts would be unique to each alternative and therefore are discussed separately for each alternative. Although project subsections are referenced for context, community impacts are evaluated for the entirety of each alternative.

Impact SOCIO#1: *Temporary Disruption to Community Cohesion or Division of Existing Communities from Construction.*

Aboveground construction activities (e.g., grading, excavating, or constructing the HSR rail trackway and ancillary facilities) would create noise and dust that would directly result in disruptions to nearby communities. Increased truck traffic near construction sites would also increase congestion and disrupt traffic patterns on adjacent and nearby roadways. Construction activities would require the introduction of lights for nighttime work and would also result in glare from construction machinery. For further detail on these specific construction impacts, refer to Section 3.2, Transportation; Section 3.3, Air Quality and Global Climate Change; Section 3.4, Noise and Vibration; and Section 3.16, Aesthetics and Visual Quality. Communities would experience direct, temporary impacts wherever at-grade or above-grade facilities would be built and around adits and window areas. Although project construction would affect residents, businesses, and individual property owners, these effects would be temporary and would not permanently impact community cohesion.

Refined SR14 Build Alternative

South of Palmdale, the Refined SR14 Build Alternative would involve the construction of at-grade facilities traversing along the western side of the Boulders at the Lake Mobile Home Park located south of East Avenue S and east of Sierra Highway, as well as the unincorporated community of Harold just south of Lake Palmdale (see Figure 3.12-2). Aboveground construction would also take place within the unincorporated community of Acton near Red Rover Mine Road, Big Springs Road, and Rolling Ranch Road (see Figure 3.12-4). The affected areas in Acton generally consist of rural single-family homes. In addition, Vasquez High School would be affected as it is along Red Rover Mine Road, south of the Antelope Valley Freeway.

The Refined SR14 Build Alternative would be constructed at grade and on viaduct intermittently from Big Springs Road to the Vulcan Mine (see Figure 3.12-5). Within this segment, at-grade construction staging areas would be at Big Springs Road, near the Pacific Crest Trail, north of Briggs Edison Road, along Agua Dulce Canyon Road, east of Soledad Canyon Road, and along Lang Station Road. Construction activities associated with the Refined SR14 Build Alternative would introduce new physical barriers but would not divide these established communities, as access between properties and the local road networks would be maintained.

For the Refined SR14 Build Alternative, adit option SR14-A1 would be constructed in the ANF along Little Tujunga Canyon Road. Adit options SR14-A2 and SR14-A3 would be constructed south of the Pacoima Dam. Adit option SR14-A2 would surface west of the Refined SR14 alignment and connect to Gavina Avenue; and adit option SR14-A3 would surface east of the alignment, connecting with Wallabi Avenue (see Figure 3.12-7). Construction of each of these adits would involve temporary construction staging areas. Either window option SR14-W1 or SR14-W2 would be constructed near the I-210/SR 118 intersection, necessitating a construction staging area in Sylmar. The construction staging area for SR14-W1 would be located directly north of the I-210/SR 118 intersection near primarily industrial uses. The construction staging area for SR14-W2 would be located directly south of the I-210/SR 188 intersection, directly affecting several industrial businesses (including High Temp Metals, a metal supplier company, as well as Vision Scenery Corporation, a construction company), and would be within 250 feet of Hillery T. Broadous Elementary School and a residential neighborhood. The adit and window

options would result in new physical barriers but would not divide these established communities; access between properties and the local road networks would be maintained.

South of the ANF, aboveground construction would be required along San Fernando Road from approximately Montague Street to the Hollywood Burbank Airport. Land uses within this corridor are generally either industrial or commercial with airport-related uses concentrated along the south side of San Fernando Road from approximately Clybourn Avenue to North Ontario Street. Residential neighborhoods exist on either side of the HSR corridor. Temporary construction impacts would not result in the division of these communities since access between properties and the local road networks would be maintained.

Although construction activities could temporarily disturb nearby residents and motorists, they would not physically divide established communities. Implementation of the IAMFs and mitigation measures described below would minimize temporary construction impacts such that existing land-use patterns and community cohesion would be preserved.

A detailed CMP would be developed prior to construction as part of SOCIO-IAMF#1. The plan will include actions pertaining to communications, visual protection, air quality, safety controls, noise controls, and traffic controls to minimize impacts on residents, including low-income households and minority populations. The plan will also verify that property access is maintained for local businesses, residences, and emergency services. Access to community facilities will not be eliminated except in cases where facilities would be displaced (discussed in Impact SOCIO#3).

Noise-related disruptions would be minimized by requiring the contractor to adhere to federal guidelines for minimizing noise near sensitive receptors, including residential neighborhoods (NV-IAMF#1). Disruptions from construction-induced dust would be minimized through the preparation and implementation of a fugitive dust control plan (AQ-IAMF#1). The fugitive dust control plan will include best management practices, such as covering all materials transported on public roads, watering exposed grading surfaces, suspending construction activities during high wind events, and removing any accumulation of mud or dirt from adjacent public streets. Temporary impacts related to air quality would also be minimized by low-volatile organic paint during construction (AQ-IAMF#2) and concrete batch plant siting and control measures (AQ-IAMF#6).

Construction-related traffic disruptions would be minimized by the preparation and implementation of a CTP (TR-IAMF#2). The CTP would reduce the impact of construction traffic on adjoining and nearby roadways by establishing best management practices, such as the erection of temporary signage to alert drivers and pedestrians to the construction zone, provision of alternative access during temporary road closures, and maintenance of safe vehicular and pedestrian access to local businesses and residences during construction.

Lighting for nighttime construction would result in substantial disturbances of nearby residents and motorists. However, this impact would be mitigated by shielding such lighting and directing it downward in such a manner that the light source is not visible off-site, and so that the light does not fall outside the boundaries of the project site to avoid light spillage off-site (AVR-MM#2).

SR14A Build Alternative

Impacts from the SR14A Build Alternative would be similar to those described for the Refined SR14 Build Alternative above. However, the SR14A Build Alternative would be south of East Avenue S, near Lake Palmdale, and would therefore not require the construction of at-grade project facilities and would not introduce new physical barriers in the unincorporated community of Harold. At-grade facilities would be built within the western portion of Boulders at the Lake Mobile Home Park, south of East Avenue S and east of Sierra Highway; temporary division of this community would not occur since construction activities would be localized to the western portion of the mobile home park. Additionally, unlike the Refined SR14 Build Alternative, the SR14A Build Alternative would not require the construction of at-grade and elevated alignment along Red Rover Mine Road, Big Springs Road, and Rolling Ranch Road, thus avoiding temporary construction impacts that would introduce new physical barriers which would divide the unincorporated community of Acton (see Figure 3.12-4).

Although construction activities, including lighting for nighttime construction, could temporarily disturb nearby residents and motorists, they would not physically divide established communities. The same IAMFs and mitigation measures listed for the Refined SR14 Build Alternative will apply to the SR14A Build Alternative. Implementation of IAMFs and mitigation measures would minimize temporary construction impacts such that existing land-use patterns and community cohesion would be preserved.

E1 Build Alternative

Like the Refined SR14 Build Alternative, the E1 Build Alternative would involve at-grade construction in the western portion of the Boulders at the Lake Mobile Home Park located south of East Avenue S and east of Sierra Highway, and the unincorporated communities of Harold just south of Lake Palmdale.

Further south, the E1 Build Alternative would be constructed at grade near the SCE Vincent Substation in the unincorporated community of Acton. Groups of single-family homes here, located along Foreston Drive and between Kentucky Springs Road and Searchlight Ranch Road, would be susceptible to construction-related disruptions (see Figure 3.12-3).

The E1 Build Alternative would be similar to the Refined SR14 Build Alternative within the Burbank Subsection.

Although construction activities, including lighting for nighttime construction, could temporarily disturb nearby residents and motorists, they would not physically divide established communities. All the same IAMFs and mitigation measures described for the Refined SR14 Build Alternative will apply to the E1 Build Alternative. Implementation of IAMFs and mitigation measures would minimize temporary construction impacts such that existing land-use patterns and community cohesion would be preserved.

E1A Build Alternative

Impacts from the E1A Build Alternative would be similar to those described for the E1 Build Alternative, except for the portion of alignment south of East Avenue S, near Lake Palmdale. In this location, the E1A Build Alternative would not require the construction of at-grade facilities traversing the unincorporated community of Harold. At-grade facilities would be constructed within the western portion of the Boulders at the Lake Mobile Home Park south of East Avenue S and east of Sierra Highway.

Although construction activities, including lighting for nighttime construction, could temporarily disturb nearby residents and motorists, they would not physically divide established communities. The same IAMFs and mitigation measures described for the Refined SR14 Build Alternative will apply to the E1A Build Alternative. Implementation of IAMFs and mitigation measures would minimize temporary construction impacts such that existing land-use patterns and community cohesion would be preserved.

E2 Build Alternative

Construction impacts within the E2 Central Subsection would be similar to those discussed for the E1 Build Alternative for the residences in the western portion of the Boulders at the Lake Mobile Home Park, the unincorporated community of Harold just south of Lake Palmdale, and in the unincorporated community of Acton along Foreston Drive.

Further south within the Central Subsection, the E2 Build Alternative would be constructed in underground bored tunnels, which would have limited impacts on existing communities at the surface. The E2 Build Alternative could require at-grade facilities (adit) along Little Tujunga Canyon Road or Gold Creek Road depending on which adit option is chosen. As the E2 Build Alternative approaches the San Fernando Valley, it would emerge from bored tunnels and be constructed at grade and on viaduct through the Los Angeles community of Lake View Terrace. The adjacent residences in this community would therefore be subject to temporary construction impacts. The E2 Build Alternative would also involve some at-grade construction work in the northern portion of Sun Valley through an area of industrial, warehousing, and manufacturing businesses.

Although construction activities, including lighting for nighttime construction, could temporarily disturb nearby residents and motorists, they would not physically divide established communities. All the same IAMFs and mitigation measures described for the Refined SR14 Build Alternative will apply to the E2 Build Alternative. Implementation of IAMFs and mitigation measures would minimize temporary construction impacts such that existing land-use patterns and community cohesion would be preserved.

E2A Build Alternative

Impacts from the E2A Build Alternative would be similar to those described for the E2 Build Alternative above, except for the area south of East Avenue S, near Lake Palmdale. In this location, the E2A Build Alternative would not require the construction of at-grade facilities in the unincorporated community of Harold. At-grade facilities would be constructed within the western portion of the Boulders at the Lake Mobile Home Park located South of East Avenue S and east of Sierra Highway.

Although construction activities, including lighting for nighttime construction, could temporarily disturb nearby residents and motorists, they would not physically divide established communities. All the same IAMFs and mitigation measures described for the Refined SR14 Build Alternative will apply to the E2A Build Alternative. Implementation of IAMFs and mitigation measures would minimize temporary construction impacts such that existing land-use patterns and community cohesion would be preserved.

CEQA Conclusion

Within the context of CEQA, this analysis addresses the potential for the Palmdale to Burbank Project Section to physically divide established communities or disrupt community cohesion. Although construction activities could temporarily disturb nearby residents and motorists, they would not physically divide established communities, and therefore, the CEQA impact is less than significant for all Build Alternatives.

Further, as required by SOCIO-IAMF#1, the Authority will implement a CMP that would minimize impacts on community residents and businesses and maintain access. As described in other resource sections, construction impacts related to noise, traffic, and air quality that may disrupt residents and motorists would be minimized through NV-IAMF#1 (minimization of noise near sensitive receptors), AQ-IAMF#1 (implementation of a fugitive dust control plan), AQ-IAMF#2 (selection of coatings), AQ-IAMF#6 (reduce the potential impact of concrete batch plants), and TR-IAMF#2 (implementation of best management practices through a CTP), and impacts from temporary construction activities would be minimized such that existing land-use patterns and community cohesion would be preserved. As explained in Section 3.16, Aesthetics and Visual Quality, lighting for nighttime construction would result in substantial disturbance to nearby residents and motorists. Although nighttime lighting would not physically divide an established community, this potential aesthetics impact would be reduced with implementation of AVR-MM#2, which will ensure shielding of such lighting and direct it downward such that the light source is not visible off-site, and the light that falls outside the boundaries of the project site is minimized.

Impact SOCIO#2: *Permanent Disruption to Community Cohesion or Division of Established Communities from Construction.*

Infrastructure and transportation projects can create physical barriers that restrict movement and visibility between parts of a community. Such barriers or divisions can decrease the cohesiveness or connectedness within a community. The exacerbation of existing divisions would generally not result in new permanent impacts on the division of established communities but would weaken community cohesion, while the creation of new divisions resulting from the project would be a direct impact on community cohesion and division, as discussed below.

Refined SR14 Build Alternative

South of Lake Palmdale, the alignment of the Refined SR14 Build Alternative would be constructed at grade through the west side of the unincorporated community of Harold, along East Barrel Springs Road (see Figure 3.12-2). The rail alignment in this area would require the acquisition of seven residential properties in the unincorporated community of Harold and would present a new physical and visual barrier between the Boulders at the Lake Mobile Home Park

east of the alignment and single-family residences west of the alignment and Sierra Highway. To maintain paths of travel between the communities and the regional road network, a new access road would be constructed.

In the unincorporated community of Acton, near Vasquez High School, the construction of at-grade and elevated trackway would divide an existing residential community through the middle of Acton and would require the displacement of five homes (see Figure 3.12-4). Further south, both at-grade track and above-grade viaduct would be constructed through a rural residential area near Big Springs Road in Agua Dulce (see Figure 3.12-5). Construction in this area would require the acquisition of residential properties and would physically divide the existing residential area by permanently preventing access to the southern portion of the area through Big Springs Road. Views between homes in this area are already obstructed by mountainous terrain. Access between the remaining homes and the regional road network would be preserved.

Two of the Refined SR14 adit options would be just south of the Pacoima Dam within sight of the Los Angeles neighborhood of Sylmar (see Figure 3.12-7). Additionally, construction of the Refined SR14 Build Alternative would require at-grade alignment and ancillary facilities to be located within the Los Angeles neighborhoods of Pacoima and Sun Valley (see Figure 3.12-8). These adits would not displace residents and would not divide established communities. Either window option SR14-W1 or SR14-W2 would be either directly north or directly south of the I-210/SR 118 intersection. These window options would cause some business displacements but no residential displacements. Because window options SR14-W1 and SR14-W2 would be adjacent to two major freeways that already divide existing residential communities, windows would only result in displacements at the edge of this existing division. No new division would be created. Near Branford Street, in the Pacoima neighborhood (see Figure 3.12-8), displacement of existing structures would create a new division by diminishing the number of sightlines and paths of travel in the area, isolating heavy industrial land uses that were previously a short walk away.

From Montague Street into Burbank, the Refined SR14 Build Alternative would be within the San Fernando Boulevard/Metrolink corridor, requiring the displacement of businesses and one residence along this corridor. However, because the San Fernando Boulevard/Metrolink corridor already divides the existing residential neighborhoods along the corridor, the project section construction would be limited to widening this existing barrier, which would not create a new division.

In the Burbank Subsection, the Burbank Airport Station would be underground. Proposed aboveground facilities (primarily parking areas) would displace some industrial uses but would not create a new physical or visual barrier within the community.

SR14A Build Alternative

Impacts from the SR14A Build Alternative would be similar to those described for the Refined SR14 Build Alternative above. However, the SR14A Build Alternative would not require the construction of at-grade facilities traversing the unincorporated community of Harold, just south of Lake Palmdale. At-grade facilities would be built within the western portion of Boulders at the Lake Mobile Home Park south of East Avenue S and east of Sierra Highway (see Figure 3.12-2). Construction in this area would require the acquisition of 23 residential properties (of approximately 200 total residential units) and would present a new physical and visual barrier between the Boulders at the Lake Mobile Home Park to the east and the single-family homes to the west, weakening community cohesion in this area. Access between the remaining homes and the regional road network would be preserved via East Avenue S, which would be modified as an overcrossing over the SR14A Build Alternative alignment. Furthermore, unlike the Refined SR14 Build Alternative, the SR14A Build Alternative would not require the construction of at-grade and elevated alignment at the existing residential community near Vasquez High School (see Figure 3.12-4), nor within the community near Big Springs Road in Agua Dulce (see Figure 3.12-5). The SR14A Build Alternative would, therefore, avoid physically dividing these existing residential communities.

E1 Build Alternative

Like the Refined SR14 Build Alternative, the E1 Build Alternative would involve at-grade construction in the unincorporated community of Harold, just south of Lake Palmdale. Specifically, the at-grade alignment would create a physical barrier between the Boulders at the Lake Mobile Home Park to the east and a group of single-family homes to the west (see Figure 3.12-2), and would weaken community cohesion in this area. To maintain paths of travel between the communities and the regional road network, a new access road would be constructed.

Further south, at the east side of the unincorporated community of Acton, the E1 Build Alternative would divide a residential area located west of the nearby SCE Vincent Substation (see Figure 3.12-3) by acquiring residential properties for project right-of-way. This portion of the E1 Build Alternative alignment would create a linear barrier through an existing residential area and would require a new grade separation on Foreston Drive. Residential displacements along Foreston Drive would be required, and the east side of the small neighborhood on that street would be truncated by the rail alignment.

Existing development in these areas includes residential areas to the west and east of SR 14, Sierra Highway, Soledad Canyon Road, Carson Mesa Road, and a wash. Implementation of the E1 Build Alternative would create a new physical and visual separation between the area's residential land uses. Changes in topography necessary to create a level surface for the at-grade rail alignment would diminish visual connections between residential uses west of the SCE Vincent electrical substation and residential use to the east off Hillside Drive and Soledad Pass Road. This could create a sense of social isolation for residents that could previously see their neighbors' homes from afar. Displacements on Foreston Drive would also fragment the compact social environment created by that cluster of homes.

Farther south within the Central Subsection, the E1 Build Alternative would be constructed in underground bored tunnels, which would have limited impacts on existing communities at the surface. The E1 Build Alternative would require at-grade facilities (adit) along Little Tujunga Canyon Road (see Figure 3.12-7). As the E1 Build Alternative approaches the San Fernando Valley, its alignment joins that of the Refined SR14 Build Alternative, and its impacts on communities in this area would be the same as those described for the Refined SR14 Build Alternative within the San Fernando Road corridor and Burbank Subsection.

E1A Build Alternative

Impacts from the E1A Build Alternative would be the same as those described for the E1 Build Alternative above, except for the area just south of East Avenue S, near Lake Palmdale. In this location, the E1A Build Alternative would not require the construction of at-grade facilities traversing the unincorporated community of Harold. At-grade facilities would be constructed within the western portion of the Boulders at the Lake Mobile Home Park located south of East Avenue S and east of Sierra Highway (see Figure 3.12-2), identical to the SR14A Build Alternative. Construction in this area would require the acquisition of residential properties and would present a new physical and visual barrier between the Boulders at the Lake Mobile Home Park to the east and the single-family homes to the west, weakening community cohesion in this area. However, access between the remaining homes and the regional road network would be preserved via East Avenue S, which would be modified as an overcrossing over the E1A Build Alternative alignment.

E2 Build Alternative

The E2 Central Subsection would have similar impacts to those of the E1 Build Alternative for the residential areas just south of Lake Palmdale in the unincorporated community of Harold, and along Foreston Drive in the unincorporated community of Acton.

Unlike the Refined SR14, SR14A, E1, and E1A Build Alternatives, which would enter the San Fernando Valley near Pacoima, the E2 Build Alternative would head in a more directly southward direction, transitioning from tunnel to at-grade for approximately 1,000 feet before transitioning to an elevated viaduct structure at Lake View Terrace. The E2 Build Alternative would be constructed at-grade and on viaduct within the Los Angeles community of Lake View Terrace (see Figure 3.12-8). This would require the displacement of residential properties and would therefore divide the

neighborhood between Jimenez Street and Wheatland Avenue. Connectivity between the divided neighborhood would be maintained via Arnwood Road and Foothill Boulevard, both of which would pass underneath the elevated HSR right-of-way. Foothill Boulevard would continue to provide the neighborhood with access to the regional road network.

The E2 Build Alternative would continue south on viaduct through the Lake View Terrace neighborhood, and would cross over Arnwood Road, Foothill Boulevard, the I-210 freeway, Big Tujunga Wash, and Wentworth Street in the Shadow Hills neighborhood of the city of Los Angeles; the E2 Build Alternative would not divide this residential neighborhood. After crossing Wentworth Street, the E2 Build Alternative would have a relatively short at-grade section before transitioning to a bored tunnel. Although the proposed viaduct would maintain circulation within Lake View Terrace below the viaduct on I-210 and Foothill Boulevard, residential displacements would be required, and the alternative would create a visual division; however, access between the existing residences and regional road network would be preserved via Dronfield Avenue. Sight lines and paths of travel through the neighborhood would be reduced, which could create social isolation among neighbors who could previously walk directly between their homes or see unobstructed views of each other's homes.

Farther south, the E2 Build Alternative would emerge in the Sun Valley area where cut-and-cover construction would result in displacement of industrial, warehousing and manufacturing businesses. However, because this displacement would occur in an industrial/commercial neighborhood, it would not divide an established community.

E2A Build Alternative

Impacts from the E2A Build Alternative would be the same as those described for the E2 Build Alternative above except for the area just south of East Avenue S, near Lake Palmdale. In this location, the E2A Build Alternative would not require the construction of at-grade facilities traversing the unincorporated community of Harold. At-grade facilities would be constructed within the Boulders at the Lake Mobile Home Park south of East Avenue S and east of Sierra Highway (see Figure 3.12-2), identical to the SR14A and E1A Build Alternatives. Construction in this area would require the acquisition of residential properties and would present a new physical and visual barrier between the Boulders at the Lake Mobile Home Park to the east and the single-family homes to the west, weakening community cohesion in this area. However, access between the existing residences and the regional road network would be preserved and would be modified as an overcrossing over the E2A Build Alternative alignment.

CEQA Conclusion

Construction of the Build Alternatives within the Central Subsection would present new physical and visual barriers with the potential to divide existing communities. New physical and visual barriers from the at-grade or above-grade Build Alternative footprint would occur at the unincorporated community of Harold (Refined SR14, E1, and E2 Build Alternatives), the Boulders at the Lake Mobile Home Park (SR14A, E1A, and E2A Build Alternative), the residential area near Vasquez High School in Acton (Refined SR14 Build Alternative only), the residential area near Big Springs Road in Agua Dulce (Refined SR14 Alternative), the residential area west of the SCE Vincent Substation in Acton (E1, E1A, E2, and E2A Build Alternatives), and the Lake View Terrace Neighborhood (E2 and E2A Build Alternatives). Where new physical and visual barriers would occur within existing communities, access between properties and the local road networks would be maintained. The project would provide adequate roadway overcrossings and undercrossings to facilitate pedestrian, bicycle, and vehicular circulation. However, new physical and visual barriers created by the project within existing communities represents a significant impact, and therefore CEQA requires mitigation. SO-MM#2 (discussed in Section 3.12.7, Mitigation Measures) will require special outreach to affected residential neighborhood and community residents, community organizations, and local officials, as well as require the Authority's evaluation of the community's modified access, in order to enable the Authority to maintain community cohesion and avoid physical deterioration. Upon gathering feedback from the community, the Authority would use the input and develop enhancements to ameliorate effects associated with community cohesion and community division. The Authority would be responsible for implementing the measures to reduce impacts through project design and through the long-

term management of the measures, which would involve documenting the desired design concepts, incorporating them into the final design, and facilitating ongoing maintenance. Therefore, the impact of physically dividing existing communities would be less than significant for all Build Alternatives.

Impact SOCIO#3: *Permanent Displacement of Community Facilities from Construction.*

Community facilities provide important services to members of a community, help create a sense of place, and/or otherwise have local importance as neighborhood assets, and can have historical, cultural, and social meaning to members of the community. Community facilities include airports and heliports, places of worship, education facilities, government facilities, health and mental health facilities, libraries, parks and recreation, public safety facilities, shopping centers, social services, and transit sites.

Implementation of the Refined SR14, SR14A, E1, and E1A Build Alternatives would not result in the displacement of community facilities. However, the E2 and E2A Build Alternatives would displace one community facility, the Los Angeles County Department of Public Social Services in Sun Valley, in the Central Subsection. IAMFs will be incorporated as part of the Build Alternative design to help avoid and minimize impacts. SOCIO-IAMF#2 will provide relocation assistance to persons and properties displaced by the Build Alternative in compliance with the Uniform Act, and SOCIO-IAMF#3 will establish an appraisal, acquisition, and relocation process in consultation with affected cities, counties, and property owners.

CEQA Conclusion

The Refined SR14, SR14A, E1, and E1A Build Alternatives would not result in the displacement of community facilities and would therefore not result in impacts related to the provision of replacement public facilities. There would be no impacts, and CEQA would not require any mitigation for these four Build Alternatives.

For the E2 and E2A Build Alternatives, acquisition would result in the displacement of the Los Angeles County Department of Public Social Services facility. As discussed above, project impacts related to displacements and relocations would be minimized through compliance with SOCIO-IAMF#2 (Compliance with Uniform Relocation Assistance and Real Property Acquisitions Act) and SOCIO-IAMF#3 (Relocation Mitigation Plan). SOCIO-IAMF#2 will provide relocation assistance for social services activities in the building that would be displaced through right-of-way acquisition, and SOCIO-IAMF#3 will require the Authority to develop a relocation mitigation plan to establish an appraisal, acquisition, and relocation process in consultation with affected cities, counties, and property owners. Impacts would remain significant and CEQA would require mitigation. SO-MM#3 (discussed in Section 3.12.7, Mitigation Measures) will ensure the continued availability of community services provided by this facility through reconfiguration of land uses and buildings and/or ensure the relocation of the affected social services prior to demolition. Nearby communities, including North Hollywood and the city of Burbank, would likely have sufficient replacement properties such that the construction of a replacement facility would not be required (see Table 3.12-35). With implementation of mitigation, impacts would be less than significant under CEQA for the E2 and E2A Build Alternatives.

Impact SOCIO#4: *Permanent Displacement of Residences from Construction.*

Each of the Build Alternatives would result in the displacement of both Single-Family Residential (SFR) and Multi-Family Residential (MFR) units. Table 3.12-16 summarizes residential displacement impacts for each Build Alternative.

Table 3.12-16 Comparison of High-Speed Rail Build Alternative Impacts for Residential Displacements

Impacts	Build Alternative					
	Refined SR14	SR14A	E1	E1A	E2	E2A
Total SFR Units Displaced	38 – 41 [1]	8 – 11 [1]	13 – 18 [1]	12 – 17 [1]	38	37
Total MFR Units Displaced	13	29	11	27	11	27
Total Residential Units Displaced	51 – 54 [1]	39 – 42 [1]	24 – 29 [1]	39 – 44 [1]	49	64
Communities with Insufficient Suitable Replacement Housing	Southeast Antelope Valley	None	None	None	Lake View Terrace	Lake View Terrace
Deficit of Available Replacement Housing Units	3	N/A	N/A	N/A	15	15

Source: Authority, 2019b
[1] Displacements vary due to optional adit and window options
MFR = multifamily residential
N/A = not available
SFR = single family residential

Refined SR14 Build Alternative

Implementation of the Refined SR14 Build Alternative would result in the displacement of both SFR units and MFR units. Such displacement would be a direct impact of the project. Table 3.12-17 summarizes residential unit displacements and available replacement units offered for sale or lease. Residential displacements that would result from project implementation are depicted on Figure 3.12-19 through Figure 3.12-29.

Table 3.12-17 Residential Displacements and Available Replacement Housing – Refined SR14 Build Alternative

Location/Community	SFR Units Displaced	MFR Units Displaced	Total Residential Units Displaced	Total Residential Units Available	Surplus/ (Deficit)
Central Subsection					
Palmdale[1]	0	7	7	614[1]	607
Agua Dulce	2	0	2	25	23
Acton	4	2	6	38	32
Southeast Antelope Valley	27	0	27	24	(3)
Tujunga Canyons	4 – 7 [2]	0	4 – 7 [2]	52	45 – 48 [2]
Sun Valley	1	0	1	25	24
Burbank Subsection					
Sun Valley[3]	0	4	4	24[3]	20
Burbank	0	0	0	104	104
Total	**38 – 41 [2]**	**13**	**51 – 54 [2]**	**906**	**852 – 855 [2]**

Source: Authority, 2019b
[1] This row only accounts for displacements within the portion of Palmdale located in the Central Subsection.
[2] Units displaced vary because of optional adit and window combinations.
[3] This row only accounts for displacements within the portion of Sun Valley located in the Burbank Subsection. Available units reduced to account for displacements in the Central Subsection.
MFR = multifamily residential
SFR = single-family residential

As shown in Table 3.12-17, construction of the Refined SR14 Build Alternative would result in an estimated displacement of 38 to 41 SFR units, depending on the adit and window options chosen. Based on an average household size of 3.02 occupants for Los Angeles County, this translates to an estimated 115 to 124 residents that would be displaced and require relocation. Additionally, the Refined SR14 Build Alternative would displace an estimated 13 MFR units with an estimated 39 residents.

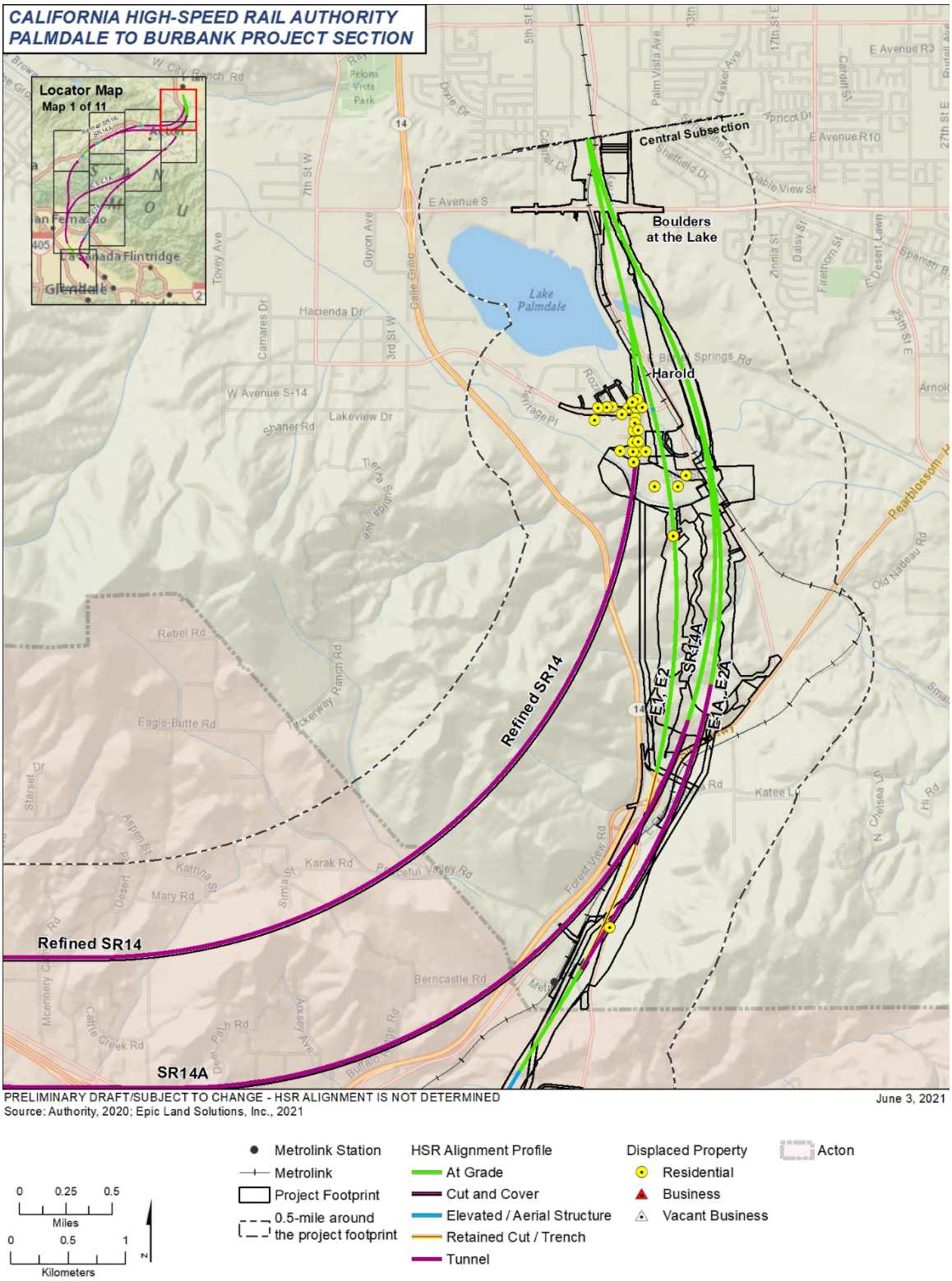

Figure 3.12-19 Residential and Business Displacements (Map 1 of 11)

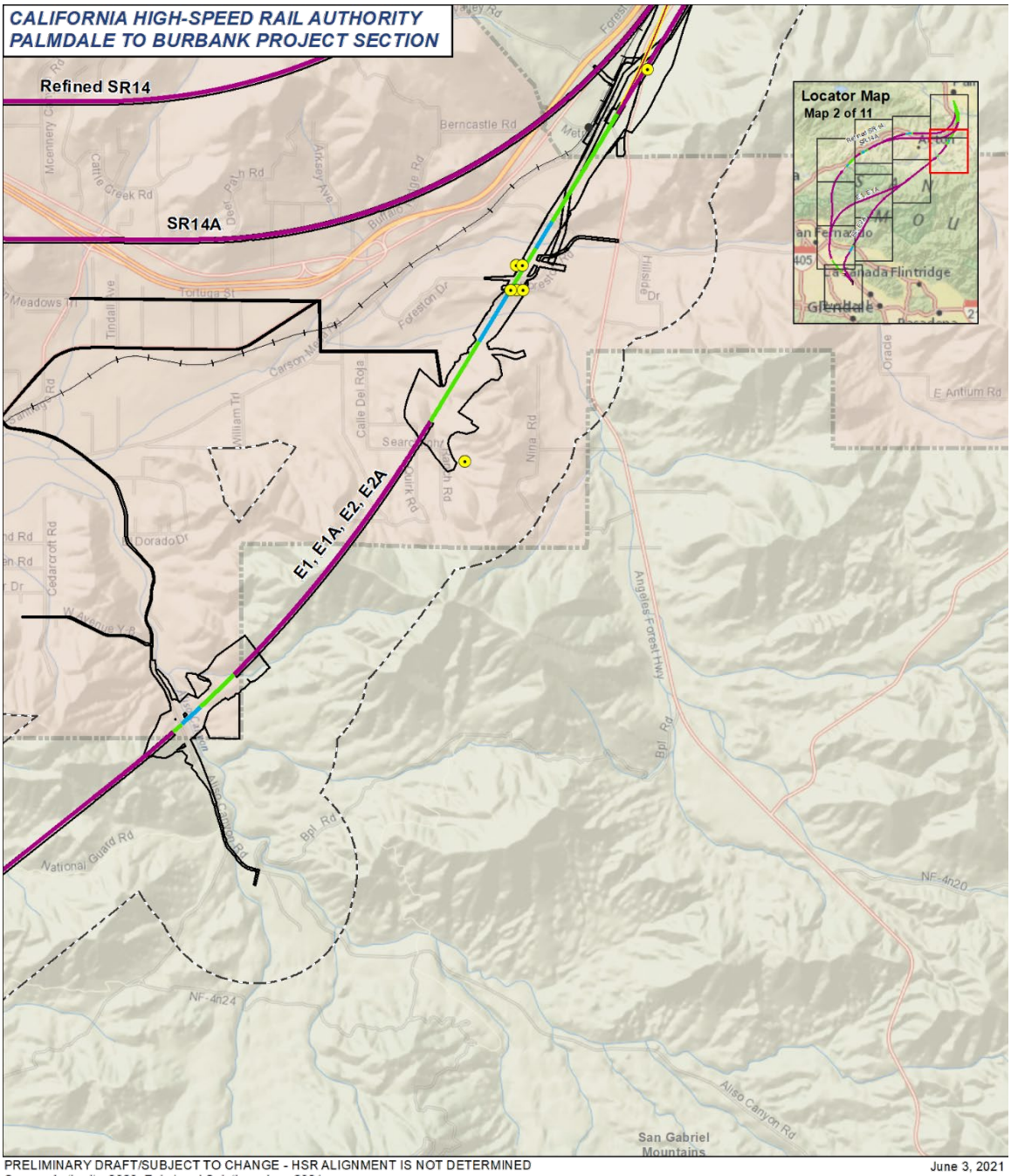

Figure 3.12-20 Residential and Business Displacements (Map 2 of 11)

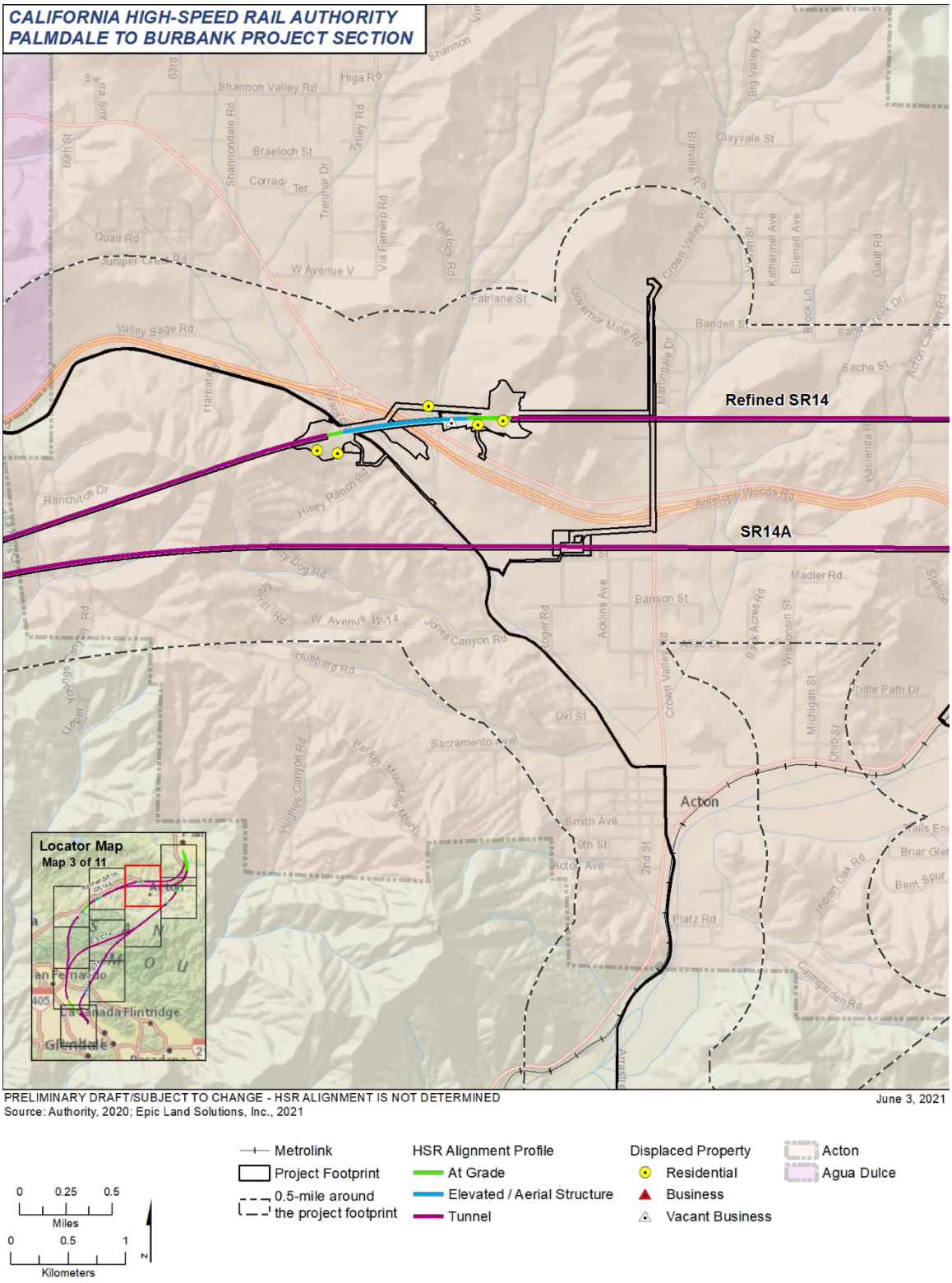

Figure 3.12-21 Residential and Business Displacements (Map 3 of 11)

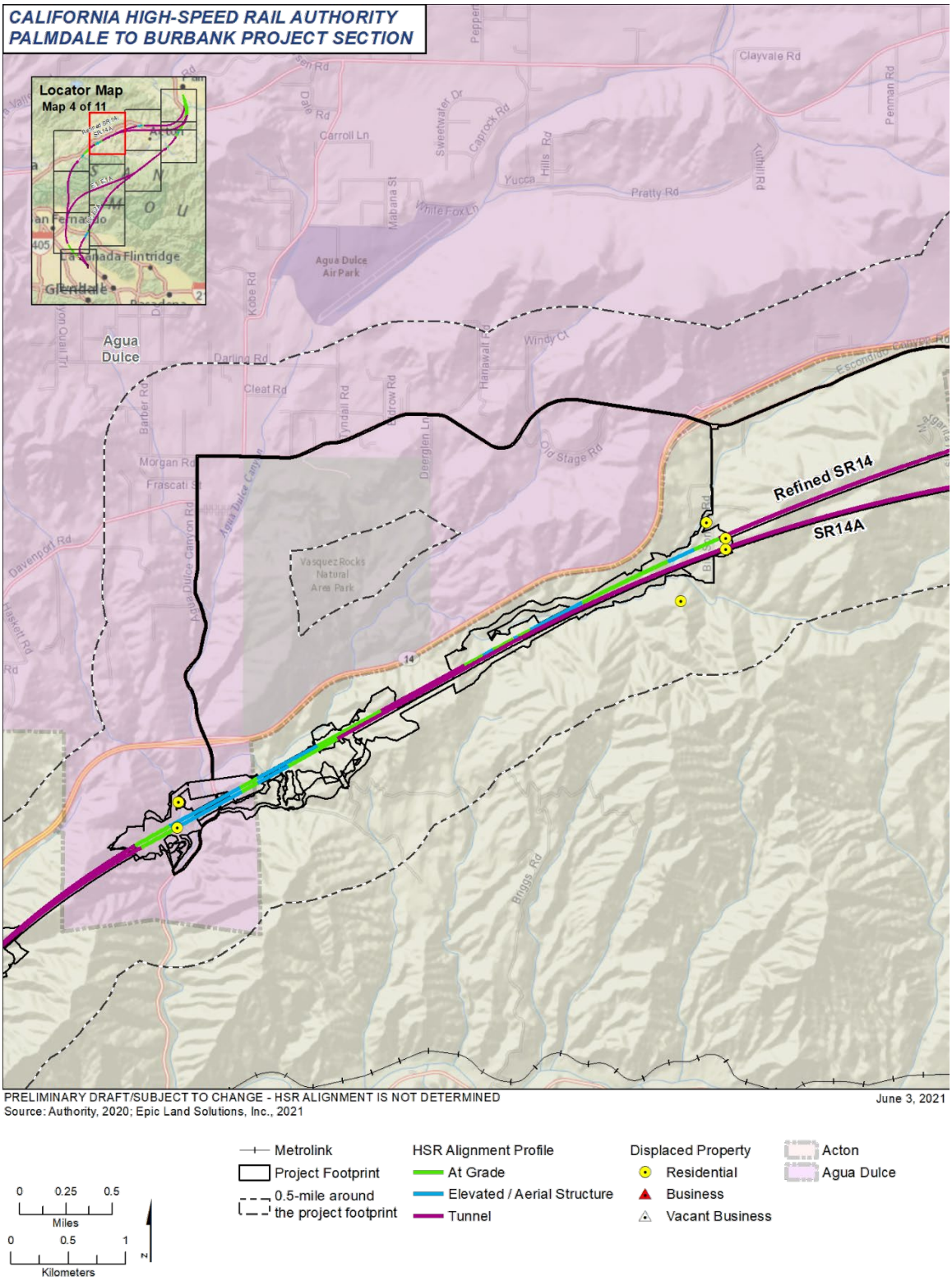

Figure 3.12-22 Residential and Business Displacements (Map 4 of 11)

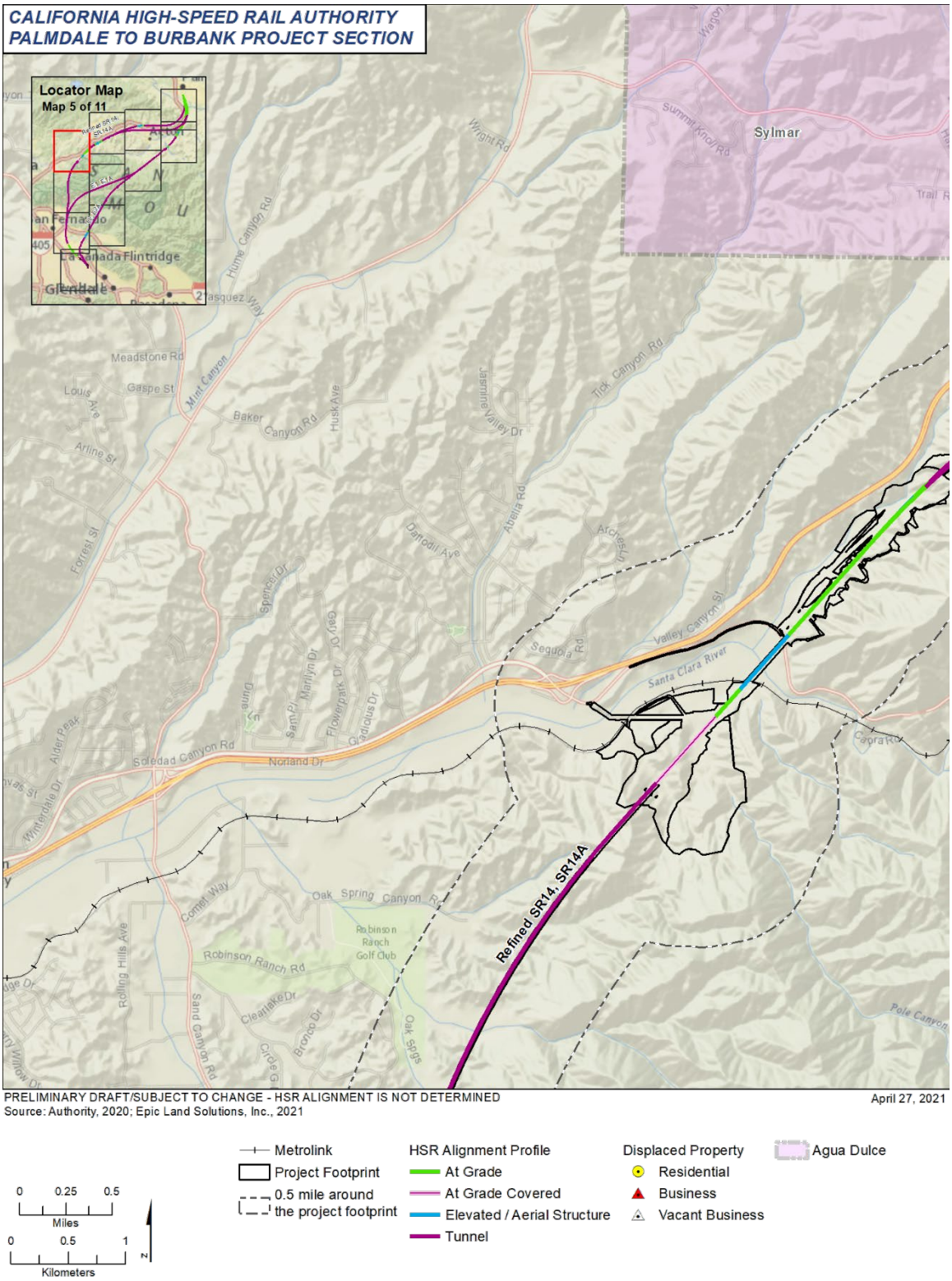

Figure 3.12-23 Residential and Business Displacements (Map 5 of 11)

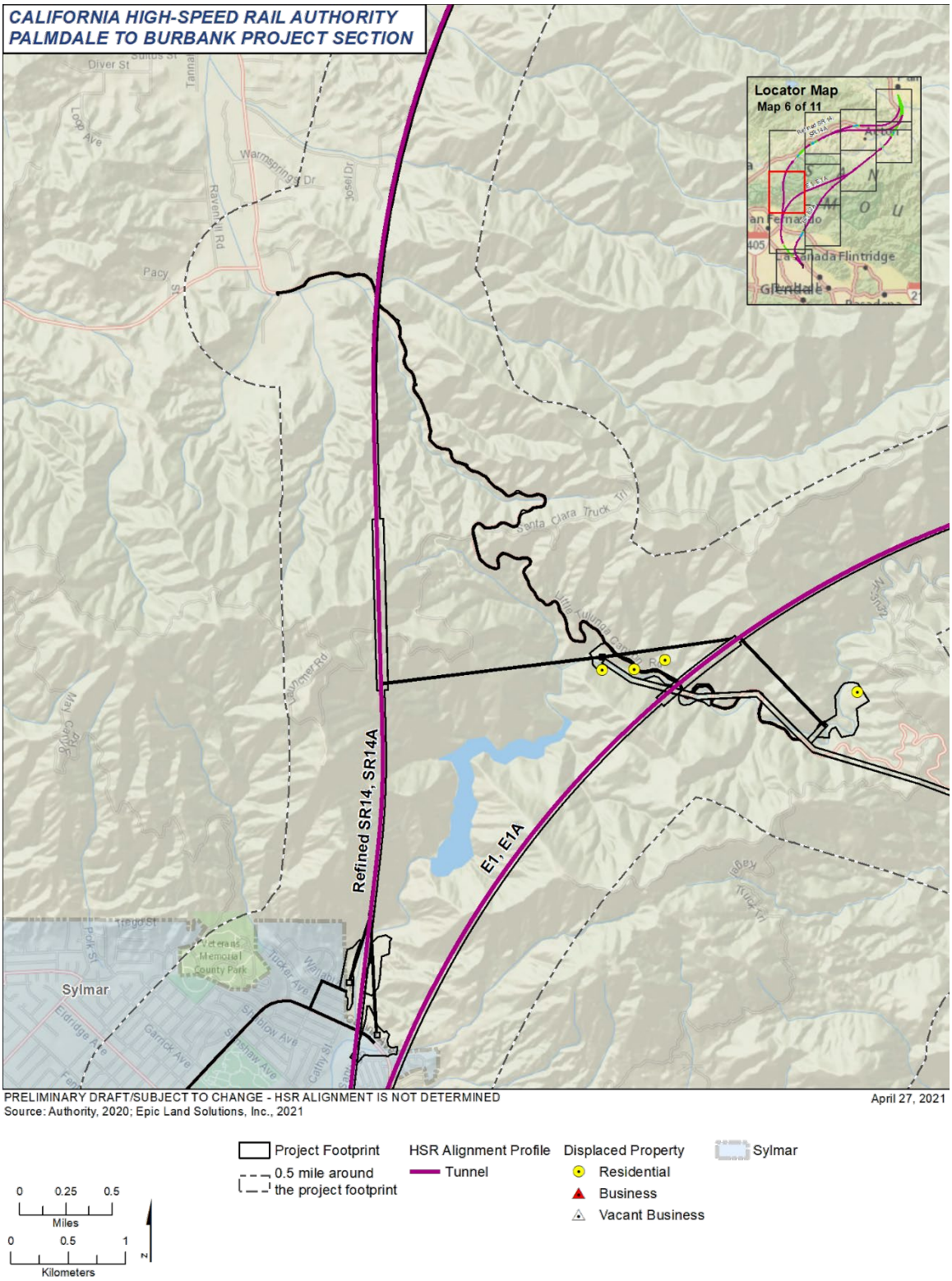

Figure 3.12-24 Residential and Business Displacements (Map 6 of 11)

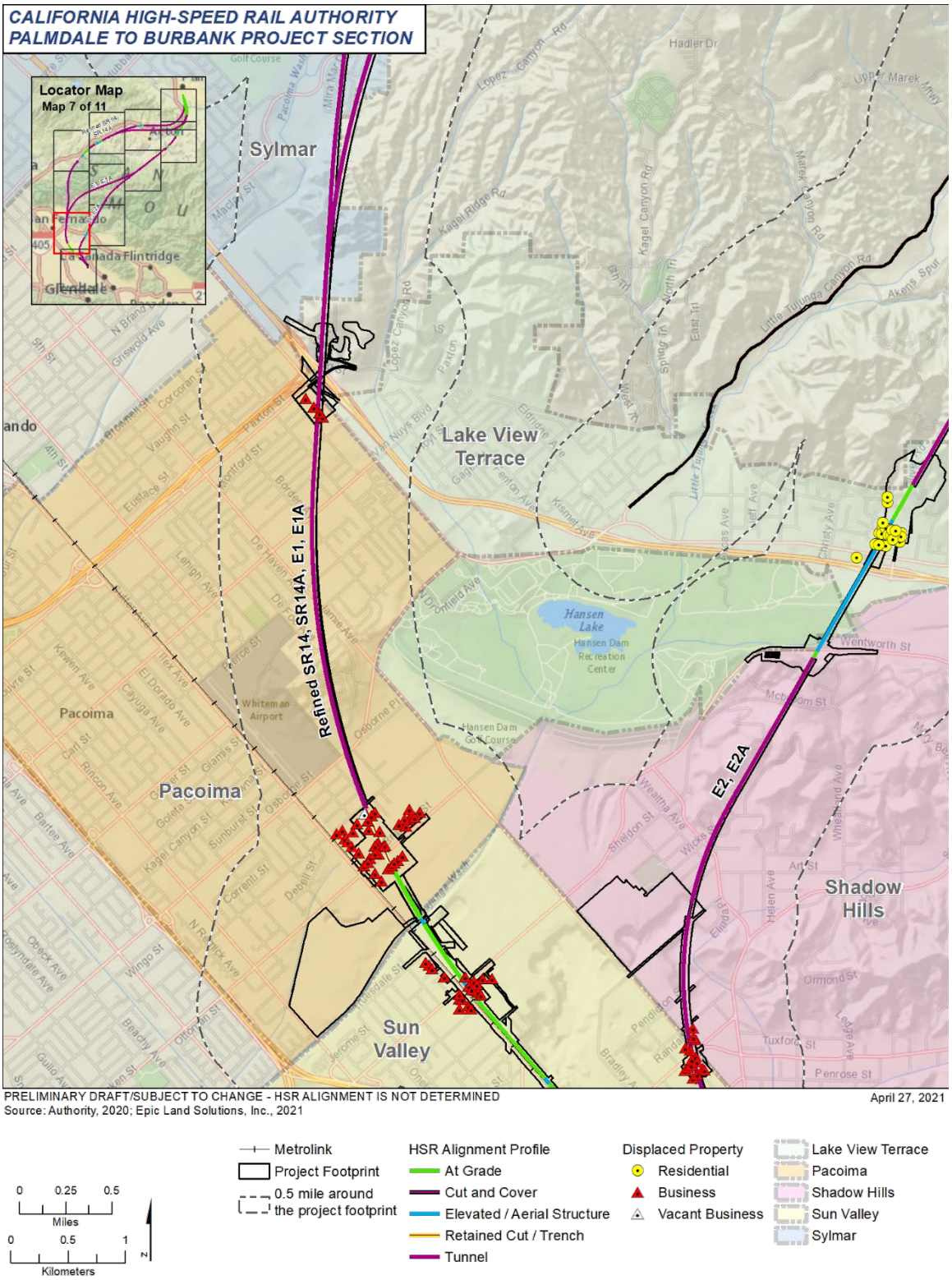

Figure 3.12-25 Residential and Business Displacements (Map 7 of 11)

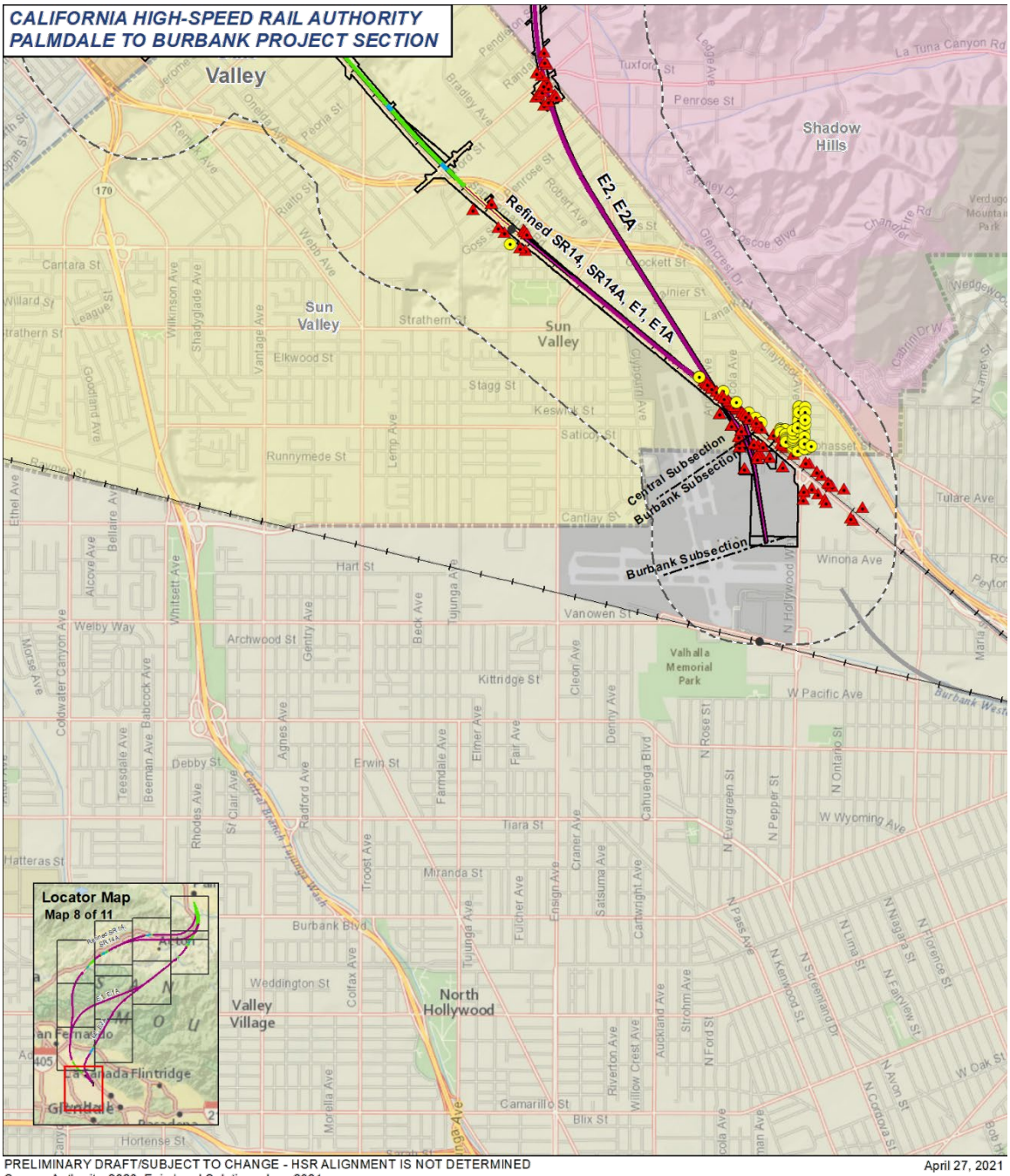

Figure 3.12-26 Residential and Business Displacements (Map 8 of 11)

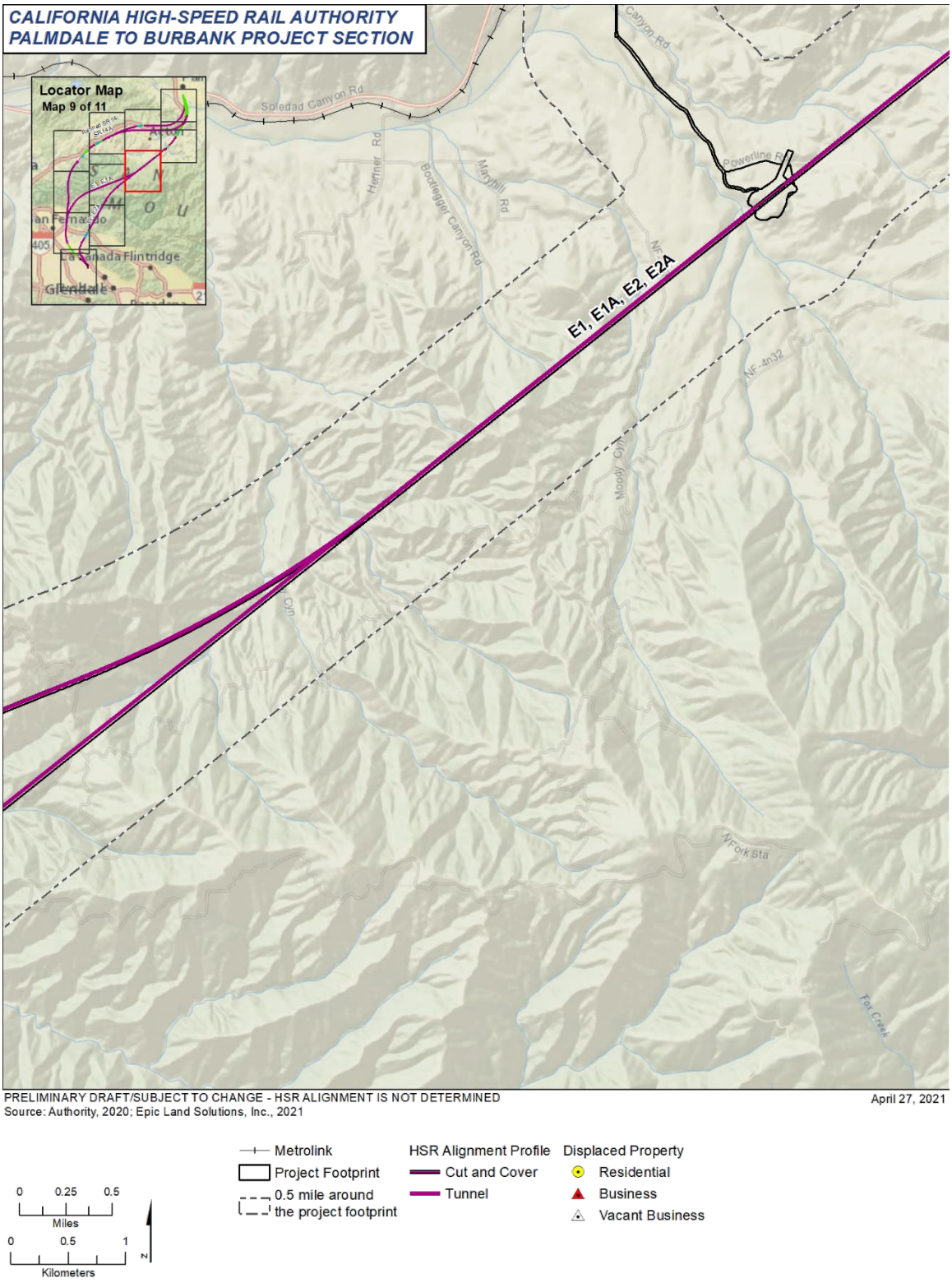

Figure 3.12-27 Residential and Business Displacements (Map 9 of 11)

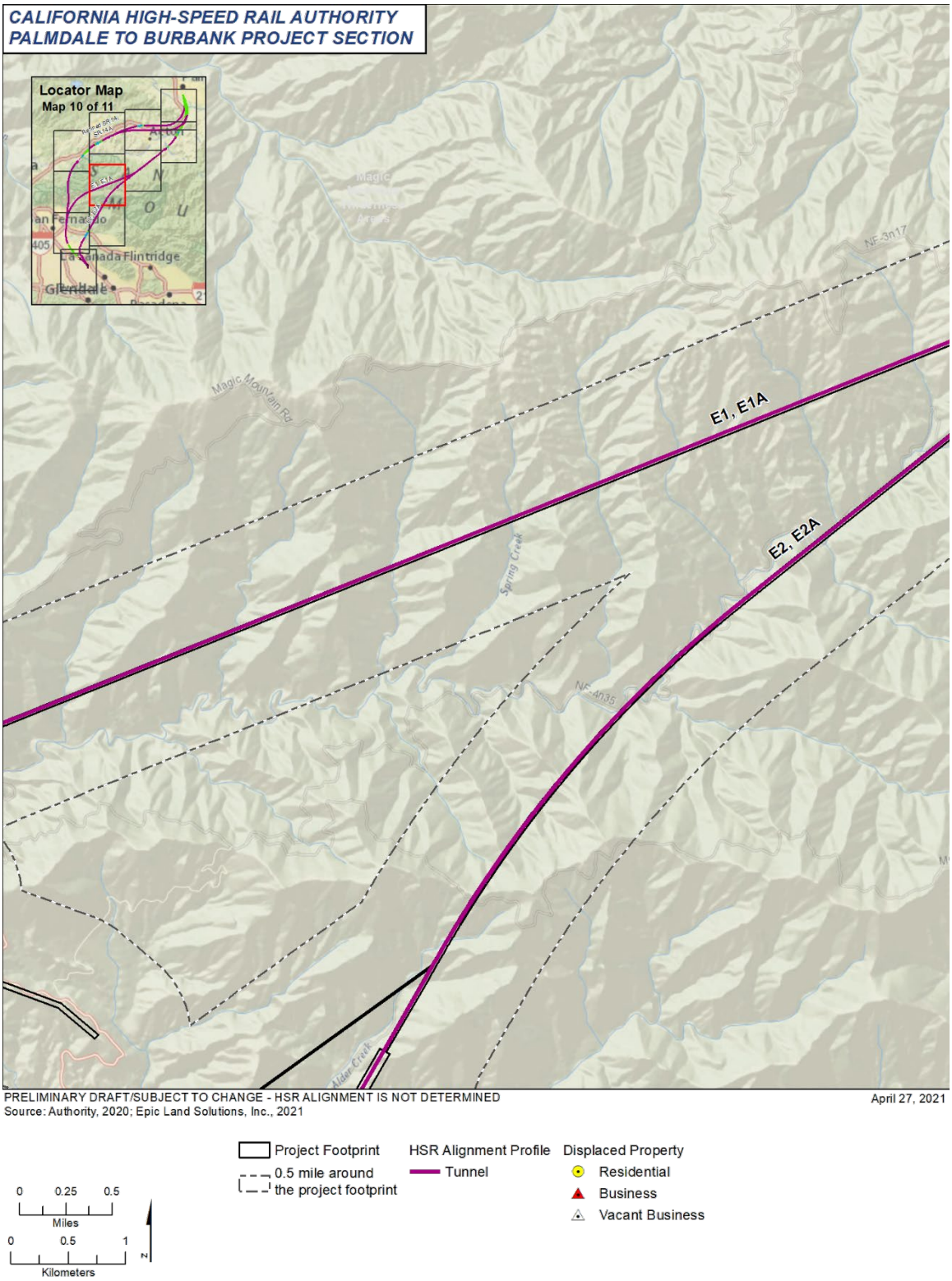

Figure 3.12-28 Residential and Business Displacements (Map 10 of 11)

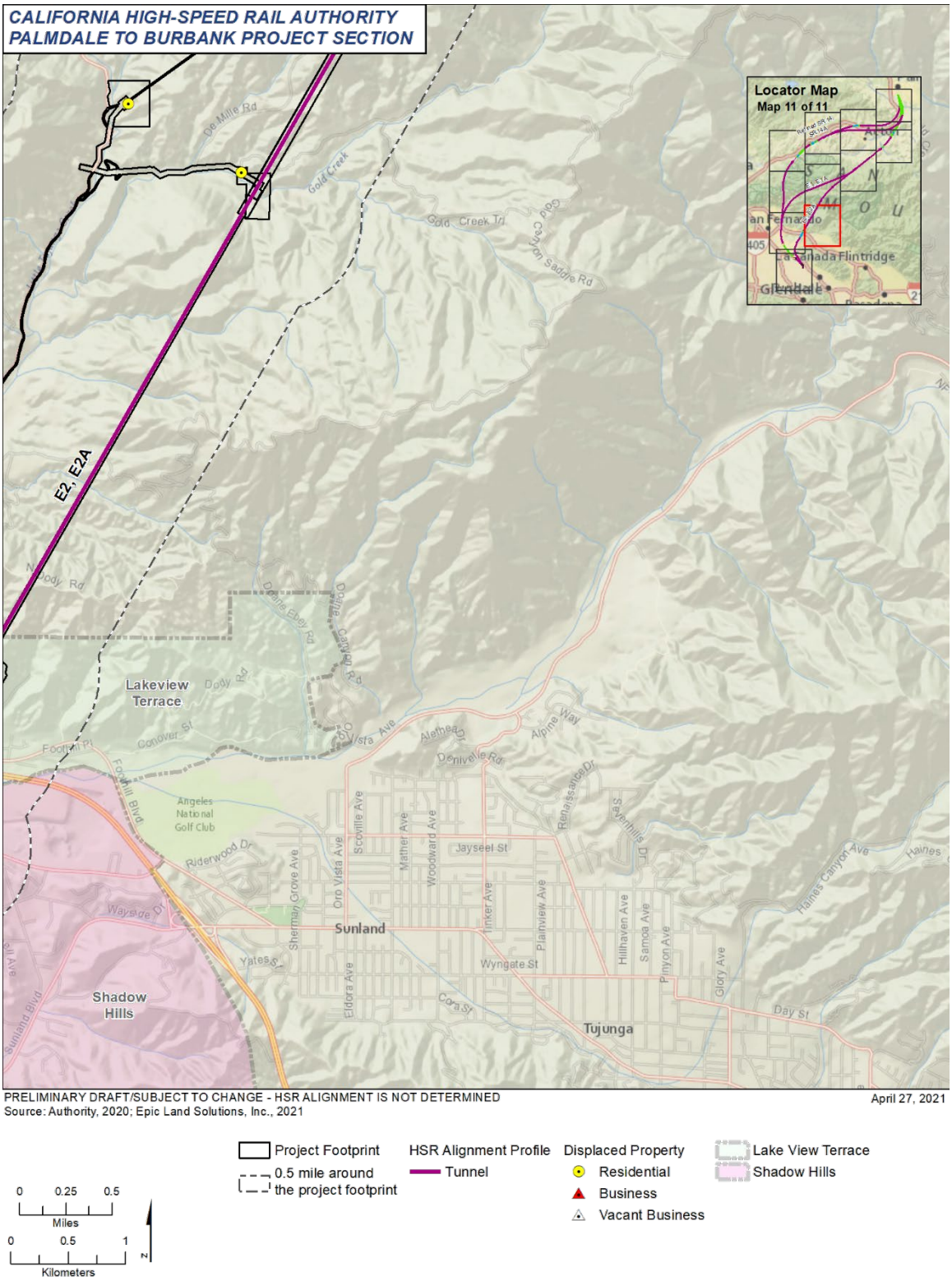

Figure 3.12-29 Residential and Business Displacements (Map 11 of 11)

An analysis of suitable replacement housing in the Draft Relocation Impact Report (Authority 2019b) determined that sufficient replacement residences would be available in all communities except Southeast Antelope Valley. Based on the limited number of comparable replacement units available in Southeast Antelope Valley as of July 2017, it is likely that there would be an insufficient number of replacement properties available within this community to accommodate all displaced households. As a result, people displaced may not be able to find replacement housing in their current community and may need to look for housing in other nearby communities.

Southeast Antelope Valley is a 30-square-mile area south of Palmdale in unincorporated Los Angeles County. The SFR units that could be displaced are clustered in a smaller 70-acre area immediately south of Lake Palmdale. It is possible that many of the displaced households would relocate immediately north to the nearby city of Palmdale with its likely large surplus of replacement housing as shown in Table 3.12-17. Given this anticipated availability of housing nearby, there would be sufficient replacement housing to accommodate all SFR displacements resulting from the Refined SR14 Build Alternative.

SR14A Build Alternative

Like the Refined SR14 Build Alternative, implementation of the SR14A Build Alternative would result in the displacement of both SFR and MFR units. Table 3.12-18 summarizes SFR and MFR unit displacements and available replacement units currently available for sale or lease within each community.

Table 3.12-18 Residential Displacements and Available Replacement Housing – SR14A Build Alternative

Location/Community	SFR Units Displaced	MFR Units Displaced	Total Residential Units Displaced	Total Residential Units Available	Surplus/ (Deficit)
Central Subsection					
Palmdale[1]	4	23	27	614 [1]	587[1]
Agua Dulce	3	2	5	25	20
Acton	0	0	0	38	38
Southeast Antelope Valley	0	0	0	24	24
Tujunga Canyons	0 – 3 [2]	0	0 – 3 [2]	52	49 – 52 [2]
Sun Valley	1	0	1	25	24
Burbank Subsection					
Sun Valley	0	4	4	24	20
Burbank	0	0	0	104	104
Total	**8 – 11 [2]**	**29**	**37 – 40 [2]**	**906**	**866 – 869 [2]**

Source: Authority, 2019b

[1] This row only accounts for displacements within the portion of Palmdale located in the Central Subsection.

[2] Units displaced vary because of optional adit and window combinations.

[3] This row only accounts for displacements within the portion of Sun Valley located in the Burbank Subsection. Available units reduced to account for displacements in the Central Subsection.

MFR = multifamily residential

SFR = single-family residential.

The SR14A Build Alternative would result in 8 to 11 SFR displacements; this is a reduction of 30 displacements compared to the Refined SR14 Build Alternative; this translates to an estimated displacement of 24 to 33 residents for the SR14A Build Alternative. Based on this reduction in displacements compared to the Refined SR14 Build Alternative, the potential replacement properties identified in the Draft Relocation Impact Report (Authority 2019b) for the Refined SR14

Build Alternative would be sufficient to accommodate displacements that would result from the SR14A Build Alternative.

As shown in Table 3.12-18, the SR14A Build Alternative would result in a total of 29 MFR displacements, an increase of 16 MFR displacements when compared to the Refined SR14 Build Alternative. This would correlate to an estimated 87 displaced residents. Each of the 16 additional MFR displacements identified in Palmdale for the SR14A Central Subsection are mobile homes in the Boulders at the Lake Mobile Home Park south of Avenue S and east of Sierra Highway. Mobile homes are considered multifamily dwellings for the purpose of this analysis. The SR14A Build Alternative would also result in two MFR displacements in Agua Dulce.

E1 Build Alternative

Implementation of the E1 Build Alternative would result in the displacement of both SFR and MFR units. Such displacements would be a direct impact of the project. Table 3.12-19 summarizes SFR and MFR unit displacements and available replacement units for sale or lease for this Build Alternative.

Table 3.12-19 Residential Displacements and Available Replacement Housing – E1 Build Alternative

Community	SFR Units Displaced	MFR Units Displaced	Total Residential Units Displaced	Total Residential Units Available	Surplus/ (Deficit)
Central Subsection					
Palmdale[1]	0	7	7	614 [1]	607
Acton	6	0	6	38	32
Southeast Antelope Valley	6	0	6	24	18
Tujunga Canyons	0 – 5 [2]	0	0 – 5 [2]	52	47 – 52 [2]
Sun Valley	1	0	1	25	24
Burbank Subsection					
Sun Valley[3]	0	4	4	20 [3]	16
Total	**13 – 18** [1]	**11**	**24 – 29** [1]	**773**	**744 – 749** [1]

Source: Authority, 2019b

[1] This row only accounts for displacements within the portion of Palmdale located in the Central Subsection.

[2] Units displaced vary because of optional adit and window combinations.

[3] This row only accounts for displacements within the portion of Sun Valley located in the Burbank Subsection. Available units reduced to account for displacements in the Central Subsection.

MFR = multifamily residential

SFR = single-family residential

Under the E1 Build Alternative, the estimated range of SFR displacements would be 13 to 18 units, depending on the adit and window options chosen, compared to the 38 to 41 SFR units displaced under the Refined SR14 Build Alternative. This would correlate to an estimated displacement of 39 to 54 residents for the E1 Build Alternative. As shown in Table 3.12-19, construction of the E1 Build Alternative would displace an estimated 11 MFR units, which is similar to the Refined SR14 Build Alternative. This would correlate to an estimated 33 displaced residents. The analysis of suitable replacement housing in Table 3.12-19 finds that a sufficient number of potential replacement residences would likely be available in all communities under the E1 Build Alternative.

E1A Build Alternative

Implementation of the E1A Build Alternative would result in the displacement of both SFR and MFR units. Such displacements would be a direct impact of the project. Table 3.12-20

summarizes SFR and MFR unit displacements and available replacement units for sale or lease available within each community.

The E1A Build Alternative would result in 12 to 17 SFR displacements, which would correlate to an estimated displacement of 36 to 51 residents. Five SFR displacements would not occur that would otherwise occur with the E1 Build Alternative Central Subsection, including four SFR displacements in Palmdale and one SFR displacement in Acton. However, the E1A Build Alternative would eliminate six SFR displacements that would result from the E1 Build Alternative. Thus, the E1A Build Alternative would have one less displacement than the E1 Build Alternative.

Table 3.12-20 Residential Displacements and Available Replacement Housing – E1A Build Alternative

Community	SFR Units Displaced	MFR Units Displaced	Total Residential Units Displaced	Total Residential Units Available	Surplus/ (Deficit)
Central Subsection					
Palmdale	4	23	27	614	587
Acton	7	0	7	38	31
Southeast Antelope Valley	0	0	0	24	24
Tujunga Canyons	0 – 5 [1]	0	0 – 5 [1]	52	47 – 52 [1]
Sun Valley	1	0	1	25	24
Burbank Subsection					
Sun Valley	0	4	4	24	20
Total	**12 – 17** [1]	**27**	**39 – 44** [1]	**777**	**733 – 738** [1]

Source: Authority, 2019b
[1] This row only accounts for displacements within the portion of Palmdale located in the Central Subsection.
[2] Units displaced vary because of optional adit and window combinations.
[3] This row only accounts for displacements within the portion of Sun Valley located in the Burbank Subsection. Available units reduced to account for displacements in the Central Subsection.
MFR = multifamily residential
SFR = single-family residential

Based on the reduction in displacements compared to the Refined SR14 Build Alternative, the potential replacement properties identified in the Draft Relocation Impact Report (Authority 2019b) for the E1 Build Alternative would be sufficient to accommodate displacements that would result from the E1A Build Alternative.

As shown in Table 3.12-20, a total of 27 MFR displacements would occur under the E1A Build Alternative. This correlates to an estimated 81 displaced residents. The E1A Build Alternative also would result in 16 additional MFR displacements that would not occur under implementation of the E1 Build Alternative. These are the same mobile home displacements discussed in the SR14A Build Alternative MFR displacement analysis presented earlier in this section. A total of 27 MFR displacements would occur under the E1A Build Alternative,

E2 Build Alternative

Implementation of the E2 Build Alternative would result in the displacement of both SFR and MFR units. Such displacements would be a direct impact of the project. Table 3.12-21 shows the total number of SFR and MFR units that would be displaced by the E2 Build Alternative as well as the number of potential replacement units currently available for sale or lease within each community.

Table 3.12-21 Residential Displacements and Available Replacement Housing – E2 Build Alternative

Community	SFR Units Displaced	MFR Units Displaced	Total Residential Units Displaced	Total Residential Units Available	Surplus/ (Deficit)
Central Subsection					
Palmdale [1]	0	7	7	614 [1]	607
Acton	6	0	6	38	32
Lake View Terrace	23	0	23	8	(15)
Southeast Antelope Valley	6	0	6	24	18
Tujunga Canyons	2	0	2	52	50
Sun Valley	1	0	1	25	24
Burbank Subsection					
Sun Valley [2]	0	4	4	24 [2]	20
Total	**38**	**11**	**49**	**785**	**736**

Source: Authority, 2019b

[1] This row only accounts for displacements within the portion of Palmdale located in the Central Subsection.

[2] This row only accounts for displacements within the portion of Sun Valley located in the Burbank Subsection. Available units reduced to account for displacements in the Central Subsection.

MFR = multifamily residential

SFR = single-family residential

The E2 Build Alternative would displace a total of 38 SFR units, translating to an estimated 115 residents. Additionally, 11 MFR units would be displaced. This correlates to an estimated 33 displaced residents. An analysis of suitable replacement housing in the Draft Relocation Impact Report (Authority 2019b) anticipates that a sufficient number of comparable replacement residences would be available in all communities except for Lake View Terrace.

Lake View Terrace is a suburban district in the northeast quadrant of the city of Los Angeles, north of Hansen Dam and the I-210 Freeway. Although sufficient replacements properties did not appear to be available within Lake View Terrace itself, a search identified potentially suitable replacement SFR units in the nearby communities of Sylmar, Tujunga, and Sunland as shown in Table 3.12-22. The number of anticipated available replacement units and the relative proximity of the replacement communities suggest there would be sufficient suitable replacement housing to accommodate all displaced households from Lake View Terrace.

Table 3.12-22 Availability of Replacement Residential Units near Lake View Terrace – E2 Build Alternative

Community	Total Units Displaced	Total Units Available	Approximate Distance (Mile)
Lake View Terrace	**23**	**8**	**-**
Sunland	-	29	3
Sylmar	-	13	3
Tujunga	-	38	6

Source: Authority, 2019a

E2A Build Alternative

Implementation of the E2A Build Alternative would result in the displacement of both SFR and MFR units. Such displacements would be a direct impact of the project. Table 3.12-23 shows the total number of SFR and MFR units that would be displaced by the E2A Build Alternative and the number of potential replacement units currently available for sale or lease within each community.

Table 3.12-23 Residential Displacements and Available Replacement Housing – E2A Build Alternative

Community	SFR Units Displaced	MFR Units Displaced	Total Residential Units Displaced	Total Residential Units Available	Surplus/ (Deficit)
Central Subsection					
Palmdale [1]	4	23	27	614 [1]	587
Acton	7	0	7	38	31
Lake View Terrace	23	0	23	8	(15)
Southeast Antelope Valley	0	0	0	24	24
Tujunga Canyons	2	0	2	52	50
Sun Valley	1	0	1	25	24
Burbank Subsection					
Sun Valley [2]	0	4	4	24 [2]	20
Total	**37**	**27**	**64**	**785**	**721**

Source: Authority, 2019b
[1] This row only accounts for displacements within the portion of Palmdale located in the Central Subsection.
[2] This row only accounts for displacements within the portion of Sun Valley located in the Burbank Subsection. Available units reduced to account for displacements in the Central Subsection.
MFR = multifamily residential
SFR = single-family residential

The E2A Build Alternative would result in a total of 37 SFR displacements, which correlates to displacement of approximately 112 residents, and 27 MFR displacements, which correlates to an approximate displacement of 81 residents. As with the E2 Build Alternative, the E2A Build Alternative would have a deficit of available replacement units in Lake View Terrace. However, as shown in Table 3.12-22, sufficient replacement units would likely be available in nearby communities including Sunland, Sylmar, and Tujunga.

CEQA Conclusion

Within the context of CEQA, this analysis addresses the potential for the Palmdale to Burbank Project Section to displace residences such that it would require the construction of replacement housing elsewhere. Construction of the Build Alternatives would result in displacement of 28 to 64 residences, depending on the adit and window options. As discussed above, Southeast Antelope Valley and Lake View Terrace would likely have insufficient replacement housing for the households displaced by the Palmdale to Burbank Project Section; however, adequate replacement housing appears to be available in nearby communities, provided that such housing can be made available at affordable prices. It is therefore unlikely that the displacement of the limited number of residential units in these areas would necessitate the construction of additional housing elsewhere, and therefore this impact is less than significant for all Build Alternatives.

Furthermore, SOCIO-IAMF#2 (Compliance with Uniform Relocation Assistance and Real Property Acquisitions Act) will provide relocation assistance for persons displaced through right-of-way acquisition; SOCIO-IAMF#3 (Relocation Mitigation Plan) will require the Authority to develop a relocation mitigation plan which will establish an appraisal, acquisition, and relocation process to minimize economic disruption related to relocation in consultation with affected property owners. Additionally, prior to construction, fulfillment of SO-MM#1 will require special outreach efforts to affected residential neighborhood and community residents to better determine relocation needs and locate suitable replacement properties and facilities.

Impact SOCIO#5: *Permanent Displacement and Relocation of Sensitive Residential Populations from Construction.*

Displacement of residential units associated with the construction of the Palmdale to Burbank Project Section could result in the relocation of sensitive populations, including the elderly (over age 65), the disabled, low-income, female heads of households, and linguistically isolated residents, although available data are insufficient to make a conclusion about displacement effects for those populations. These sensitive populations may need additional assistance in the relocation process, such as access to interpreters or medical assistance due to mobility issues. In addition, family requirements, such as dependence on childcare, school services, or community services, may also affect the relocation of sensitive populations, particularly in relation to female-headed households. Displacement impacts on minority and low-income populations are examined in Chapter 5, Environmental Justice. Table 3.12-6 in Section 3.12.5.1 provides a breakdown of the sensitive population percentages in Los Angeles County and each of the cities within the RSA.

More than likely residential impacts under all of the Build Alternatives would require acquisition of some residential units that could affect these sensitive populations. The comparisons shown in Table 3.12-6 suggests residential displacements could affect sensitive populations at a higher rate in the city of Palmdale (low-income and female heads of households), the city of Los Angeles (low-income, linguistically isolated residents, and female heads of households), and the city of Burbank (the elderly). Relocation plans and resources provided would take these sensitive populations into account during the acquisition process.

The Boulders at the Lake Mobile Home Park is owned by the Housing Authority of the City of Palmdale and is a rent-controlled property under the Housing Authority's regulatory agreement, which further dedicates these housing units to all-age, low- and moderate-income households (City of Palmdale 2021). Long-term affordability covenants are income restrictions on housing units for a fixed term. Therefore, it is reasonable to conclude that low-income (50 percent to 80 percent of the local area median income) and moderate-income (80 percent to 120 percent of the local area median income) residents comprise 100 percent of the tenant population at the mobile home park. The Refined SR14, E1, and E2 Build Alternatives would result in 7 residential unit displacements at Boulders at the Lake Mobile Park Home, while the SR14A, E1A, and E2A Build Alternatives would result 23 residential unit displacements. No other properties owned by local Housing Authorities would be displaced by any of the Build Alternatives.

Impact SOCIO#4 provides further detail regarding the location of residential unit displacements for each of the six Build Alternatives. Residential unit displacements in Southeast Antelope Valley

(for the Refined SR14 Build Alternative) and Lake View Terrace (for the E2 and E2A Build Alternatives) would likely have insufficient replacement housing for the units displaced by the Palmdale to Burbank Project Section. These displacements could occur to households considered to be sensitive populations. However, adequate replacement housing appears to be available in nearby communities, provided that such housing can be made available at affordable prices.

The displacement of residential units from the construction of the Palmdale to Burbank Project Section could affect households with sensitive populations. IAMFs that are part of the Build Alternatives are designed to help avoid and minimize these impacts. SOCIO-IAMF#2 will provide relocation assistance to all residents displaced by the Build Alternative in compliance with the Uniform Act, including sensitive populations. SOCIO-IAMF#3 will establish an appraisal, acquisition, and relocation process in consultation with the affected cities, counties, and property owners. Implementation of these IAMFs would minimize the impacts from the potential permanent displacement and relocation of sensitive populations from construction of the Palmdale to Burbank Project Section. No additional mitigation would be required.

CEQA Conclusion

The displacement of sensitive populations, by itself, is not an environmental impact under CEQA. The potential for all residential displacements to result in the construction of new housing is analyzed under Impact SOCIO#4. Implementation of SOCIO-IAMF#2 will provide relocation assistance to all residents displaced by the Build Alternative in compliance with the Uniform Act, and SOCIO-IAMF#3 will establish an appraisal, acquisition, and relocation process in consultation with the affected cities, counties, and property owners. Therefore, the project would not displace substantial numbers of existing homes such that relocation of residents would require the construction of replacement housing, and this impact would be less than significant for all Build Alternatives. Therefore, CEQA does not require mitigation.

Impact SOCIO#6: *Permanent Displacement of Commercial and Industrial Businesses from Construction.*

Each of the Build Alternatives would result in the displacement of commercial and industrial businesses. Table 3.12-24 summarizes business displacement impacts for each Build Alternative.

Table 3.12-24 Comparison of High-Speed Rail Build Alternative Impacts for Business Displacements

Impacts	Build Alternative					
	Refined SR14	SR14A	E1	E1A	E2	E2A
Total Businesses Displaced	161 – 178 [1]	160 – 177 [1]	160 – 177 [1]	162 – 179 [1]	68	70
Communities with Insufficient Suitable Replacement Sites	Pacoima and Sun Valley	Pacoima and Sun Valley	Pacoima and Sun Valley	Pacoima and Sun Valley	Sun Valley and Shadow Hills	Sun Valley and Shadow Hills

Source: Authority, 2019b

[1] Displacements vary due to optional adit and window options

Refined SR14 Build Alternative

Implementation of the Refined SR14 Build Alternative would require the displacement of approximately 161 to 178 businesses, depending on the adit and window options chosen. Such displacements would be a direct impact of the project. An estimated 1,406 to 1,725 employees would be displaced. The Draft Relocation Impact Report (Authority 2019b) provides additional information on employee displacement.

Businesses that are unique to their geographic area and businesses with specific siting requirements would have the most difficulty relocating. Businesses that are unique to their geographic area would include small restaurants that serve a particular neighborhood or community. Businesses with specific siting requirements would include automotive maintenance and repair businesses, which often require specialized facilities because of the nature of the services performed. Other specialized businesses that could have trouble finding suitable relocation sites include two motion picture and video production businesses and an aircraft engine and engine part manufacturing business. Table 3.12-25 shows the total number of businesses in each community that would be displaced by the Refined SR14 Build Alternative. Table 3.12-26 shows the estimated number of business displacements that would occur in each community by type of business and identifies the availability of replacement space. Business displacements are depicted on Figure 3.12-19 through Figure 3.12-29.

The replacement availability analysis in Table 3.12-26 shows that several affected communities would have insufficient vacant industrial properties to accommodate displaced businesses. Many of these businesses would likely need to relocate outside of their existing communities. As shown in Table 3.12-27, displaced industrial businesses in Pacoima could relocate within 10 miles of their existing locations to the communities of San Fernando, Panorama City, Sylmar, Van Nuys, North Hollywood, or Burbank. Sun Valley businesses could relocate within 6 miles to North Hollywood. Another possible location for displaced Sun Valley businesses is Burbank, an option that could reduce the distance that certain businesses would need to move.

Table 3.12-25 Business Displacement by Subsection – Refined SR14 Build Alternative

Community	Estimated Businesses Displaced	Estimated Employees Displaced	Estimated Employee Displacements as a Percent of Local Work Force[1]
Central Subsection			
Acton	1	2	<0.01%
Pacoima	81 – 98 [2]	541 – 860 [2]	0.03% – 0.04%
Sun Valley	68	510	0.03%
Burbank Subsection			
Burbank	7	283	0.50%
Sun Valley	4	70	<0.01%
Total	**161 – 178 [2]**	**1,406 – 1,725 [2]**	**0.03 – 0.04%**

Source: Authority, 2019b

[1] Percentage of total Los Angeles County workforce.

[2] Displacements vary because of optional adit and window combinations.

< = less than

Table 3.12-26 Availability of Replacement Commercial and Industrial Units - Refined SR14 Build Alternative

Community	Commercial			Industrial		
	Businesses Displaced	Space Availability[1]	Surplus/ (Deficit)	Businesses Displaced	Space Availability[1]	Surplus/ (Deficit)
Central Subsection						
Acton	1	9	8	0	0	0
Pacoima	11	20	9	70 – 87 [2]	6	(64) – (81) [2]
Sun Valley	20	11	(9)	48	25	(23)
Burbank Subsection						
Burbank	0	145	145	7	33	26
Sun Valley	1	0	(1)	3	0	(3)
Total	**33**	**185**	**152**	**128 – 145 [2]**	**64**	**(64) – (81) [2]**

Source: Authority, 2019b
[1] Potential replacement sites include properties for sale or lease.
[2] Displacements vary because of optional adit and window combinations.

Table 3.12-27 shows the displacement of commercial and industrial businesses and the availability of commercial and industrial replacement sites in nearby communities. For the purposes of the expanded replacement area tables, the maximum possible numbers of displacements are reflected for cities where displacements could vary depending on window, adits, and station options. It is anticipated that most displaced commercial businesses could be accommodated within the commercial relocation area. In this case, it is possible that new commercial facilities would be constructed to accommodate the displaced businesses.

Table 3.12-27 Expanded Commercial and Industrial Relocation Area – Refined SR14 Build Alternative

Community	Business Units Displaced	Business Units Available	Approximate Distance (miles)
Commercial Businesses			
Sun Valley	**21 [1]**	**11**	**-**
North Hollywood	-	89	6
Burbank	-	145	7
Industrial Businesses			
Pacoima	**81 – 98 [2]**	**6**	**-**
▪ San Fernando	-	8	4
▪ Panorama City	-	4	6
▪ Sylmar	-	9	8
▪ Van Nuys	-	28	8
▪ North Hollywood	-	28	9
▪ Burbank	-	33	10
Sun Valley	**51 [3]**	**25**	**-**

Community	Business Units Displaced	Business Units Available	Approximate Distance (miles)
▪ North Hollywood	-	28	6
▪ Burbank	-	33	7

Source: Authority, 2019b
[1] Out of the 21 commercial units displaced for the Refined SR14 Build Alternative, 20 displacements would occur within the Central Subsection and 1 would occur within the Burbank Subsection.
[2] Displacements vary because of adit/window combinations.
[3] Out of the 51 industrial units displaced for the Refined SR14 Build Alternative, 48 displacements would occur within the Central Subsection and 3 would occur within the Burbank Subsection.

SR14A Build Alternative
Compared to the Refined SR14 Build Alternative, there would be no additional commercial or industrial uses displaced by the SR14A Build Alternative. One commercial business in Acton that would be displaced by the Refined SR14 Build Alternative would not be affected by the SR14A Build Alternative, resulting in a net reduction of one displacement. Table 3.12-28 shows the total number of businesses that would be displaced by the SR14A Build Alternative.

Table 3.12-28 Business Displacement by Subsection – SR14A Build Alternative

Community	Estimated Businesses Displaced	Estimated Employees Displaced	Estimated Employee Displacements as a Percent of Local Work Force
Central Subsection			
Acton	0	0	0.00%
Pacoima	81 – 98 [1]	541 – 860 [1]	0.03% – 0.04%
Sun Valley	68	510	0.03%
Burbank Subsection			
Burbank	7	283	0.50%
Sun Valley	4	70	<0.01%
Total	**160 – 177** [1]	**1,404 – 1,723** [1]	**0.03 – 0.04%** [2]

Source: Authority, 2019b
[1] Displacements vary because of optional adit and window combinations.
[2] Percentage of total Los Angeles County workforce.
< = less than

As described for the Refined SR14 Build Alternative, some communities would have an insufficient number of potential replacement sites for displaced businesses; however, there would likely be sufficient replacement sites to accommodate all business displacements within the Expanded Commercial and Industrial Resource Areas. See Section 6.4.1.1 of the Draft Relocation Impact Report (Authority 2019b) for details of the Expanded Replacement Area analysis. Based on the small change in the number of commercial and industrial displacements for the SR14A Build Alternative compared to the Refined SR14 Build Alternative, the Expanded Replacement Resource Areas identified in the Draft Relocation Impact Report would be sufficient to accommodate displacements from the SR14A Build Alternative.

E1 Build Alternative
Table 3.12-29 shows the total number of businesses in each community that would be displaced by the E1 Build Alternative. In total, construction of the E1 Build Alternative would displace an estimated 160 to 177 commercial and industrial businesses; this impact would be similar to the Refined SR14 Build Alternative, which would displace an estimated 161 to 178 businesses. Such

displacements would be a direct impact of the project. An estimated range of 1,404 to 1,723 employees also would be displaced.

Businesses that are unique to their geographic area and businesses with specific siting requirements would have the most difficulty relocating. Businesses that are unique to their geographic area would include small restaurants that serve a particular neighborhood or community. Businesses with specific siting requirements would include automotive maintenance and repair businesses, which often require specialized facilities because of the nature of the services performed. Other specialized businesses that may have trouble finding suitable replacement sites include two motion picture and video production businesses and an aircraft engine and engine part manufacturing business.

Table 3.12-29 Business Displacement by Subsection – E1 Build Alternative

Community	Estimated Businesses Displaced	Estimated Employees Relocated	Estimated Employee Displacements as a Percent of Local Work Force
Central Subsection			
Pacoima	81 – 98 [1]	541 – 860 [1]	0.03 – 0.04%
Sun Valley	68	510	0.03%
Burbank Subsection			
Burbank	7	283	0.50%
Sun Valley	4	70	<0.01%
Total	**160 – 177** [1]	**1,404 – 1,723** [1]	**0.03 – 0.04%** [2]

Source: Authority, 2019b
[1] Displacements vary because of optional adit and window combinations.
[2] Percentage of total Los Angeles County workforce.
< = less than

Table 3.12-30 summarizes the estimated number of business displacements that would occur in each community by type of business and includes replacement availability. According to the analysis results in Table 3.12-30, there would be a sufficient number of commercial replacement sites in the communities listed under the Burbank Subsection for the E1 Build Alternative. The communities of Pacoima, and Sun Valley would likely not have sufficient replacement sites to accommodate displacements, and some businesses would need to relocate outside these communities.

Displaced businesses in Pacoima could relocate within 8 miles to the surrounding communities of San Fernando and Sylmar. Sun Valley businesses could relocate within 6 miles to North Hollywood. Another possible location for displaced Sun Valley businesses is Burbank, an option that may reduce the distance that certain businesses would have to move.

Table 3.12-30 Availability of Replacement Commercial and Industrial Units - E1 Build Alternative

Community	Commercial			Industrial		
		Space Availability[1]	Surplus/ (Deficit)	Businesses Displaced	Space Availability[1]	Surplus/ (Deficit)
Central Subsection						
Acton	0	9	9	0	-	-

Community	Commercial			Industrial		
	Businesses Displaced	Space Availability[1]	Surplus/ (Deficit)	Businesses Displaced	Space Availability[1]	Surplus/ (Deficit)
Pacoima	11	20	9	70 – 87 [2]	6	(64) – (81) [2]
Sun Valley	20	11	(9)	53	24	(29)
Burbank Subsection						
Burbank	0	145	145	7	33	26
Sun Valley	1	0	(1)	3	0	(3)
Total	**32**	**185**	**153**	**133 – 150 [2]**	**63**	**(70) – (87) [2]**

Source: Authority, 2019b
[1] Potential replacement sites include properties for sale or lease.
[2] Displacements vary because of adit/window option combinations.

The replacement property availability analysis also shows that several affected communities would have insufficient vacant industrial units available to accommodate displaced businesses. Many businesses would need to relocate outside the communities from which they would be displaced. Analysis of adjacent and nearby communities found likely additional suitable replacement sites for Sun Valley and Pacoima, as shown in Table 3.12-31.

Table 3.12-31 Expanded Commercial and Industrial Resource Area – E1 Build Alternative

Community	Business Units Displaced	Business Units Available	Approximate Distance (miles)
Commercial Businesses			
Sun Valley	**21 [1]**	**11**	**-**
North Hollywood	-	89	6
Burbank	-	145	7
Industrial Businesses			
Pacoima	**80 – 97 [2]**	**6**	**-**
▪ San Fernando	-	8	4
▪ Panorama City	-	4	6
▪ Sylmar	-	9	8
▪ Van Nuys	-	28	8
▪ North Hollywood	-	28	9
▪ Burbank	-	33	10
Sun Valley	**56 [3]**	**25**	**-**
▪ North Hollywood	-	28	6
▪ Burbank	-	33	7

Source: Authority, 2019b
[1] Out of the 21 commercial units displaced for the E1 and E1A Build Alternatives, 20 displacements would occur within the Central Subsection and 1 would occur within the Burbank Subsection.
[2] Displacements vary because of adit/window option combinations.
[3] Out of the 56 total industrial units displaced for the Refined SR14 Build Alternative, 53 displacements would occur within the Central Subsection and 3 would occur within the Burbank Subsection.

Displaced industrial businesses in Pacoima could relocate within 10 miles of their current location to the communities of San Fernando, Panorama City, Sylmar, Van Nuys, North Hollywood, or Burbank. Sun Valley businesses could relocate to North Hollywood or Burbank.

E1A Build Alternative

Business displacements from the E1A Build Alternative would not substantially differ compared to the E1 Build Alternative. Construction of a proposed tunnel portal in southeast Antelope Valley near the Vincent Grade/Acton Metrolink Station (see Figure 3.12-3) would displace a storage yard and a paintball park under the E1A Build Alternative. These are the only two displacements that would not occur under the E1 Build Alternative. This would result in a total increase of two business displacements for the E1A Build Alternative. Table 3.12-32 shows the total number of businesses that would be displaced by the E1A Build Alternative.

Table 3.12-32 Business Displacement by Subsection – E1A Build Alternative

Community	Estimated Businesses Displaced	Estimated Employees Relocated	Estimated Employee Displacements as a Percent of Local Work Force
Central Subsection			
Southeast Antelope Valley	2	20	0.03%
Pacoima	81 – 98 [1]	541 – 860 [1]	0.03 – 0.04%
Sun Valley	68	510	0.03%
Burbank Subsection			
Burbank	7	283	0.50%
Sun Valley	4	70	<0.01%
Total	**162 – 179 [1]**	**1,424 – 1,743 [1]**	**0.04 – 0.05% [2]**

Source: Authority, 2019b
[1] Displacements vary because of optional adit and window combinations.
[2] Percentage of total Los Angeles County workforce.
< = less than

Based on the small increase in business displacements under the E1A Build Alternative, replacement properties identified in the Expanded Commercial and Industrial Resource Areas in the Draft Relocation Impact Report (Authority 2019b) would be sufficient to accommodate all the business displacements from the E1A Build Alternative. Table 3.12-31 shows the availability of commercial and industrial replacement sites in nearby communities for the E1A Build Alternative.

E2 Build Alternative

Table 3.12-33 shows the total number of businesses in each community that would be displaced by the E2 Build Alternative. These displacements would be a direct impact of the project.

Table 3.12-33 Business Displacement by Subsection – E2 Build Alternative

Subsection	Estimated Businesses Displaced	Estimated Employees Relocated	Estimated Employee Displacements as a Percent of Local Work Force
Central Subsection			
Lake View Terrace	1	10	<0.01%
Shadow Hills	6	161	0.01%

Subsection	Estimated Businesses Displaced	Estimated Employees Relocated	Estimated Employee Displacements as a Percent of Local Work Force
Sun Valley	50	430	0.02%
Burbank Subsection			
Sun Valley	4	70	<0.01%
Burbank	7	283	<0.01%
Total	**68**	**954**	**0.02%** [1]

Source: Authority, 2019b
[1] Percentage of total Los Angeles County workforce.
< = less than

Construction of the E2 Build Alternative would displace an estimated 68 commercial and industrial businesses, most of which are commercial and located within the city of Palmdale. An estimated 954 employees also would be displaced. The Draft Relocation Impact Report (Authority 2019b) provides additional information on employee displacement. Total business displacement impacts for the E2 Build Alternative would be less than business displacements associated with the Refined SR14, SR14A, E1, and E1A Build Alternatives, which are estimated to displace between 152 and 171 businesses.

Businesses that are unique to their geographic area and businesses with specific siting requirements would have the most difficulty relocating. Businesses that are unique to their geographic area would include small restaurants that serve a particular neighborhood or community. Businesses with specific siting requirements would include automotive maintenance and repair businesses, which often require specialized facilities because of the nature of the services performed. Other specialized businesses that may have trouble finding suitable replacement sites include a biotechnology research and development business, and an aircraft engine and engine part manufacturing business.

Table 3.12-34 shows the estimated number of business displacements that would occur in each community by type of business and includes an analysis of replacement property availability.

Table 3.12-34 Availability of Replacement Commercial and Industrial Units – E2 Build Alternative

Community	Commercial			Industrial		
	Businesses Displaced	Space Availability[1]	Surplus/ (Deficit)	Businesses Displaced	Space Availability[1]	Surplus/ (Deficit)
Central Subsection						
Lake View Terrace	1	3	2	0	-	-
Shadow Hills	0	-	-	6	0	(6)
Sun Valley	17	11	(6)	33	25	(8)
Burbank Subsection						
Sun Valley	1	0	(1)	3	0	(3)
Burbank	0	145	145	7	33	26
Total	**19**	**159**	**140**	**49**	**58**	**9**

Source: Authority, 2019b
[1] Potential replacement sites include properties for sale or lease.

According to the analysis results shown in Table 3.12-34, the city of Burbank would likely have a sufficient number of business replacement properties. There would likely be deficits of available business space in Shadow Hills and Sun Valley. Therefore, some businesses would likely need to relocate outside these communities. Table 3.12-35 shows the availability of commercial and industrial replacement sites in nearby communities.

Table 3.12-35 Expanded Commercial and Industrial Resource Area – E2 Build Alternative

Community	Business Units Displaced	Business Units Available	Approximate Distance (miles)
Commercial Businesses			
Sun Valley	**18** [1]	**11**	**-**
North Hollywood	-	89	6
Burbank	-	145	7
Industrial Businesses			
Shadow Hills	**6**	**0**	-
▪ Pacoima	-	6	5
Sun Valley	**36** [2]	**25**	-
▪ North Hollywood	-	28	6
▪ Burbank	-	33	7

Source: Authority, 2019b
[1] Out of the 19 commercial units displaced for the E2 Build Alternative, 18 displacements would occur within the Central Subsection and 1 would occur within the Burbank Subsection.
[2] Out of the 39 industrial units displaced for the E2 Build Alternative, 36 displacements would occur within the Central Subsection and 3 would occur within the Burbank Subsection.

It is likely there is insufficient commercial space to accommodate displacements associated with the E2 Build Alternative. To replace businesses displaced as a result of project implementation, it is possible that new commercial facilities would be constructed to accommodate the displaced businesses.

Sun Valley businesses could relocate to North Hollywood, which is within six miles. Another possible location for displaced Sun Valley businesses is Burbank, which could reduce the distance that certain businesses have to move. These areas have sufficient commercial units available to accommodate the displacements.

The industrial replacement availability analysis shows that the community of Shadow Hills would have insufficient vacant industrial units to accommodate displaced businesses. Businesses in Shadow Hills, however, could relocate approximately four to five miles to Pacoima.

E2A Build Alternative

Business displacements from the E2A Build Alternative would not substantially differ compared to the E2 Build Alternative. Construction of a proposed tunnel portal in Southeast Antelope Valley near the Vincent Grade/Acton Metrolink Station would displace a storage yard and a paintball park under the E2A Build Alternative (see Figure 3.12-3). These are the only two displacements under the E2A Build Alternative that would not occur under the E2 Build Alternative. This results in a relative increase of two business displacements under the E2A Build Alternative. Table 3.12-36 shows the number of business units that would be displaced by the E2A Build Alternative.

Table 3.12-36 Business Displacement by Subsection – E2A Build Alternative

Subsection	Estimated Businesses Displaced	Estimated Employees Relocated	Estimated Employee Displacements as a Percent of Local Work Force
Central Subsection			
Southeast Antelope Valley	2	20	0.03%
Lake View Terrace	1	10	<0.01%
Shadow Hills	6	161	0.01%
Sun Valley	50	430	0.02%
Burbank Subsection			
Sun Valley	4	70	<0.01%
Burbank	7	283	<0.01%
Total	**70**	**974**	**0.02%** [1]

Source: Authority, 2019b
[1] Percentage of total Los Angeles County workforce.
< = less than

Based on the small increase in business displacements under the E2A Build Alternative, replacement properties identified in the expanded commercial and industrial resource areas in the Draft Relocation Impact Report (Authority 2019b) would be sufficient to accommodate all the business displacements from the E2A Build Alternative. Table 3.12-35 shows the availability of commercial and industrial replacement sites in nearby communities for the E2A Build Alternative.

CEQA Conclusion
The displacement of local businesses is not considered an environmental impact under CEQA, and therefore, a significance conclusion is not required for this type of impact (CEQA Guidelines Section 15064(e)). Although displaced businesses may relocate, the activities associated with such relocation, including the potential locations, are speculative, as is the potential for such relocation to result in significant environmental impacts. The development of new commercial and industrial space is beyond the scope of the project and would be subject to a separate environmental review and public decision-making process undertaken by the jurisdiction(s) with land use planning authority over the subject properties.

Impact SOCIO#7: *Temporary Effects on Regional Employment from Construction.*

Construction of each of the six Build Alternatives would each result in direct, indirect, and induced employment impacts. Direct construction employment impacts are near-term jobs that would result from construction of the project. Indirect and induced construction employment impacts are those due to construction activity and expenditures by workers and their families, respectively. Specific direct and indirect construction-period calculations for each alternative are discussed in Section 3.18, Regional Growth, and Appendix 3.18-A, RIMS II Modeling Details; the results of these calculations are summarized below.

Construction-related jobs for the Palmdale to Burbank Project Section were estimated based on projected construction expenditures and costs, which includes the costs of the Palmdale Station and Maintenance Facility. The majority of construction-related spending would be dedicated to track structures rather than to stations, support facilities, or other construction expenditure categories. Therefore, it is anticipated most construction workers would be employed at different locations along the track alignment as construction progresses rather than remaining at one construction site throughout the construction period. The total capital costs for the project would

range from approximately $22,400 million to approximately $24,075 million (2018$), depending on the Build Alternative.

The project is expected to support an estimated 7,800 to 8,000 direct jobs (construction sector jobs) during the peak year of construction (Year 4/2023), which represents approximately 5.4 to 5.6 percent of the approximately 144,000 construction industry jobs forecast for Los Angeles County in 2023 (Employment Development Department 2016). Given this relatively small percentage of regional construction industry employment, there is relatively low likelihood of additional construction workers moving to the region with substantial effects on public services and utilities within the context of forecasted growth in the region. Therefore, project construction would provide jobs for many county residents. For further details regarding employment impacts, refer to Section 3.18, Regional Growth.

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 economic impacts. Section 15064(e) of the CEQA Guidelines also notes that "economic or social changes may be used … to determine that a physical change shall be regarded as a significant effect on the environment." The potential for employment to induce growth is addressed in Section 3.18, Regional Growth.

Impact SOCIO#8: *Temporary Sales Tax Revenue Gains from Construction.*

Sales tax gains would be generated from taxable purchases made for the construction of any of the Build Alternatives. Table 3.12-37 provides information on the local sales tax revenues resulting from local expenditures generated by the Build Alternatives over the approximately six-year construction period. These estimates were generated using preliminary cost estimates from the project engineer (Authority 2019a).

Table 3.12-37 Sales Tax Revenues Generated during Construction

	Refined SR14	SR14A	E1	E1A	E2	E2A
Cumulative sales tax over construction period	$95,700,900	$97,402,700	$92,291,300	$93,663,100	$92,891,800	$94,264,800
Annual average sales tax (during construction)	$11,962,600	$12,175,300	$11,536,400	$11,707,900	$10,321,300	$10,473,900

Source: Authority, 2019a

The cumulative local sales tax revenues generated from the Build Alternatives over the construction period are estimated in the range of $92 to $97 million, and annual average sales tax revenues are estimated to be $10 to $12 million. The sales tax revenues lost from displaced businesses under the six Build Alternatives were estimated to be approximately $546,500 to $89,000 annually as shown in Table 3.12-39, which would give the project an overall positive impact on sales tax revenues collected by local governments during the construction period.[8] Annual sales tax revenues would be higher for the SR14 and SR14A Build Alternatives, in part because the alternatives would take a longer route from Palmdale to Burbank and would therefore have higher construction costs (for further details regarding construction costs, refer to

[8] The sales tax revenue losses shown illustrate a highly conservative scenario where none of the displaced businesses are able to find replacement properties.

Chapter 6, Project Costs and Operations). Sales tax effects are discussed in more detail in Appendix C, Economic Analysis, of the Community Impact Assessment (Authority 2019a).

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 economic impacts. Section 15064(e) of the CEQA Guidelines also notes that "economic or social changes may be used … to determine that a physical change shall be regarded as a significant effect on the environment."

Impact SOCIO#9: *Potential for Permanent Physical Deterioration from Construction.*

As discussed further in Section 3.18, Regional Growth, construction of any of the Build Alternatives would result in direct, indirect, and induced employment impacts. However, the number of construction-related jobs would be small compared to the available construction labor force in the economic RSA as discussed in Impact SOCIO#7 above, and the likelihood of workers from other counties moving into the economic RSA for job opportunities is not anticipated. Because construction jobs would be filled by local workers, the population within the displacement and relocation RSA would likely not increase during construction beyond the forecasted regional population growth. Therefore, effects on public services and utilities beyond those caused by forecasted growth in the region is not anticipated to occur and physical deterioration in the land or infrastructure is not anticipated.

As shown in Table 3.12-37 and discussed in Impact SOCIO#8, project construction would result in increased sales tax revenues generated from local expenditures. Sales tax losses from business are not expected to result in stores closing or properties being abandoned, and therefore would not cause physical deterioration of existing communities. The increased sales tax revenues to local jurisdictions could be used for infrastructure or community facility projects that could improve the physical conditions within these communities.

CEQA Conclusion

Because project construction would provide jobs for local workers, generate local sales tax revenue, and avoid physical impacts on agricultural lands, economic changes caused by the project would not lead to physical deterioration of local communities. Therefore, impacts would be less than significant for all six Build Alternatives.

Impact SOCIO#10: *Temporary and Permanent Effects on Agricultural Operations from Construction.*

As discussed in Section 3.14, Agricultural Farmland and Forest Land, there would be no construction staging areas on Important Farmland for any of the Build Alternatives. The E1, E1A, E2, and E2A Build Alternatives would also cross underneath an area of Important Farmland south of Arrastre Canyon Road. These areas of Important Farmland receive water from the East Branch of the California Aqueduct, which would be traversed by each Build Alternative alignment south of Lake Palmdale.

Construction of each of the Build Alternatives would be coordinated or phased to minimize or eliminate disruption in utility services, including disruption in water sources for irrigation. Prior to construction, the contractor will be required to prepare a technical memorandum documenting how construction activities will be coordinated with service providers to minimize or avoid interruptions (PUE-IAMF#4). This will give utility providers an opportunity to plan appropriately for needed service interruptions. To minimize irrigation interruptions, construction work could be scheduled to coincide with routine shutdowns of the East Branch of the California Aqueduct. The Authority will work with irrigation agencies and landowners to protect pipelines, ditches, and related irrigation systems. Where relocating irrigation infrastructure is necessary, the Authority will ensure that, where feasible, new or relocated systems are operational prior to disconnecting the original system (PUE-IAMF#2). This would help alleviate the potential for service interruptions and would therefore allow agricultural production to continue through the construction period.

Construction of the project would generate noise and vibration from construction equipment and vehicles (e.g., clearing, grading, track installation). As discussed in Section 3.4, Noise and Vibration, noise levels are estimated to be 89 A-weighted decibels (dBA) of equivalent continuous sound level (L_{eq}) at 50 feet for an 8-hour workday, and vibration levels are estimated to be 75 vibration decibels (VdB) at up to 70 feet from the construction site. Such noise and vibration levels are judged to be acceptable for animal husbandry operations including those on grazing lands (see Section 3.14, Agricultural Farmland and Forest Land).

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 economic impacts. Section 15064(e) of the CEQA Guidelines also notes that "economic or social changes may be used to determine that a physical change shall be regarded as a significant effect on the environment."

Impact SOCIO#11: *Temporary Effects on Children's Health and Safety from Construction.*

The detailed assessment of the potential for the construction of the Build Alternatives to result in temporary effects on children's health and safety is evaluated in Appendix 3.12-C, Children's Health and Safety Risk Assessment. As discussed in this appendix, all six of the Build Alternatives would have similar construction effects on children's health and safety, and they are not anticipated to result in a substantial risk to children's health and safety with implementation of IAMFs and mitigation measures. Construction-related impacts that could affect children's health and safety (e.g., traffic effects on bus routes and children bicycling and walking to school, air emissions, noise/vibrations, and use of hazardous materials in proximity to schools) are described further below.

Local roadway modifications and construction activities including spoils hauling may temporarily disrupt circulation patterns in some communities and could affect school bus transportation routes and the safety of children bicycling or walking to school (refer to Section 3.2, Transportation, for information on construction impacts and mitigation measures to minimize transportation and traffic impacts and maintain access). Although access to some neighborhoods, businesses, or community facilities would be disrupted and detours required for short periods during construction, access would be available. Roadways that will require realignment would be constructed before the closure of the existing roadway to minimize effects. Construction will also require an increase in construction activities that would affect pedestrians, bicyclists, and transit because of detours, traffic delays, and increased congestion. The California HSR System's temporary impacts related to community circulation would be minimized through compliance with the IAMFs listed below. These IAMFs would reduce potential temporary impacts related to community circulation from construction through the following mechanisms:

- SOCIO-IAMF#1: Construction Management Plan—Prior to construction, the contractor will prepare a CMP that provides measures to minimize impacts on community residents and businesses and maintain access. The plan will include actions pertaining to communications, visual resources protection, air quality, safety controls, noise controls, and traffic controls.
- TR-IAMF#2: Construction Transportation Plan—A CTP will be prepared before construction to provide information ensuring the safety of school children and advising school district of construction activities.

Implementation of these IAMFs would reduce the local traffic impacts on school access and safety.

Construction activities such as earthmoving and operation of diesel-fueled construction equipment could result in a substantial amount of fugitive dust emissions, potential exposure to cancer risks, and temporary disruption of soil or exposure to airborne transmission of the fungus that causes Valley fever. Refer to Section 3.3, Air Quality and Global Climate Change, for the location of sensitive receivers including schools within 1,000 feet of the Build Alternatives, information on construction emissions, as well as IAMFs to reduce fugitive dust and exhaust from construction vehicles. Refer to Section 3.11, Safety and Security, for further information on Valley

fever exposure and IAMFs to prevent the spread of Valley fever. These emissions could have potential localized impacts on children in the vicinity of construction activities. The California HSR System's temporary impacts related to air quality would be minimized through implementation of the IAMFs below:

- AQ-IAMF#1: Fugitive Dust Emissions—The contractor will minimize and control fugitive dust emissions through preparation and implementation of a fugitive dust control plan.
- AQ-IAMF#2: Selection of Coatings—During construction, the contractor will minimize temporary air quality impacts using low-volatile organic compound paint.
- AQ-IAMF#6: Reduce the Potential Impact of Concrete Batch Plants—The contractor will provide the Authority with a technical memorandum documenting consistency with the Authority's concrete batch plant siting criteria and utilization of typical control measures during construction.
- HMW-IAMF#5: Demolition Plans—Prior to construction that involves demolition, the contractor will prepare demolition plans for safe dismantling of building components and debris. The demolition plans will include a plan for lead and asbestos abatement.
- SS-IAMF#2: Safety and Security Management Plan—The contractor shall prepare and implement a Valley fever action plan.

Both the fugitive dust control plan and the lead and asbestos abatement plan would focus on minimizing effects on children and the elderly, in particular, because of their sensitive receptor status. Implementation of AQ-IAMF#1, AQ-IAMF#2, AQ-IAMF#6, HMW-IAMF#5, and SS-IAMF#2 would reduce air quality effects to children's health and safety during construction.

Noise and vibration from construction activities would have the potential to temporarily exceed noise and vibration standards and affect sensitive receptors along the project corridor (refer to Section 3.4, Noise and Vibration, for the location of sensitive receivers including schools within 1,000 feet of the Build Alternatives, information on construction impacts, and IAMFs to minimize impacts). Noise-related disruptions would be minimized by requiring the contractor to adhere to federal guidelines for minimizing noise near sensitive receptors, including residential neighborhoods, schools, and parks (NV-IAMF#1). Implementation of NV-IAMF#1 would minimize effects on children's health and safety from construction-related noise and vibration.

Construction of each of the six Build Alternatives would increase the quantity of hazardous materials moving along major transportation corridors (i.e., SR 14 and I-5) during construction. If unaddressed, the presence of hazardous waste near educational facilities would represent a direct hazard throughout the construction period (refer to Section 3.10, Hazardous Materials and Wastes, for the location of schools and other education facilities within 0.25 mile of the Build Alternatives, information on construction impacts and mitigation measures and IAMFs to minimize impacts). Such construction could potentially result in accidental spills or releases of hazardous materials and wastes, and result in temporary hazards to schools. With implementation of the SPCC plan described in HMW-IAMF#6, the project's construction effects to children's health related to routine transportation and handling of hazardous or acutely hazardous materials would be reduced.

CEQA Conclusion

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

Operations Impacts

Impact SOCIO#12: *Long-Term Effects on Property and Sales Tax Revenues from Operations.*

Property Tax Revenue

Reduced property tax revenues would be a direct effect of project operations because of the potential reductions in the sales price of properties due to train nuisances where the project is aboveground (e.g., noise, visual impacts), such as south of the city of Palmdale near the community of Harold (refer to Figure 3.12-1 through Figure 3.12-12 for locations of above-ground alignment for each of the Build Alternatives). As municipalities determine property values informed by their sales price, property values could also experience reductions (Authority 2019a). This analysis relies on the assessment of changes to property tax revenue based on parcel acquisition.

Property tax impacts were estimated using Los Angeles County Assessor parcel data reflecting the assessed value of full- and partial-acquisition parcels along the alternatives. A detailed discussion of this methodology can be found in Appendix C, Economic Analysis, of the Community Impact Assessment (Authority 2019a). Table 3.12-38 summarizes estimated revenue losses for the Build Alternatives. Given the small percentage of total revenues that would be lost because of project displacements, the overall effect of these revenue losses would be small. However, for jurisdictions potentially confronting severe revenue shortfalls and budget crises, even a minor loss of annual revenues could be cumulatively considerable.

As shown in Table 3.12-38, total annual property tax revenue loss within the region ranges from $1.2 million to $1.6 million. The entity that would experience the largest potential revenue loss in dollars is Los Angeles County with approximately $1.12 million in lost property tax revenue annually under the Refined SR14 Build Alternative; however, this is only 0.03 percent of the county's property tax revenues. The largest estimated percentage loss of property tax revenues is within the city of Burbank under all six Build Alternatives with a loss of approximately 0.10 percent, or approximately $44,000, in annual property tax revenues.

Table 3.12-38 Property Tax Revenues Lost during Operations (2016 Dollars)

Jurisdiction	Estimated Property Tax Loss	Property Tax Revenue (Fiscal Year 2014–2015)	Estimated % Loss in Property Tax Revenue
Refined SR14			
City of Santa Clarita	$754	$37,508,973	< 0.01%
City of Burbank	$44,634	$46,080,193	0.10%
City of Los Angeles	$389,641	$1,745,171,717	0.02%
Los Angeles County	$1,123,806	$4,483,370,377	0.03%
Regional Total	**$1,558,835**	**$6,312,131,260**	**0.02%**
SR14A			
City of Santa Clarita	$754	$37,508,973	< 0.01%
City of Burbank	$44,634	$46,080,193	0.10%
City of Los Angeles	$389,641	$1,745,171,717	0.02%
Los Angeles County	$1,057,470	$4,483,370,377	0.02%
Regional Total	**$1,492,499**	**$6,312,131,260**	**0.02%**

Jurisdiction	Estimated Property Tax Loss	Property Tax Revenue (Fiscal Year 2014–2015)	Estimated % Loss in Property Tax Revenue
E1			
City of Santa Clarita	$0	$37,508,973	< 0.01%
City of Burbank	$44,634	$46,080,193	0.10%
City of Los Angeles	$406,301	$1,745,171,717	0.02%
Los Angeles County	$1,097,903	$4,483,370,377	0.02%
Regional Total	**$1,548,838**	**$6,312,131,260**	**0.02%**
E1A			
City of Santa Clarita	$0	$37,508,973	< 0.01%
City of Burbank	$44,634	$46,080,193	0.10%
City of Los Angeles	$406,301	$1,745,171,717	0.02%
Los Angeles County	$1,084,940	$4,483,370,377	0.02%
Regional Total	**$1,535,875**	**$6,312,131,260**	**0.02%**
E2			
City of Santa Clarita	$0	$37,508,973	< 0.01%
City of Burbank	$44,634	$46,080,193	0.10%
City of Los Angeles	$278,525	$1,745,171,717	0.02%
Los Angeles County	$951,919	$4,483,370,377	0.02%
Regional Total	**$1,275,078**	**$6,312,131,260**	**0.02%**
E2A			
City of Santa Clarita	$0	$37,508,973	0.00%
City of Burbank	$44,634	$46,080,193	0.10%
City of Los Angeles	$278,525	$1,745,171,717	0.02%
Los Angeles County	$938,956	$4,483,370,377	0.02%
Regional Total	**$1,262,115**	**$6,312,131,260**	**0.02%**

Source: Authority, 2019a
To provide a conservative estimate of property tax impacts, parcel data from the 2015/2016 equalized tax roll reflecting the assessed value of both fully acquired and partially acquired parcels were used.
< = less than

Sales Tax Revenues

Project operations would also result in sales tax losses associated with displaced businesses, as shown in Table 3.12-39. The largest losses would occur with Refined SR14, SR14A, E1, and E1A Build Alternatives; E2 and E2A Build Alternatives would result in lower sales tax losses because of their lower number of business displacements.

Table 3.12-39 Net Annual Loss of Sales Tax from Displaced Businesses by Build Alternative

Build Alternative	Estimated Gross Sales[1]	Transfer Effect (95%)[2]	Net Sales Lost	Net Sales Tax Lost
Refined SR14, SR14A, E1, E1A	$75 million	($71.2 million)	$3.8 million	$89,000
E2, E2A	$40 million	($38.0 million)	$2.0 million	$46,500

Source: Authority, 2019a
[1] Gross sales represent the total annual taxable sales from displaced business before adjustments for relocation/transfer to other businesses.
[2] Transfer effect includes business relocation and customers finding alternative establishments within the local area.

Estimated losses were calculated on a jurisdiction-by-jurisdiction basis, using the 2.87 percent local portion of the base sales tax rate (Authority 2019a). It would be speculative to delineate sales tax losses by city jurisdictional boundaries, but for illustrative purposes, most sales tax losses are shown in Table 3.12-40 and Table 3.12-41. The estimated sales tax losses shown in these tables assume a highly conservative scenario under which none of the displaced businesses would be able to find replacement sites within their current city. However, as discussed under Impact SOCIO#5, replacement properties in nearby communities would be sufficient to accommodate business displacements resulting from the Palmdale to Burbank Project Section.

Table 3.12-40 Illustrative Estimation of Local Sales Tax Losses from Displaced Businesses (Net of Transfer) by Jurisdiction - Refined SR14, SR14A, E1, and E1A Build Alternatives

Jurisdiction	Estimated Sales Tax Loss	Sales Tax Revenue (Fiscal Year 2014–2015)	Estimated % Loss in Sales Tax Revenue
City of Los Angeles	$70,000	$492,934,561	0.01%
Other	$19,000	N/A	N/A
Regional Total	**$89,000**	**$492,934,561**	**0.01%**

Source: Authority, 2019a
N/A = Not Applicable

Table 3.12-41 Illustrative Estimations of Local Sales Tax Losses from Displaced Businesses (Net of Transfer) by Jurisdiction - E2 and E2A Build Alternatives

Jurisdiction	Estimated Sales Tax Loss	Sales Tax Revenue (Fiscal Year 2014–2015)	Estimated % Loss in Sales Tax Revenue
City of Los Angeles	$36,600	$492,934,561	0.01%
Other	$9,900	N/A	N/A
Regional Total	**$46,500**	**$492,934,561**	**0.01%**

Source: Authority, 2019a
N/A = Not Applicable

In addition to the estimated sales tax losses above, generally, the operation of the Burbank Airport Station would generate new sales tax revenues for the region through project spending on operation and maintenance of the station facility.

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 economic impacts. Section 15064(e) of the CEQA Guidelines also notes that "economic or social changes may be used … to determine that a physical change shall be regarded as a significant effect on the environment." Refer to Impact SOCIO#9 for an evaluation of how the economic or social changes related to the construction of the Build Alternatives could result in physical deterioration in the affected communities.

Impact SOCIO#13: *Long-Term Effects on School District Funding from Operations.*

The impacts of construction on school district funding were considered based on residential unit displacements and parcel acquisitions within school district boundaries. School district funding is primarily dependent on student attendance, so if large numbers of students were moved to new residences outside of their current school districts, this would reduce funding for the affected school districts. School district funding is also derived in part from property tax revenue, and parcel acquisitions for project construction within school district boundaries would also reduce funding for the affected school districts.

As discussed in Impact SOCIO#4, some communities, such as Southeast Antelope Valley and Lake View Terrace, would have insufficient replacement housing to accommodate displaced residents. However, a sufficient amount of vacant replacement housing would be available in the city of Palmdale for Southeast Antelope Valley, and in the communities of Sylmar, Kegel Canyon, Tujunga, and Sunland for Lake View Terrace. Replacement housing would be within school district boundaries (Antelope Valley Union High School District, Los Angeles Unified School District), even if not within the same city boundaries. Therefore, students would likely have the opportunity to remain in their current school districts, and effects on school district funding based on average daily attendance (ADA) would be minimal as described in Appendix C, Economic Analysis, of the Community Impact Assessment (Authority 2019a).

As discussed in Impact SOCIO#12 above, there would be reductions in school district funding from property tax revenues, as a result of removal from the property tax assessment roll of parcels acquired to make way for project construction. Table 3.12-42 summarizes the school district revenue losses resulting from parcel acquisitions for each of the Build Alternatives.

Table 3.12-42 School District Property Tax Revenue Losses

School District	Total Revenue	Estimated Property Tax Revenue (Estimated Revenue Loss as a Percentage of Total Revenue)					
		Refined SR14	SR14A	E1	E1A	E2	E2A
Antelope Valley Union High School District	$247,087,574	$438,453 (0.18%)	$397,950 (0.16%)	$412,784 (0.17%)	$399,004 (0.16%)	$412,784 (0.17%)	$399,004 (0.16%)
William S. Hart Union High	$225,424,089	$10,957 (< 0.01%)	$11,067 (< 0.01%)	$324 (< 0.01%)	$324 (< 0.01%)	$0 (0%)	$0 (0%)
Burbank Unified School District	$150,240,142	$100,576 (0.07%)	$100,576 (0.07%)	$100,576 (0.07%)	$100,576 (0.07%)	$100,576 (0.07%)	$100,576 (0.07%)
Acton-Agua Dulce Unified School District	$16,232,239	$73,380 (0.45%)	$29,333 (0.18%)	$47,045 (0.30%)	$48,545 (0.30%)	$47,045 (0.30%)	$48,545 (0.30%)
Los Angeles Unified School District	$7,149,940,138	$610,845 (0.01%)	$610,845 (0.01%)	$638,190 (0.01%)	$638,190 (0.01%)	$441,143 (0.01%)	$441,143 (0.01%)

School District	Total Revenue	Estimated Property Tax Revenue (Estimated Revenue Loss as a Percentage of Total Revenue)					
		Refined SR14	SR14A	E1	E1A	E2	E2A
Regional Total	**$7,541,836,608**	**$1,234,211 (0.01%)**	**$1,149,771 (0.01%)**	**$1,198,919 (0.01%)**	**$1,186,548 (0.01%)**	**$1,001,548 (0.01%)**	**$989,268 (0.01%)**

Source: Authority, 2016, 2019a;Employment Development Department, 2016
All information is for Fiscal Year 2015–2016.
< = less than

Each of the Build Alternatives would result in an approximately 0.01 percent loss of total affected school district funding. The Refined SR14 would result in the highest total loss, 25 percent more than the loss incurred by the E2A Build Alternative, which would result in the lowest loss. The greatest dollar-value revenue loss would occur in Los Angeles Unified School District under the E1 and E1A Build Alternatives, approximately $638,190 for each Build Alternative. However, this is only approximately 0.01 percent of the district's total annual revenue. The greatest percentage revenue loss would occur in Acton-Agua Dulce Unified School District under the Refined SR14 Build Alternative, a loss of approximately 0.45 percent of total revenue, or approximately $73,380 annually. School closings are often triggered by reductions in ADA and the corresponding revenue allocated to each district based on its ADA. As summarized in Section 3.12.5.3, an estimated 99.6 percent of total revenue for Acton-Agua Dulce Unified School District funding is derived from ADA-based allocations. Because property tax revenues contribute a small amount to the district funding, it is unlikely that a reduction in only property tax revenues would trigger school closures within the district.

Project-related roadway modifications may change some access and routing of school buses due to the permanent closure of Penrose Street. However, in Sun Valley and Burbank (Penrose Street) road closures are not expected to have a negative effect on school bus transportation because the presence of other nearby roadways would prevent the required out-of-direction travel distance from exceeding one mile. Since the closure of Penrose Street would cause out-of-direction travel of less than one mile, it is not anticipated to result in long-term effects on school district funding.

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 economic impacts. Section 15064(e) of the CEQA Guidelines also notes that "economic or social changes may be used … to determine that a physical change shall be regarded as a significant effect on the environment." Refer to Impact SOCIO#9 for an evaluation of how the economic or social changes related to the construction of the Build Alternatives could result in physical deterioration in the affected communities.

Impact SOCIO#14: *Permanent Effects on Agricultural Operations from Project Operations.*

No agricultural parcels or facilities would be fully acquired by implementation of any of the Build Alternatives. As discussed in Section 3.14, Agricultural Farmland and Forest Land, impacts on Important Farmland from the Refined SR14 and SR14A Build Alternatives would be limited to the construction of an electrical utility corridor across an approximately 9-acre vineyard east of the Sierra Highway/SR 14 interchange for a traction power facility. The Refined SR14 and SR14A Build Alternatives would have 1 acre and less than 1 acre, respectively, of surface footprint on Important Farmland; the surface impacts in this area would be limited to a new electric utility corridor. AG-IAMF#2 through AG-IAMF#6 will be implemented to reduce any potential indirect impacts from placing utility poles near the Important Farmland. The E1, E1A, E2, and E2A Build Alternatives would not have the potential for permanent surface impacts on Important Farmland.

CEQA Conclusion
Because the construction of an electrical utility line associated with the Refined SR14 and SR14A Build Alternatives could convert Important Farmland to nonagricultural use, this impact would be significant, and therefore CEQA would require mitigation. As explained in Section 3.14, Agricultural Farmland and Forest Land, implementation of mitigation measure AG-MM#1 will require utility corridors to be designed to avoid placing structures on agricultural lands. Electrical towers and poles would be used to allow the electric utility line to span a parcel of farmland without requiring conversion of farmland for the construction of electrical towers. With implementation of AG-MM#1, this impact would be less than significant for the Refined SR14 and SR14A Build Alternatives. The E1, E1A, E2, and E2A Build Alternatives would not have the potential for impacts to Important Farmland.

Impact SOCIO#15: *Potential for Permanent Physical Deterioration from Operations.*

As discussed in Impact SOCIO#12, project operations would result in both property and sales tax losses. Table 3.12-38 shows total annual property tax revenue loss within the region ranges between $1.2 million to $1.6 million. The entity experiencing the greatest potential dollar-value loss would be Los Angeles County with approximately $1.12 million in lost property tax revenue annually under the Refined SR14 Build Alternative; however, this is only 0.03 percent of the county's annual property tax revenues. The largest estimated percentage loss of property tax revenues is for the City of Burbank under all six Build Alternatives, with a loss approximately 0.1 percent, or approximately $44,000, in annual property tax revenue. It would be speculative to delineate sales tax losses by city jurisdictional boundaries, but for illustrative purposes, the City of Los Angeles is estimated to experience approximately 0.1 percent in potential sales tax revenue loss. This estimated sales tax losses assume a highly conservative scenario under which none of the displaced businesses would be able to find replacement sites within their current city. Such small losses in tax revenue would not be anticipated to lead to the physical deterioration of public facilities or infrastructure.

As discussed in Impact SOCIO#13, project operations would result in long-term effects on school district funding as a result of property tax revenue loss, however, these losses would be negligible. The greatest percentage revenue loss would occur for the Refined SR14 Build Alternative, in Acton-Agua Dulce Unified School District at 0.45 percent. Property tax revenues contribute to only a small amount of total school district funding, so it is unlikely that the project would have negative long-term effects to school district funding that would lead to physical deterioration of facilities.

CEQA Conclusion
Property and sales tax revenue comprises the majority of government revenue to support public facilities and services; because property and sales tax revenue losses from project operations would be negligible, it is not anticipated these reductions would lead to physical deterioration of schools or other public facilities and services. Additionally, agricultural lands would not be physically affected by the project. This impact would be less than significant for all six Build Alternatives.

Impact SOCIO#16: *Permanent Effects on Children's Health and Safety from Operations.*

The potential for the Build Alternatives to result in permanent effects on children's health and safety is evaluated in Appendix 3.12-C, Children's Health and Safety Risk Assessment. As discussed in Appendix 3.12-C, all six of the Build Alternatives would have similar effects on children's health and safety and are not anticipated to result in a substantial risk to children's health and safety over the long term. Operation-related impacts that could affect children's health and safety (e.g., traffic effects, air emissions, noise/vibrations, and use of hazardous materials in proximity to schools) are described further below.

Roadway modifications may change some access and routing of school buses due to road closures, but alternative routes are available to minimize impacts (refer to Section 3.2, Transportation, for information on access impacts and mitigation measures to maintain access). Although project operations would have the potential to impact roadway segments and

intersections, with implementation of mitigation measures, there would be no significant operational transportation impacts. Additionally, pedestrian and bicycle facilities would be provided to compensate for loss of existing facilities and to maintain safe connections to the regional and local pedestrian and bicycle network. Effects to children's health and safety as a result of school district bus transportation changes, as well as effects to the safety of children bicycling or walking to school during HSR operations, would be negligible.

All six Build Alternatives would result in a net benefit of regional and statewide air quality from HSR operations because of a decrease in emissions as a result of transportation modes shift (refer to Section 3.3, Air Quality and Global Climate Change, for information on operational emissions). Effects to children's health and safety as a result of changes to air quality during HSR operations would be negligible.

HSR operations could result in a number of moderate impacts due to increased noise levels (refer to Section 3.4, Noise and Vibration, for information on operational impacts and mitigation measures to minimize impacts). Since mitigation measures would reduce operational noise and vibration impacts to less than significant levels at sensitive receptors such as homes, schools, and community facilities, there would be no impact to children's health and safety.

Project operations could entail storage or use of hazardous materials within 0.25 mile of a school (refer to Section 3.10, Hazardous Materials and Wastes, for information on operational impacts and mitigation measures to minimize impacts). An operations plan would be created by the Authority and coordinated with the relevant educational facilities to ensure that no extremely hazardous substances would be used in a quantity equal to or greater than the state threshold quantity within 0.25 mile of a school, in compliance with Health and Safety Code Section 25532. Therefore, there would be no significant impacts to children's health and safety from the handling of hazardous materials or waste during project operations.

Several schools would be adjacent to the Build Alternatives. California Code of Regulations (Cal. Code Regs.) Title 5, Section 14010c, calls for a separation between schools and power transmission lines of 100 feet for 50- to 133-kilovolt (kV) lines. The project would be powered by a 25-kV system; therefore, a separation between schools and power transmission lines would not be required. Additionally, the project would not require the construction of new power transmission lines in the vicinity of existing schools and other education facilities. For these reasons, electrification of the Build Alternatives would have no safety effects on school employees and students.

Derailment of a train during a seismic event or other natural disaster could be a substantial safety hazard to schools along the Build Alternatives if the train were to leave the HSR right-of-way and collide with school structures or children on adjacent school properties. The hazard is associated with the physical mass and speed of the train. However, as the California HSR System would carry passengers and be electric-powered, there would be no safety hazard associated with HSR cargo or fuel that could result in explosions. A basic design feature of an HSR system is to contain trainsets within the operational corridor (FRA 1997). Strategies to ensure containment include operational and maintenance plan elements that would ensure high-quality tracks and vehicle maintenance to reduce the risk of derailment. Also, physical elements, such as containment parapets, check rails, guard rails, and derailment walls, would be used in specific areas with a high risk of or high impact from derailment. Thus, if a derailment were to occur, the train would remain within the HSR right-of way. The Build Alternatives would be located in a tunnel in all locations where it would be adjacent to schools. Therefore, effects on children's health and safety would be minimal.

CEQA Conclusion

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

3.12.7 Mitigation Measures

The impacts presented in Section 3.12.6, Environmental Consequences, reflect the implementation/inclusion of numerous mitigation measures that will be required to reduce the socioeconomic and community impacts during construction and operations of the Palmdale to Burbank Project Section. These mitigation measures are described below:

SO-MM#1: Implement measures to reduce impacts associated with the division of residential neighborhoods

Prior to construction (in residential areas) the Authority will minimize impacts in residential areas by conducting special outreach to affected homeowners and residents to understand their special relocation needs fully. The Authority will make efforts to locate suitable replacement properties that are comparable to those currently occupied by these residents, including constructing suitable replacement facilities if necessary.

In cases where residents wish to remain in the immediate vicinity, 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 replacement of services and utilities, as appropriate. Before land acquisition, the Authority will conduct community workshops to obtain input from those homeowners whose property would not be acquired but whose community would be substantially altered by construction of HSR facilities, including the loss of many neighbors, to identify measures that could be taken to mitigate impacts on those who remain (including placement of noise barriers and landscaping, and potential uses for nonagricultural remnant parcels that could benefit the community in the long term). The Authority will document implementation of this measure through annual reporting.

SO-MM#2: Implement measures to reduce impacts associated with the division of communities

Prior to construction (in mixed-use communities) the Authority will minimize impacts in the existing communities through a program of outreach to homeowners, residents, landowners, business owners, community organizations, and local officials in affected neighborhoods. The objective will be to maintain community cohesion and avoid physical deterioration. The Authority will evaluate the community's modified access, including the effectiveness of providing overcrossings or undercrossings of the HSR track to allow continued use of community facilities and connectivity. This includes the design of overcrossings or undercrossings to allow multimodal passage.

The Authority will also conduct community workshops about the future use of the areas beneath the rail guideway, where these areas would exist. These meetings will provide the community an opportunity to identify design and use options that could strengthen community cohesion and be consistent with the existing community character.

To maximize attendance and generate awareness of the workshops, the Authority will work with either community organizations or community leaders within the neighborhoods. A location and time will be selected to increase attendance and be based on the community's needs.

The Authority will present information at the workshops giving the community options for the future use of the area beneath or above the rail guideway and provide an opportunity for individuals to provide feedback and propose solutions. For example, if safety considerations prohibit such uses as bike paths or community gardens, alternatives, such as sculpture gardens or managed landscaping, could be considered. The Authority will consider comments and feedback in planning for the sites.

Upon gathering feedback from the community, the Authority will utilize the input and define solutions. The Authority will report the decisions at a public workshop and in a written report made available to the public.

The Authority will be responsible for implementing the measures to reduce impacts through project design and through the long-term management of the measures. This will involve documenting the

desired design concepts, incorporating them into the final design, and facilitating ongoing maintenance. The Authority will identify potential uses that may be developed in the project right-of-way. These uses will be consistent with the character of the adjacent community and sensitive to project needs (as outlined in Section 3.11, Safety and Security). The costs associated with the development of these corridor improvements and how these costs will be paid will be determined during consultations with the affected jurisdictions or community organizations. Furthermore, the parties or entities (e.g., the Authority, local government, park or recreation district, nonprofit organization) responsible for ongoing maintenance of these community areas will be determined. The Authority will document compliance with this measure through annual reporting.

SO-MM#3: Implement measures to reduce impacts associated with the relocation of important community facilities

Prior to construction, the Authority will minimize impacts resulting from the acquisition, displacement, and/or relocation of key community facilities.

The Authority will consult with the appropriate parties before land acquisition to assess potential opportunities to reconfigure land use and buildings and/or relocate affected facilities, as necessary, to minimize the disruption of facility activities and services and to provide for relocation that allows the community currently being served to continue to use these services.

The Authority will continue to implement a comprehensive non-English-speaking language outreach program as land acquisition begins. This program will facilitate the identification of approaches that will maintain continuity of operation and allow space and access for the types of services currently provided and planned for these facilities. To avoid disruption to these community amenities, the Authority will provide for reconfiguring land uses or buildings, or relocation of community facilities prior to demolishing existing structures. The Authority will document compliance with this measure through annual reporting.

3.12.7.1 Impacts from Implementing Mitigation Measures

The following impacts from implementing mitigation measures relevant to socioeconomics and communities could occur:

- ***SO-MM#1:*** Identifying replacement residential properties, consulting with local authorities, and conducting community workshops would not have any secondary environmental impacts. As discussed above, if replacement facilities are built, new development could have a range of construction and operations period impacts typical of residential development, such as: emissions and fugitive dust from construction equipment, construction-related noise, construction-related road closures or traffic delays, mobilization of extant hazardous materials or wastes, private property acquisitions, and impacts on biological and cultural resources. These impacts would depend on the location, timing, and context of the construction.
- ***SO-MM#2:*** Implementation of design concepts suggested during public workshops would not result in secondary or off-site environmental impacts beyond those discussed in this Draft EIR/EIS.
- ***SO-MM#3:*** Where communities facilities would be displaced, implementation of SO-MM#3 would minimize the disruption of facility activities and services and provide for relocation that allows the community currently being served to continue to use these services. Preservation of access would not result in secondary environmental impacts. As discussed above, if replacement facilities are built, new development could have a range of construction and operations period impacts typical of such development, including emissions and fugitive dust from construction equipment, construction-related noise, construction-related road closures or traffic delays, mobilization of extant hazardous materials or wastes, private property acquisitions, and impacts on biological and cultural resources. These impacts would depend on the location, timing, and context of the construction.

3.12.8 NEPA Impacts Summary

This section summarizes the impacts of the six Build Alternatives and compares them to one another. Overall, implementation of the Build Alternatives could result in impacts on socioeconomics and communities through construction activities and infrastructure development that may disrupt or divide communities, potentially affect children's health and safety, and result in displacements or affect the use of residential and commercial properties and community facilities. Operation of the Build Alternatives would affect socioeconomic and communities through inspection and maintenance activities that may result in the disruption of communities, impacts on children's health and safety, and result in changes to employment as well as property and sales tax revenues.

3.12.8.1 Population and Communities

Construction of each of the Build Alternatives would have the potential to temporarily disrupt communities where aboveground construction activities would take place. Such construction disruptions would be a direct effect and would include increased noise levels, fugitive dust, increased traffic and congestion, and additional light and glare. Because construction activities would be similar for all six Build Alternatives, the intensity of these disruptions would also be similar for each alternative. All six Build Alternatives would involve at-grade construction activities within the community at the Boulders at the Lake Mobile Home Park just south of Lake Palmdale; the Refined SR14, E1, and E2 Build Alternatives would involve at-grade construction activities in the unincorporated community of Harold as well. In addition, the Refined SR14 Build Alternative would be constructed aboveground in an area of low-density residential development in Agua Dulce near Big Springs Road. The E1, E1A, E2, and E2A Build Alternatives would avoid the community in Agua Dulce, but they would involve at-grade construction work near single-family residences in the unincorporated community of surrounding the SCE Vincent Substation. Additionally, the Refined SR14, SR14A, E1, and E1A Build Alternatives would involve at-grade construction work near single-family residences the neighborhood of Sylmar, while the E2 and E2A Build Alternatives would involve at-grade construction work in the Los Angeles communities of Lake View Terrace and Sun Valley. Although the intensity of construction-related effects would be similar for all six Build Alternatives, the E2 Build Alternative would require at-grade construction work adjacent to more communities than would the other Build Alternatives.

Where the Build Alternatives would be constructed at grade, existing residential communities would have the potential to be permanently divided. Such divisions would be a direct effect of the project. Each Build Alternative would permanently divide the unincorporated community of Harold to the south of Lake Palmdale. The Refined SR14 and SR14A Build Alternatives would also divide a rural residential community in Agua Dulce. The E1, E1A, E2, and E2A Build Alternatives would divide and truncate a group of rural single-family residences in Acton near the SCE Vincent Substation. Additionally, the E2 and E2A Build Alternatives would divide the Los Angeles neighborhood of Lake View Terrace.

3.12.8.2 Displacements and Relocation

The Refined SR14, SR14A, E1, and E1A Build Alternatives would not result in the displacement of community facilities. The E2 and E2A Build Alternatives would displace a Los Angeles County Department of Public Social Services facility in Sun Valley. Implementation of SO-MM#3 will ensure the continued availability of community services provided by these facilities through reconfiguration of land uses and buildings and/or would ensure the relocation of affected facilities prior to demolishing existing structures, such that the construction of replacement facilities would be avoided.

Residential and business displacements would be direct effects of the project. Although the adit and window options chosen would affect the total number of residential displacements, the SR14A Build Alternative has the potential to result in the smallest number of SFR displacements (8-11) of all the Build Alternatives. The Refined SR14 Build Alternative would result in the largest number of SFR displacements (38-41). Regardless of the adit and window options chosen, the

E1 and E2 Build Alternatives would result in the smallest number of MFR unit displacements (11). The SR14A Build Alternative would result in the largest number of MFR unit displacements (29).

In general, there would be enough replacement units available to accommodate displaced residents for all six Build Alternatives. The Refined SR14 Build Alternative would have a small deficit of available replacement units (3) in Southeast Antelope Valley, in a community adjacent to Palmdale. However, Palmdale itself has a surplus of available residential units nearby. Similarly, the E2 and E2A Build Alternatives would have a deficit of available units in the city of Los Angeles neighborhood of Lake View Terrace (15). However, sufficient replacement units would be available within a 5-mile radius in the adjacent neighborhoods of Sunland, Sylmar, and Tujunga.

The E2 Build Alternative and E2A Build Alternative would displace the fewest businesses (68 and 70, respectively). The most business displacements would occur under the Refined SR14 Build Alternative (161–178), SR14A Build Alternative (160–177), E1 Build Alternative (160–177), and E1A Build Alternative (162–179). Sun Valley would have insufficient replacement sites for businesses displaced by each of the Build Alternatives. In addition, Pacoima would not have sufficient replacement sites for businesses displaced by the Refined SR14, SR14A, E1, and E1A Build Alternatives. Shadow Hills would not have sufficient replacement sites for businesses displaced by the E2 and E2A Build Alternatives.

3.12.8.3 Economic Effects

Construction of any of the Build Alternatives would result in direct, indirect, and induced employment impacts. However, the number of construction-related jobs would be small compared to the available construction labor force in the economic RSA, and construction jobs would be filled by local workers. Thus, effects on public services and utilities beyond those caused by forecasted growth in the region is not anticipated to occur and physical deterioration is not anticipated. Project operations would result in both property and sales tax losses; because property and sales tax revenue losses from project operations would be negligible, it is not anticipated these reductions would lead to physical deterioration of schools or other public facilities and services.

There would be no construction staging areas on Important Farmland for any of the Build Alternatives. Construction of each of the Build Alternatives would be coordinated or phased to minimize or eliminate disruption in utility services, including disruption in water sources for irrigation. Construction of the project would generate noise and vibration from construction equipment and vehicles (e.g., clearing, grading, track installation); however, such noise and vibration levels are judged to be acceptable for animal husbandry operations including those on grazing lands. The E1, E1A, E2, and E2A Build Alternatives would not result in the temporary or permanent conversion of Important Farmland. However, impacts on Important Farmland from the Refined SR14 Build Alternative would occur, and would be limited to the construction of an electrical utility corridor across an approximately 9-acre vineyard east of the Sierra Highway/Refined SR14 interchange for a traction power facility. The SR14A Build Alternative would impact the same 9-acre vineyard east of the Sierra Highway/SR14A interchange. Implementation of AG-MM#1 will require utility corridors to be designed to avoid placing structures on agricultural lands, such that the conversion of Important Farmland to nonagricultural use would be avoided.

Direct effects of the project on regional employment would be similar for all six Build Alternatives. During the peak of construction (Year 4/2023), each alternative would support an estimated 7,800 to 8,000 direct jobs. The E1 Build Alternative would have the potential to create the most construction job-years (29,020). The E2 Build Alternative would create the fewest construction job-years (25,490). Regardless of the Build Alternative chosen, the project would result in a relatively small percentage of projected regional construction industry employment during the peak year of construction (Year 4/2023). Accordingly, the project is not expected to result in a temporary influx of workers to live in the region. The projected local construction workforce would likely absorb the added demand for construction workers and would not induce more population growth than what is planned for the region.

Construction of each of the Build Alternatives would indirectly result in sales tax gains. The SR14A Build Alternative would result in the greatest total gains ($97,402,700) over the course of the construction period. The E1 Build Alternative would have the least sales tax gains ($92,291,300). There would also be losses in sales and property tax during the operations period because of displaced businesses and decreases in sales prices reducing property values. Each of the six Build Alternatives would result in an approximate 0.02 percent loss in property tax revenue from displaced residences and businesses. The E2 and E2A Build Alternatives would have a smaller net annual loss of sales tax ($46,500) than any of the other Build Alternatives (implementation of the Refined SR14, SR14A, E1, or E1A Build Alternatives would result in the loss of approximately $89,000 in sales tax from displaced businesses). Given the small percentage of total revenues that would be lost because of project displacements, the overall effect of these revenue losses would be small. Long-term effects on school district funding resulting from residential acquisitions would be similar overall among Build Alternatives; each Build Alternative would result in an approximate 0.01 percent loss in regional school district revenue. The largest difference among Build Alternatives would be in the revenue loss for the Acton-Agua Dulce Unified School District. In this district, the Refined SR14 Build Alternative would result in a 0.45 percent loss in revenue while the E1, E1A, E2, and E2A Build Alternatives would each result in a 0.30 percent loss. The SR14A Build Alternative would result in a 0.18 percent loss in revenue for the Acton-Agua Dulce School District. It is unlikely that a reduction in only property tax revenues would trigger school closures within the district as property tax revenues contribute a small amount to the district funding.

3.12.8.4 Children's Health and Safety

All six Build Alternatives would have similar construction effects on children's health and safety (e.g., traffic effects on bus routes and children bicycling and walking to school, air emissions, noise/vibrations, and use of hazardous materials in proximity to schools), and they are not anticipated to result in a substantial risk to children's health and safety with implementation of IAMFs and mitigation measures. Additionally, all six of the Build Alternatives would have similar effects on children's health and safety and are not anticipated to result in a substantial risk to children's health and safety over the long term.

Table 3.12-43 compares the impacts of each of the Palmdale to Burbank Project Section alternatives, summarizing the more detailed information provided in Section 3.12.6, Environmental Consequences.

Table 3.12-43 Comparison of High-Speed Rail Build Alternative Impacts for Socioeconomics and Communities

Impacts	Build Alternatives						NEPA Conclusion before Mitigation	Mitigation	NEPA Conclusion post Mitigation					
	Refined SR14	SR14A	E1	E1A	E2	E2A			Refined SR14	SR14A	E1	E1A	E2	E2A
Construction Impacts														
Impact SOCIO#1: **Temporary Disruption to Community Cohesion or Division of Existing Communities from Construction.**							No Adverse Effect	No mitigation needed	N/A See Section 3.12.8.1	N/A See Section 3.12.8.1	N/A See Section 3.12.8.1	N/A See Section 3.12.8.1	N/A See Section 3.12.8.1	N/A See Section 3.12.8.1
Residential Communities Affected by Aboveground Construction Activities	▪ Boulders at the Lake ▪ Harold ▪ Acton (near Vasquez High School) ▪ Agua Dulce (near Big Springs Road) ▪ Sylmar	▪ Boulders at the Lake ▪ Sylmar	▪ Boulders at the Lake ▪ Harold ▪ Acton (near Foreston Drive) ▪ Sylmar	▪ Boulders at the Lake ▪ Acton (near Foreston Drive) ▪ Sylmar	▪ Boulders at the Lake ▪ Harold ▪ Acton (near Foreston Drive) ▪ Lake View Terrace ▪ Sun Valley	▪ Boulders at the Lake ▪ Acton (near Foreston Drive) ▪ Lake View Terrace ▪ Sun Valley								
The types of construction effects would be similar for each of the above communities. Specific noise, dust, traffic, light, and glare impacts are detailed in Section 3.4, Noise and Vibration; Section 3.3, Air Quality and Global Climate Change; Section 3.2, Transportation; and Section 3.16, Aesthetics and Visual Quality. Unincorporated communities in Harold, Agua Dulce, and near the SCE Vincent Substation have a rural character and a very low density. In contrast, the community in Lake View Terrace has a semi-rural character, and Sun Valley is a suburb with a mix of industrial and commercial uses. Therefore, a greater number of sensitive receptors could be exposed to construction effects in Lake View Terrace and Sun Valley than in the unincorporated communities. Implementation of IAMFs and mitigation measures would minimize temporary construction effects such that existing land-use patterns and community cohesion would be preserved													
Impact SOCIO#2: **Permanent Disruption to Community Cohesion or Division of Established Communities from Construction.**							Adverse Effect	SO-MM#2	No Adverse Effect See Section 3.12.8.1	No Adverse Effect See Section 3.12.8.1	No Adverse Effect See Section 3.12.8.1	No Adverse Effect See Section 3.12.8.1	No Adverse Effect See Section 3.12.8.1	No Adverse Effect See Section 3.12.8.1
Existing Residential Communities Divided by At-grade or Above-grade Build Alternative Footprint	▪ Harold ▪ Acton (near Vasquez High School) ▪ Agua Dulce (near Big Springs Road)	▪ Boulders at the Lake	▪ Harold ▪ Acton (near Foreston Drive)	▪ Boulders at the Lake ▪ Acton (near Foreston Drive)	▪ Harold ▪ Near SCE Acton (near Foreston Drive) ▪ Lake View Terrace	▪ Boulders at the Lake ▪ Acton (near Foreston Drive) ▪ Lake View Terrace								
Construction of the Build Alternatives within the Central Subsection would present new physical and visual barriers with the potential to divide existing communities. Where new physical and visual barriers would occur within existing communities, access between properties and the local road networks would be maintained. The project would provide adequate roadway overcrossings and undercrossings to facilitate pedestrian, bicycle, and vehicular circulation. Additionally with implementation of SO-MM#2, will require special outreach to affected residential neighborhood and community residents, community organizations, and local officials, to provide input in order to develop enhancements to ameliorate effects associated with community cohesion and community division.														

Impacts	Build Alternatives						NEPA Conclusion before Mitigation	Mitigation	NEPA Conclusion post Mitigation					
	Refined SR14	SR14A	E1	E1A	E2	E2A			Refined SR14	SR14A	E1	E1A	E2	E2A
Impact SOCIO#3: **Permanent Displacement of Community Facilities from Construction.**							**Refined SR14, SR14A, E1, and E1A:** No Adverse Effect **E2 and E2A:** Adverse Effect	SO-MM#3	N/A See Section 3.12.8.2	N/A See Section 3.12.8.2	N/A See Section 3.12.8.2	N/A See Section 3.12.8.2	No Adverse Effect See Section 3.12.8.2	No Adverse Effect See Section 3.12.8.2
The Refined SR14, SR14A, E1, and E1A Build Alternatives would not result in the displacement of community facilities. Cut-and-cover tunnel construction of a portion of the E2 and E2A Build Alternatives near Glen Oaks Boulevard in Sun Valley would displace a Los Angeles County Department of Public Social Services facility. Implementation of SO-MM#3 will ensure the continued availability of community services provided by this facility by ensuring the relocation of the affected social services prior to demolition; sufficient replacement properties would likely be available in nearby communities, including North Hollywood and the city of Burbank.														
Impact SOCIO#4: **Permanent Displacement of Residences from Construction.**							No Adverse Effect	No mitigation needed	N/A See Section 3.12.8.2	N/A See Section 3.12.8.2	N/A See Section 3.12.8.2	N/A See Section 3.12.8.2	N/A See Section 3.12.8.2	N/A See Section 3.12.8.2
Total SFR Units Displaced	38 - 41 [1]	8 - 11 [1]	13 - 18 [1]	12 - 17 [1]	38	37								
Total MFR Units Displaced	13	29	11	27	11	27								
Communities with Insufficient Suitable Replacement Housing	▪ Southeast Antelope Valley	▪ None	▪ None	▪ None	▪ Lake View Terrace	▪ Lake View Terrace								
While the communities of Southeast Antelope Valley and Lake View Terrace would likely have insufficient replacement housing for the households displaced by the Refined SR14 Build Alternative and the E2 and E2A Build Alternatives respectively, adequate replacement housing would likely be available in nearby communities.														
Impact SOCIO#5: **Permanent Displacement and Relocation of Sensitive Residential Populations from Construction.**							No Adverse Effect	No mitigation needed	N/A See Section 3.12.8.2	N/A See Section 3.12.8.2	N/A See Section 3.12.8.2	N/A See Section 3.12.8.2	N/A See Section 3.12.8.2	N/A See Section 3.12.8.2
All six Build Alternatives would result in residential displacements that could affect sensitive populations at a higher rate in the city of Palmdale, the city of Los Angeles, and the city of Burbank. Implementation of IAMFs would minimize potential for permanent displacement and relocation of sensitive populations from construction of the project.														
Impact SOCIO#6: **Permanent Displacement of Commercial and Industrial Businesses from Construction.**							No Adverse Effect	No mitigation needed	N/A See Section 3.12.8.2	N/A See Section 3.12.8.2	N/A See Section 3.12.8.2	N/A See Section 3.12.8.2	N/A See Section 3.12.8.2	N/A See Section 3.12.8.2
Total Businesses Displaced	161 - 178 [1]	160 - 177 [1]	160 - 177 [1]	162 - 179 [1]	68	70								
Communities with Insufficient Suitable Replacement Sites	▪ Pacoima ▪ Sun Valley	▪ Pacoima ▪ Sun Valley	▪ Pacoima ▪ Sun Valley	▪ Pacoima ▪ Sun Valley	▪ Sun Valley ▪ Shadow Hills	▪ Sun Valley ▪ Shadow Hills								
While the communities of Pacoima, Sun Valley, and Shadow Hills would likely have insufficient business replacement properties, it is anticipated that most displaced businesses could be accommodated by replacement sites in nearby communities.														
Impact SOCIO#7: **Temporary Effects on Regional Employment from Construction.**							No Adverse Effect	No mitigation needed	N/A See Section 3.12.8.3	N/A See Section 3.12.8.3	N/A See Section 3.12.8.3	N/A See Section 3.12.8.3	N/A See Section 3.12.8.3	N/A See Section 3.12.8.3
Construction of all six Build Alternatives would have similar effects on regional employment. During the peak of construction (Year 4/2023) each Build Alternative would support an estimated 7,800 to 8,000 direct jobs, which represents approximately 5.4 to 5.6 percent of the approximately 144,000 construction industry jobs forecast for Los Angeles County in 2023. Given this relatively small percentage of regional construction industry employment, there is relatively low likelihood of additional construction workers moving to the region with substantial effects on public services and utilities within the context of forecasted growth in the region.														

Impacts	Build Alternatives						NEPA Conclusion before Mitigation	Mitigation	NEPA Conclusion post Mitigation					
	Refined SR14	SR14A	E1	E1A	E2	E2A			Refined SR14	SR14A	E1	E1A	E2	E2A
***Impact SOCIO#8:* Temporary Sales Tax Revenue Gains from Construction.**							No Adverse Effect	No mitigation needed	N/A See Section 3.12.8.3	N/A See Section 3.12.8.3	N/A See Section 3.12.8.3	N/A See Section 3.12.8.3	N/A See Section 3.12.8.3	N/A See Section 3.12.8.3
Cumulative Sales Tax Over Construction Period (all six Build Alternatives)	$95,700,900	$97,402,700	$92,291,300	$93,663,100	$92,891,800	$94,264,800								
Annual Average Sales Tax During Construction (all six Build Alternatives)	$11,962,600	$12,175,300	$11,536,400	$11,707,900	$10,321,300	$10,473,900								
***Impact SOCIO#9:* Potential for Permanent Physical Deterioration from Construction.**							No Adverse Effect	No mitigation needed	N/A See Section 3.12.8.3	N/A See Section 3.12.8.3	N/A See Section 3.12.8.3	N/A See Section 3.12.8.3	N/A See Section 3.12.8.3	N/A See Section 3.12.8.3
Construction of all six Build Alternatives would have similar effects on regional employment, sales tax revenue, and agricultural operations, none of which would induce physical deterioration in local communities.														
***Impact SOCIO#10:* Temporary and Permanent Effects on Agricultural Operations from Construction.**							No Adverse Effect	No mitigation needed	N/A See Section 3.12.8.3	N/A See Section 3.12.8.3	N/A See Section 3.12.8.3	N/A See Section 3.12.8.3	N/A See Section 3.12.8.3	N/A See Section 3.12.8.3
None of the six Build Alternatives would convert Important Farmland to nonagricultural use, and none of the alternatives would indirectly result in a change in agricultural production.														
***Impact SOCIO#11:* Temporary Effects on Children's Health and Safety from Construction.**							No Adverse Effect	No mitigation needed	N/A See Section 3.12.8.4	N/A See Section 3.12.8.4	N/A See Section 3.12.8.4	N/A See Section 3.12.8.4	N/A See Section 3.12.8.4	N/A See Section 3.12.8.4
All six Build Alternatives would have similar effects on children's health and safety. Implementation of IAMFs would minimize temporary construction impacts such that effects to children's health and safety are not anticipated.														
Operations Impacts														
***Impact SOCIO#12:* Long-Term Effects on Property and Sales Tax Revenues from Operations.**							No Adverse Effect	No mitigation needed	N/A See Section 3.12.8.3	N/A See Section 3.12.8.3	N/A See Section 3.12.8.3	N/A See Section 3.12.8.3	N/A See Section 3.12.8.3	N/A See Section 3.12.8.3
Loss in Sales Tax from Displaced Businesses	$89,000	$89,000	$89,000	$89,000	$46,500	$46,500								
All six Build Alternatives would result in similar effects on property tax revenues. The City of Los Angeles would lose approximately 0.02 percent for each Build Alternative. Similarly, Los Angeles County would lose approximately 0.02 percent or approximately 0.03 percent depending on the Build Alternative. The largest difference would occur in the City of Burbank, where the Burbank Airport Station would be located: Burbank would lose approximately 0.10 percent. Given the small percentage of total revenues that would be lost because of project displacements, the overall effect of these revenue losses would be small.														
***Impact SOCIO#13:* Long-Term Effects on School District Funding from Operations.**							No Adverse Effect	No mitigation needed	N/A See Section 3.12.8.3	N/A See Section 3.12.8.3	N/A See Section 3.12.8.3	N/A See Section 3.12.8.3	N/A See Section 3.12.8.3	N/A See Section 3.12.8.3
Regional Total School District Revenue Loss	0.01%	0.01%	0.01%	0.01%	0.01%	0.01%								
All six Build Alternative would result in similar effects on school district funding. The greatest difference among alternatives would occur in the Acton-Agua Dulce Unified School District, where 0.45 percent of annual revenue would be lost with implementation of the Refined SR14 Build Alternative, 0.30 percent would be lost with implementation of either the E1, E1A, E2, or E2A Build Alternatives, and 0.18 percent would be lost with implementation of the SR14A Build Alternative. School closings are often triggered by reductions in ADA and the corresponding revenue allocated to each district based on its ADA. Given that 99.6 percent of total revenue for Acton-Agua Dulce Unified School District funding is derived from ADA-based allocations, it is unlikely that a reduction in only property tax revenues would trigger school closures within the district.														

Impacts	Build Alternatives						NEPA Conclusion before Mitigation	Mitigation	NEPA Conclusion post Mitigation					
	Refined SR14	SR14A	E1	E1A	E2	E2A			Refined SR14	SR14A	E1	E1A	E2	E2A
***Impact SOCIO #14:* Permanent Effects on Agricultural Operations from Project Operations.**							**Refined SR14 and SR14A:** Adverse Effect **E1, E1A, E2, and E2A:** No Adverse Effect	AG-MM#1	No Adverse Effect See Section 3.12.8.3	No Adverse Effect See Section 3.12.8.3	N/A See Section 3.12.8.3	N/A See Section 3.12.8.3	N/A See Section 3.12.8.3	N/A See Section 3.12.8.3
Acres of Important Farmland Converted to Nonagricultural Use	1 acre	<1 acre	0 acres	0 acres	0 acres	0 acres								
The Refined SR14 and SR14A Build Alternatives would have 1 acre and less than 1 acre, respectively, of surface footprint on Important Farmland because of construction of utility poles on an approximately 9-acre vineyard east of the Sierra Highway/SR 14 interchange. Implementation of mitigation measure AG-MM#1 will require utility corridors to be designed to avoid placing structures on agricultural lands, to allow the electric utility line to span a parcel of Important Farmland without any conversion of farmland. The E1, E1A, E2, and E2A Build Alternatives would not convert Important Farmland to nonagricultural use nor affect agricultural operations.														
***Impact SOCIO #15:* Potential for Permanent Physical Deterioration from Operations.**							No Adverse Effect	No mitigation needed	N/A See Section 3.12.8.1	N/A See Section 3.12.8.1	N/A See Section 3.12.8.1	N/A See Section 3.12.8.1	N/A See Section 3.12.8.1	N/A See Section 3.12.8.1
Operation of all six Build Alternatives would have similar effects on regional employment, sales tax revenue, and agricultural operations, none of which would induce physical deterioration on local communities.														
***Impact SOCIO#16:* Permanent Effects on Children's Health and Safety from Operations.**							No Adverse Effect	No mitigation needed	N/A See Section 3.12.8.4	N/A See Section 3.12.8.4	N/A See Section 3.12.8.4	N/A See Section 3.12.8.4	N/A See Section 3.12.8.4	N/A See Section 3.12.8.4
All six Build Alternatives would result in negligible effects to children's health and safety during project operations, except for an overall benefit to regional and statewide air quality as a result of transportation modes shift.														

[1] Displacements vary due to optional adit and window combinations
< = less than
ADA = average daily attendance
MFR = multifamily residential
SFR = single-family residential

3.12.9 CEQA Significance Conclusions

Table 3.12-44 summarizes construction and operation impacts of the Palmdale to Burbank Project Section, associated mitigation measures, and levels of significance after mitigation.

This page intentionally left blank

Table 3.12-44 Summary of CEQA Significance Conclusions and Mitigation Measures for Socioeconomics and Communities

Impact	Level of CEQA Significance before Mitigation						Mitigation Measures	Level of CEQA Significance after Mitigation					
	Refined SR14	SR14A	E1	E1A	E2	E2A		Refined SR14	SR14A	E1	E1A	E2	E2A
Construction Impacts													
Impact SOCIO#1: Temporary Disruption to Community Cohesion or Division of Existing Communities from Construction.	LTS	LTS	LTS	LTS	LTS	LTS	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Impact SOCIO#2: Permanent Disruption to Community Cohesion or Division of Established Communities from Construction.	S	S	S	S	S	S	SO-MM#2	LTS	LTS	LTS	LTS	LTS	LTS
Impact SOCIO#3: Permanent Displacement of Community Facilities from Construction.	No Impact	No Impact	No Impact	No Impact	S	S	SO-MM#3	N/A	N/A	N/A	N/A	LTS	LTS
Impact SOCIO#4: Permanent Displacement of Residences from Construction.	LTS	LTS	LTS	LTS	LTS	LTS	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Impact SOCIO#5: Permanent Displacement and Relocation of Sensitive Residential Populations from Construction.	LTS	LTS	LTS	LTS	LTS	LTS	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Impact SOCIO#6: Permanent Displacement of Commercial and Industrial Businesses from Construction.	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Impact SOCIO#7:Temporary Effects on Regional Employment from Construction.	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Impact SOCIO#8: Temporary Sales Tax Revenue Gains from Construction.	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Impact SOCIO#9: Potential for Permanent Physical Deterioration from Construction.	LTS	LTS	LTS	LTS	LTS	LTS	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Impact SOCIO#10: Temporary and Permanent Effects on Agricultural Operations from Construction.	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Impact SOCIO#11: Temporary Effects on Children's Health and Safety from Construction.	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Operations Impacts													
Impact SOCIO#12: Long-Term Effects on Property and Sales Tax Revenues from Operations.	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Impact SOCIO#13:Long-Term Effects on School District Funding from Operations.	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Impact SOCIO#14: Permanent Effects on Agricultural Operations from Project Operations.	S	S	N/A	N/A	N/A	N/A	AG-MM#1	LTS	LTS	N/A	N/A	N/A	N/A
Impact SOCIO#15: Potential for Permanent Physical Deterioration from Operations.	LTS	LTS	LTS	LTS	LTS	LTS	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Impact SOCIO#16: Permanent Effects on Children's Health and Safety from Operations.	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

LTS = Less than Significant
N/A = Not Applicable
S = Significant

This page intentionally left blank

3.12.10 United States Forest Service Impact Analysis

This section summarizes the socioeconomic effects associated with each of the six Build Alternatives with respect to the ANF, including lands within the ANF that are part of the SGMNM.

3.12.10.1 Consistency with Applicable United States Forest Service Policies

Appendix 3.1-B, USFS Policy Consistency Analysis, contains a comprehensive evaluation of relevant laws, regulations, plans, and policies relative to areas within the ANF, including the SGMNM, potentially affected by the six Build Alternatives.

As discussed in Section 3.12.1, Introduction, this section analyzes impacts on communities with a special emphasis on displacements of community facilities, residences, and businesses. Because of land-use restrictions outlined in the *Angeles National Forest Management Plan* (2006) and *San Gabriel Mountains National Monument Management Plan* (2018), there are very few community facilities, residences, and businesses on or adjacent to USFS lands, except within certain private inholdings. Therefore, the project would generally not affect communities in these areas. Furthermore, policies in the Angeles National Forest Management Plan and San Gabriel Mountains National Monument Management Plan do not specifically address socioeconomics and communities, nor the displacement of community facilities, residences, and businesses on USFS lands due to the land-use restrictions outlined in these plans. As such, all six Build Alternatives are considered consistent with the policies in the Angeles National Forest System.

3.12.10.2 United States Forest Service Resource Analysis

Of the six Build Alternatives, only the E1 and E1A Build Alternatives would result in residential displacements within the ANF. Only one of two adit options (E1-A1 or E1-A2) would be selected and constructed. Construction of E1-A1 would require the displacement of three residences, and E1-A2 would displace one residence; each of these residential displacements would occur within in-holdings which are private property within the ANF. As discussed in Section 3.12.6.3, Build Alternatives, sufficient replacement SFR units are available within the E1 and E1A Central Subsection. Furthermore, SOCIO-IAMF#2 and SOCIO-IAMF#3 will be implemented to reduce effects associated with residential displacements. SOCIO-IAMF#2 will provide relocation assistance for persons displaced by right-of-way acquisition through compliance with the Uniform Act, including those on residences located on in-holdings on USFS lands; SOCIO-IAMF#3 will require the Authority to develop a relocation mitigation plan which will establish an appraisal, acquisition, and relocation process in consultation with affected property owners.

This page intentionally left blank