

3.12 Socioeconomics and Communities

3.12.1 Introduction

Section 3.12, Socioeconomics and Communities, of the *Burbank to Los Angeles Project Section Draft Environmental Impact Report/Environmental Impact Statement (EIR/EIS)* analyzes the potential impacts of the No Project Alternative and the High-Speed Rail (HSR) Build Alternative, and it describes impact avoidance and minimization features (IAMF) that would avoid, minimize, or reduce these impacts. Where applicable, mitigation measures are proposed to further reduce, compensate for, or offset impacts of the HSR Build Alternative. This section also defines the socioeconomics and communities within the region and describes the affected environment in the resource study areas (RSA).

Socioeconomics and Communities

The communities adjacent to the corridor alignment would bear most 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.

The *Burbank to Los Angeles Project Section: Community Impact Assessment* (California High-Speed Rail Authority [Authority] 2019a) provides additional technical details on socioeconomics and communities. Details on socioeconomics and communities are also provided in the following appendices in Volume 2 of this Draft EIR/EIS:

- Appendix 2-B, Impact Avoidance and Minimization Features
- Appendix 3.1-B, Regional and Local Policy Inventory
- Appendix 3.12-A, Affected Environment Figures
- Appendix 3.12-B, Relocation Assistance Benefits
- Appendix 3.12-C, Children’s Health and Safety Risk Assessment
- Appendix 3.12-D, Potential Property Acquisition and Easements
- Appendix 3.19-A, Cumulative Projects

Seven other resource sections in this Draft EIR/EIS provide information related to socioeconomics and communities:

- **Section 3.2, Transportation**—Describes localized traffic impacts that would occur in the project vicinity from construction and operation of the HSR Build Alternative.
- **Section 3.3, Air Quality and Global Climate Change**—Evaluates the potential localized and regional air quality impacts that would occur in the project vicinity from construction and operation of the HSR Build Alternative.
- **Section 3.4, Noise and Vibration**—Discusses noise and vibration impacts that would occur in the project vicinity from construction and operation of the HSR Build Alternative.
- **Section 3.11, Safety and Security**—Evaluates the potential safety impacts that would occur in the project vicinity from construction and operation of the HSR Build Alternative.
- **Section 3.16, Aesthetics and Visual Quality**—Describes the potential impacts on aesthetics and visual quality that would occur in the project vicinity from construction and operation of the HSR Build Alternative.
- **Section 3.18, Regional Growth**—Includes a discussion of growth-inducing impacts from operation of the HSR Build Alternative.
- **Section 3.19, Cumulative Impacts**—Describes the cumulative impacts of this and other past, present, and reasonably foreseeable future projects.

3.12.1.1 Definition of Resources

The following are definitions for the socioeconomics and community resources analyzed in this Draft EIR/EIS.

- **Displacement** represents property acquisitions of a parcel or structure(s).
- **Relocation** represents finding new properties for displaced residents, businesses, and organizations in acquired structures.
- **Community Cohesion** refers to residents' sense of belonging to their neighborhood, their level of commitment to their community, or a strong attachment to neighbors, groups, and institutions, usually as a result of continued association over time.
- **Neighborhood Councils** are city-certified local groups made up of community members who are elected or selected to their positions by their neighborhoods.

3.12.2 Laws, Regulations, and Orders

This section describes the federal, state, and local laws, regulations, orders, and plans that are relevant to socioeconomics and communities.

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). These FRA procedures supplement the Council on Environmental Quality Regulations (40 Code of Federal Regulations [C.F.R.] Part 1500 et seq.) and describe FRA's process for assessing the environmental impacts of actions and legislation proposed by the agency and for the preparation of associated documents (42 U.S. Code [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 (USEO 13166)

U.S. Presidential Executive Order (USEO) 13166 requires each federal agency to ensure that recipients of federal financial assistance are provided meaningful access to their programs and activities for 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 for persons with disability and requires equal opportunity in employment, state and local government services, public accommodations, commercial facilities, and transportation.

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

The Uniform Relocation Assistance and Real Property Program 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 will not suffer disproportionate injuries as a result of projects designed for the benefit of the public as a whole.

U.S. Environmental Protection Agency School Siting Guidelines

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

1. Special vulnerabilities of children to hazardous substances or pollution exposures in any case in which the potential for contamination at a potential school site exists
2. Modes of transportation available to students and staff
3. Efficient use of energy
4. Potential use of a school at the site as an emergency shelter (currently available at www.epa.gov/schools/siting/downloads/School_Siting_Guidelines.pdf).

These guidelines are intended to assist local school districts and community members with understanding environmental factors in making school siting decisions. Though state agencies, such as the Authority, are not subject to the local plans, regulations, and requirements, the Authority may choose to consider factors set in the USEPA guidelines when assessing the mitigation measures developed to minimize effects on existing or planned schools adjacent to the HSR project.

3.12.2.2 State

California Relocation Act (California Government 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 projects undertaken by state or local governments that do not involve federal funds. However, because the project will receive federal funding, the Uniform Relocation Assistance and Real Property Acquisition Policies Act (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. The policy states:

- The Authority is committed to ensuring that no person in the state of California is excluded from participation in, nor denied the benefits of, its programs, activities, and services on the basis of race, color, national origin, age, sex, or disability as afforded by Title VI of the Civil Rights Act of 1964 and Related Statutes.
- The Authority, as a federal grant recipient, is required by the FRA to conform to Title VI of the Civil Rights Act of 1964 and related statutes. The Authority's sub-recipients and contractors are required to prevent discrimination and ensure nondiscrimination in all of 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 HSR project (Authority 2012a).

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

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

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

2. 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 2012d); Resolution 12-15 (Authority 2012b).

3.12.2.3 *Regional and Local*

Table 3.12-1 lists county and city general plan goals, policies, and ordinances relevant to the HSR Build Alternative.

Table 3.12-1 Regional and Local Plans and Policies

Policy Title	Summary
Southern California Association of Governments Regional Transportation Plan (2012–2035) (2012)	
SCAG RTP (2012–2035) (2012)	<ul style="list-style-type: none"> ▪ Perform and support studies with the goal of identifying innovative transportation strategies that enhance mobility and air quality, and determine practical steps to pursue such strategies, while engaging local communities in planning efforts. ▪ Explore and implement innovative strategies and projects that enhance mobility and air quality, including those that increase the walkability of communities and accessibility to transit via non-auto modes, including walking, bicycling, and neighborhood electric vehicles or other alternative-fueled vehicles. ▪ Continue to support the California Interregional Blueprint as a plan that links statewide transportation goals and regional transportation and land use goals to produce a unified transportation strategy. ▪ Examine major projects and strategies that reduce congestion and emissions and optimize the productivity and overall performance of the transportation systems.
Amendment No. 2 (2014)	Model List: California High-Speed Rail
City of Burbank General Plan (2013)	
Mobility Element	<ul style="list-style-type: none"> ▪ Policy 1.1: Consider economic growth, transportation demands, and neighborhood character in developing a comprehensive transportation system that meets Burbank's needs. ▪ Policy 9.3: Provide access to transportation alternatives for all users, including senior, disabled, youth, and other transit-dependent residents.
Noise Element	<ul style="list-style-type: none"> ▪ Policy 3.3: Advocate the use of alternative transportation modes such as walking, bicycling, mass transit, and nonmotorized vehicles to minimize traffic noise. ▪ Policy 7.3: Limit the allowable hours of construction activities and maintenance operations located adjacent to noise-sensitive land uses.
Burbank Center Plan (1997)	<ul style="list-style-type: none"> ▪ Policy: Support new mixed land uses that incorporate interaction with an integrated multimodal citywide transportation system including light rail, commuter rail, bus, local and circulator shuttle services, and bicycle and pedestrian facilities. This system of facilities and services should minimize dependence on the automobile in support of regional land use and transportation strategies to meet clean air regulations.

Policy Title	Summary
City of Glendale General Plan (1977, revised 1986)	
Open Space and Conservation Element	<ul style="list-style-type: none"> ▪ Goal 2: Protect vital or sensitive open space areas including the ridgelines, canyons, streams, geologic formations, watersheds and historic, cultural, aesthetic and ecologically significant areas from the negative impacts of development and urbanization. Objective 3: Continue to apply and monitor open space protection measures as part of the environmental and development review processes. ▪ Goal 11: Minimize environmental hazards including noise, unhealthful air, water and composite hazards ▪ Objective 1: Provide adequate buffers from noise sources for open space and recreation users. ▪ Goal 13: Ensure maximum public participation and input for all aspects of environmental resource planning and implementation.
Noise Element	<ul style="list-style-type: none"> ▪ Goal 1: Reduce noise impacts from transportation noise sources ▪ Policy 1.3: Reduce transportation noise through proper design and coordination of routing. ▪ Policy 1.4: Ensure the effective enforcement of City, State and Federal noise levels by all appropriate City Departments.
City of Los Angeles General Plan (adoption dates vary)	
Land Use Section of the General Framework (1996)	<ul style="list-style-type: none"> ▪ Objective 3.3: Accommodate projected population and employment growth within the city and each community plan area and plan for the provision of adequate supporting transportation and utility infrastructure and public services. ▪ Policy 3.3.1: Accommodate projected population and employment growth in accordance with the Long-Range Land Use Diagram and forecasts in Table 2-2 (of the City of Los Angeles General Plan Land Use Element), using these in the formulation of the community plans and as the basis for the planning for and implementation of infrastructure improvements and public services.
Mobility Plan 2035 (2015)	<ul style="list-style-type: none"> ▪ Target greenhouse gas reductions through a more sustainable transportation system.
Noise Element (1990)	<ul style="list-style-type: none"> ▪ Objective 2 (Nonairport): Reduce or eliminate nonairport-related intrusive noise, especially relative to noise-sensitive uses. ▪ Policy 2.2: Enforce and/or implement applicable city, state, and federal regulations intended to mitigate proposed noise-producing activities, reduce intrusive noise, and alleviate noise that is deemed a public nuisance.
Northeast Los Angeles Community Plan (City of Los Angeles 1999)	
Land Use Policies and Programs	<ul style="list-style-type: none"> ▪ Goal 4: Sufficient open space, in balance with development, to serve the recreational, environmental, and health needs of the community and to protect environmental and aesthetic resources. ▪ Objective 4-2: To preserve the existing open space resources and, where possible, encourage acquisition of new open space. ▪ Goal 5: Adequate recreation and park facilities to meet the needs of the residents in the plan area. ▪ Objective 5-1: To conserve, expand, maintain, and better use existing recreational park facilities to address the recreational needs of the community. ▪ Policy 5-1.1 Preserve the existing recreational facilities and park space. ▪ Policy 5-1.2: Increase accessibility to parkland along the Arroyo Seco and potential parkland along the Los Angeles River. ▪ Goal 13: A system of safe, efficient and attractive pedestrian, bicycle, and equestrian routes. ▪ Objective 13-1: To promote an adequate system of safe bikeways for commuter, school, and recreational use.

Policy Title	Summary
Silver Lake–Echo Park–Elysian Valley Community Plan (City of Los Angeles 2004)	
Land Use Policies and Programs	<ul style="list-style-type: none"> ▪ Goal 13: A system of highways, freeways and streets that provides adequate circulation to support existing, approved, and planned land uses and that maintains a desired level of service at all intersections. ▪ Goal 14: A system of safe, efficient, and attractive bicycle, pedestrian and equestrian facilities. ▪ Objective 14-1: Promote an adequate system of safe bikeways for commuter, school, and recreational use.
Cornfield Arroyo Seco Specific Plan (City of Los Angeles 2013)	
Specific Plan Purposes	<ul style="list-style-type: none"> ▪ Purpose 3: Increase Access to Open Space ▪ Purpose 10: Lessen dependence on automobiles, and thereby reduce vehicle emissions, while enhancing the personal health of residents, employees, and visitors.
Central City North Community Plan (City of Los Angeles 2000)	
Land Use Policies and Programs	<ul style="list-style-type: none"> ▪ Goal 13: A system of safe, efficient, and attractive bicycle and pedestrian routes.
Boyle Heights Community Plan (City of Los Angeles 1998)	
Adelante Eastside Redevelopment Plan	<ul style="list-style-type: none"> ▪ Project Objective 10: Support and encourage a circulation system that will improve the quality of life in the Project Area, including pedestrian, automobile, parking, and mass transit systems, with emphasis on serving existing facilities and meeting future needs.

RTP = Regional Transportation Plan

SCAG = Southern California Association of Governments

3.12.3 Consistency with Plans and Laws

California Environmental Quality Act (CEQA) and National Environmental Policy Act (NEPA) regulations¹ require a discussion of inconsistencies or conflicts between a proposed undertaking and federal, state, regional, and local plans and laws. Several federal and state laws, listed in Section 3.12.2, pertain to socioeconomics and communities. The Authority, as the federal lead agency (the Authority is the lead federal agency pursuant to 23 U.S.C. 327 and the terms of the Memorandum of Understanding between FRA and the State of California effective July 23, 2019) and lead state agency proposing to construct and operate the 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 of the project. Therefore, there would be no inconsistencies between the HSR Build Alternative 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 HSR project so that it is consistent with land use and zoning regulations. A total of 10 plans and 38 policies were reviewed. The HSR Build Alternative would be consistent with all policies. Refer to Appendix 3.1-B for a complete consistency analysis of local plans and policies.

3.12.4 Methods for Evaluating Impacts

The following sections summarize the RSAs and the methods used to analyze impacts on socioeconomics and community resources. As summarized in Section 3.12.1, Introduction, seven other sections provide additional information related to socioeconomics and community resources: Section 3.2, Transportation; Section 3.3, Air Quality and Global Climate Change; Section 3.4, Noise and Vibration; Section 3.11, Safety and Security; Section 3.16, Aesthetics and Visual Quality; Section 3.18, Regional Growth; and Section 3.19, Cumulative Impacts.

¹ NEPA regulations refer to the regulations issued by the Council for Environmental Quality located at 40 C.F.R. 1500.

3.12.4.1 Definition of Resource Study Areas

RSAs are the geographic boundaries in which the Authority conducted environmental investigations specific to each resource topic. The RSAs for impacts on socioeconomics and communities include direct and indirect impacts RSAs for population and community impacts and an RSA for economic impacts. Table 3.12-2 provides a general definition and boundary description for each RSA within the Burbank to Los Angeles Project Section. The direct impacts RSA for population and community impacts of the HSR Build Alternative are shown on Figure 3.12-1 and Figure 3.12-2. The indirect impacts RSA for population and community impacts are shown on Figure 3.12-1 and Figure 3.12-2. The RSA for economic impacts is shown on Figure 3.12-3.

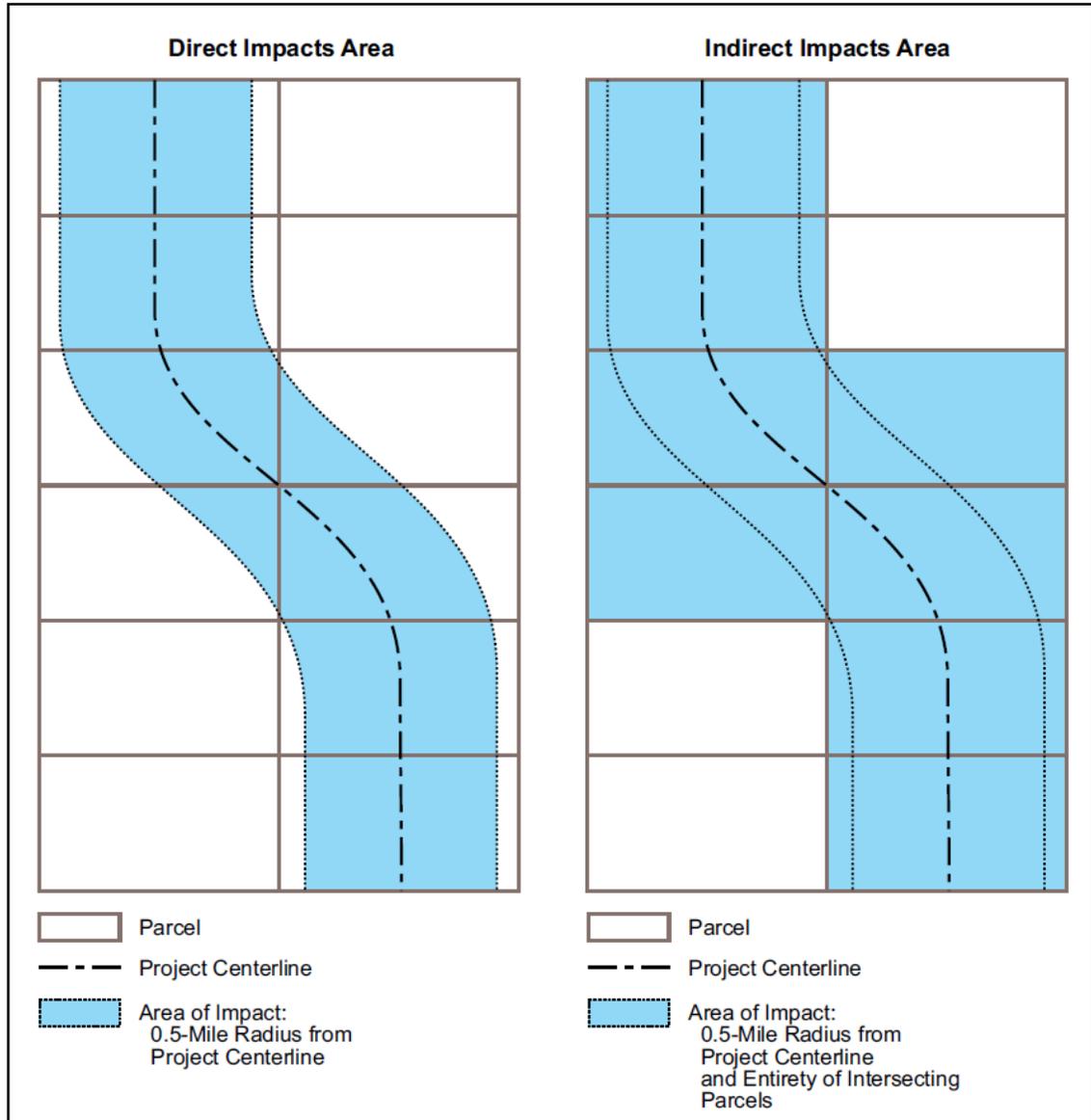
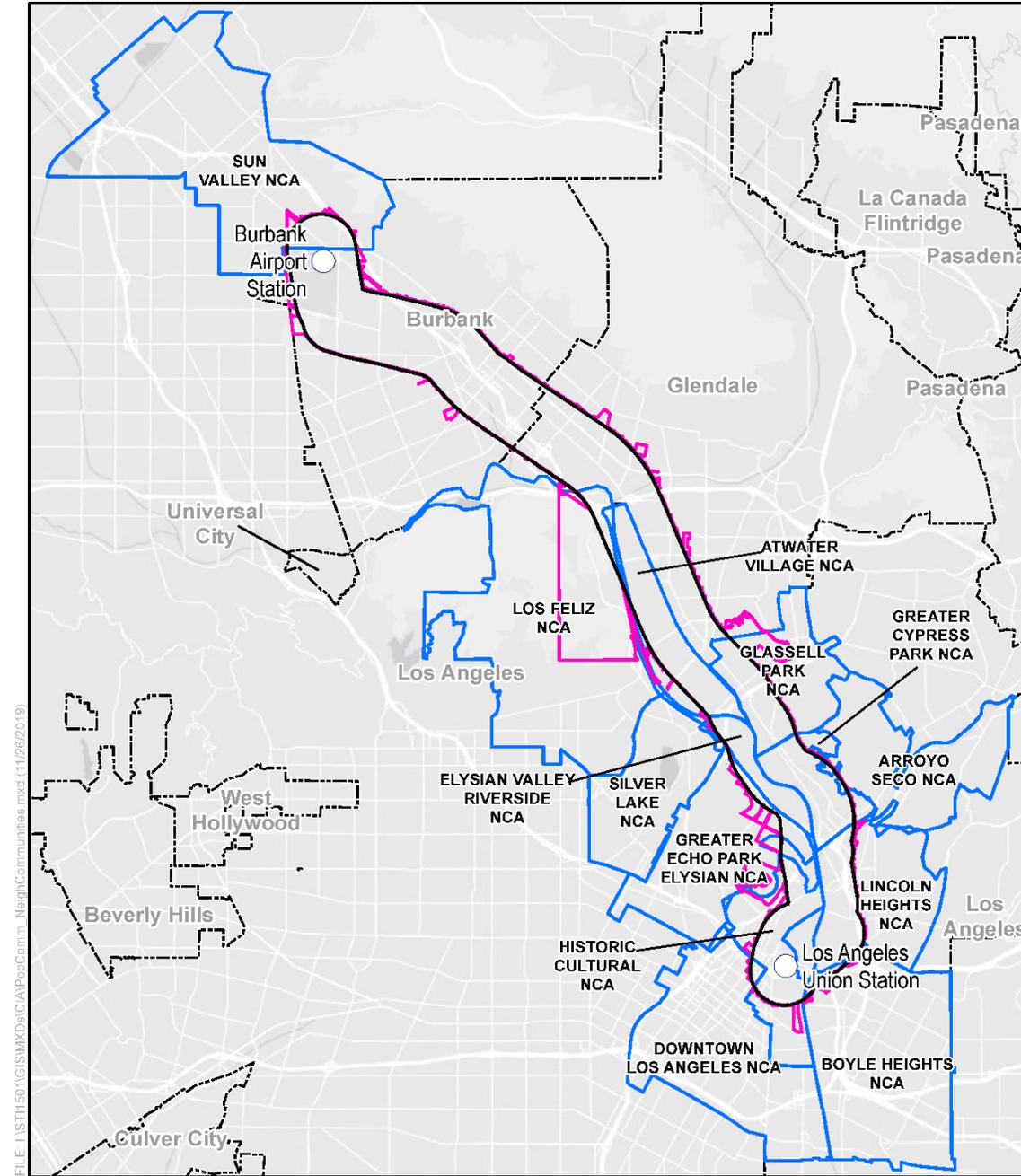
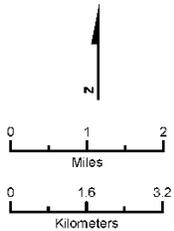


Figure 3.12-1 Definition of Direct and Indirect Impacts Resource Study Areas



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PRELIMINARY DRAFT/SUBJECT TO CHANGE - HSR ALIGNMENT IS NOT DETERMINED
 SOURCE: National Geographic/Esri (2018), CHSRA (11/2019)



- Direct Impacts RSA for Population and Community Impacts
- Indirect Impacts RSA for Population and Community Impacts
- City of Los Angeles Neighborhood Council Area (NCA)
- City Boundary
- HSR Stations

Figure 3.12-2 Indirect and Direct Impacts Population and Community Resource Study Areas



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PRELIMINARY DRAFT/SUBJECT TO CHANGE - HSR ALIGNMENT IS NOT DETERMINED
 SOURCE: National Geographic/Esri (2016); CHSRA (11/2018)

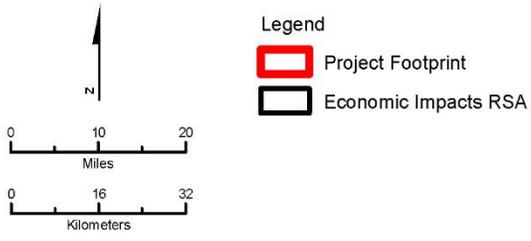


Figure 3.12-3 Economic Impacts Resource Study Area

Table 3.12-2 Definition of Resource Study Areas

General Definition	Resource Study Area Boundary and Definition
Population and Community Impacts—Direct Impacts	A 0.5-mile radius from the centerline of the HSR Build Alternative (Figure 3.12-1 and Figure 3.12-2).
Population and Community Impacts—Indirect Impacts	All parcels within the direct impacts RSA for population and community impacts, as well as the entire boundary for parcels where only a portion falls within the direct impacts RSA (with the exception of the large singular property containing Griffith Park in the City Los Angeles east of Universal City, which was split to properly frame and evaluate potential impacts) (Figure 3.12-1 and Figure 3.12-2).
Economic Impacts	The region in which the HSR Build Alternative would be located, which is defined as Los Angeles County, because the economic impacts on fiscal revenues, job creation, and school district funding could have regional economic implications (Figure 3.12-3).

HSR = High-Speed Rail

RSA = resource study area

3.12.4.2 Impact Avoidance and Minimization Features

The HSR Build Alternative incorporates standardized HSR features to avoid and minimize impacts. These features are referred to as IAMFs. The Authority would implement IAMFs during project design and construction. As such, the analysis of impacts of the HSR Build Alternative in this section factors in all applicable IAMFs. Appendix 2-B, Impact Avoidance and Minimization Features, provides a detailed description of IAMFs that are included as part of the HSR Build Alternative design. IAMFs applicable to socioeconomics and community resources include:

- SOCIO-IAMF#1: Construction Management Plan—Prepare a Construction Management Plan providing measures that minimize impacts on low-income households and minority populations.
- SOCIO-IAMF#2: Compliance with Uniform Relocation Assistance and Real Property Acquisition Policies Act—Provide fair and equitable treatment of all persons affected by relocation and real property acquisition pursuant to the Uniform Act.
- SOCIO-IAMF#3: Relocation Mitigation Plan—Develop a relocation mitigation plan to minimize the economic disruption related to relocation.
- AQ-IAMF#1: Fugitive Dust Emissions—Employ measures to minimize and control fugitive dust emissions, and prepare a fugitive dust control plan for each distinctive construction segment.
- AQ-IAMF#2: Selection of Coatings—Use lower volatile organic compound-content paint than that required by South Coast Air Quality Management District (SCAQMD) Rule 1113.
- AVQ-IAMF#1: Aesthetic Options—Employ aesthetic guidelines to minimize visual impacts to provide a consistent, project-wide aesthetic.
- AVQ-IAMF#2: Aesthetic Review Process—Follow an aesthetic review process to guide the development of non-station area structures.
- HMW-IAMF#7: Transport of Materials—Provide a hazardous materials and waste plan describing responsible parties and procedures for hazardous waste and hazardous materials transport.
- LU-IAMF#3: Restoration of Land Used Temporarily During Construction—Prepare a restoration plan to achieve restoration for temporary impacts.
- NV-IAMF#1: Noise and Vibration—Prepare and submit a noise and vibration technical memorandum documenting guidelines for minimizing construction noise and vibration impacts.

- SS-IAMF#1: Construction Safety Transportation Management Plan—Prepare a construction safety transportation management plan to maintain emergency vehicle access and specify procedures for implementing temporary road closures.
- SS-IAMF#2: Safety and Security Management Plan—Implement all construction and HSR operation-related safety and security plans.
- TR-IAMF#2: Construction Transportation Plan—Prepare a detailed construction transportation plan to minimize the impact of construction and construction traffic.
- TR-IAMF#3: Off-Street Parking for Construction-Related Vehicles—Identify adequate off-street parking for construction-related vehicles or designate remote parking area to minimize impacts on public on-street parking areas.
- TR-IAMF#4: Maintenance of Pedestrian Access—Prepare specific construction management plans to address maintenance of pedestrian access during the construction period.
- TR-IAMF#5: Maintenance of Bicycle Access—Prepare specific construction management plans to address maintenance of bicycle access during the construction period.
- TR-IAMF#6: Restriction on Construction Hours—Limit construction material deliveries and number of employees arriving or departing the site to specific time frames to minimize impacts on traffic on roadways.
- TR-IAMF#7: Construction Truck Routes—Deliver all construction-related equipment and materials on the appropriate truck routes, and prohibit heavy construction vehicles from using alternative routes to get to the site.
- TR-IAMF#8: Construction during Special Events—Provide a mechanism to prevent roadway construction activities from reducing roadway capacity during special events that substantially increase traffic on roadways affected by project construction.
- TR-IAMF#11: Maintenance of Transit Access—Prepare specific construction management plans to address maintenance of transit access during the construction period.
- TR-IAMF#12: Pedestrian and Bicycle Safety—Provide a technical memorandum describing how pedestrian and bicycle accessibility would be provided and supported across the HSR corridor, to and from stations, and on station property.

3.12.4.3 Methods for NEPA and CEQA Impact Analysis

This section describes the sources and methods the Authority used to analyze potential impacts on socioeconomics and communities from implementing the HSR Build Alternative. These methods apply to both NEPA and CEQA unless otherwise indicated. Refer to Section 3.1.3.4, Methods for Evaluating Impacts, for a description of the general framework for evaluating impacts under NEPA and CEQA. This analysis considers the direct and indirect impacts of the HSR Build Alternative on socioeconomics and communities. Additional supporting information and a detailed description of the methods are provided in the *Burbank to Los Angeles Project Section: Community Impact Assessment* in Section 4.2, Methodology for Effects Analysis (Authority 2019a).

This analysis of impacts on communities considers direct and indirect impacts from construction and operation of the HSR Build Alternative. For example, the direct impacts of the acquisition of land within the HSR Build Alternative footprint for construction would be the displacement and relocation of some residences and businesses. Indirect impacts associated with displacements and relocations from construction would include social and economic impacts on communities. For instance, residential displacements would indirectly affect property tax revenues and school district funding. The following sections discuss topic-specific evaluation methods for construction and operations regarding communities and neighborhoods, displacements and relocations, and economics.

Communities and Neighborhoods

Impacts were identified through intensive review of aerial photographs and geographic information system (GIS) layers showing the spatial relationship between the proposed improvements included in the HSR Build Alternative and existing communities and neighborhoods. The analysis considered both direct and indirect impacts on homes, businesses, and community facilities. The analysis was coordinated with the air quality, noise, traffic, and visual technical analyses to determine the extent of construction and operations impacts.

The analysis of impacts on existing communities and neighborhoods during project construction and operation considered three key issues:

- Whether new project facilities would disrupt or divide existing communities, or bring about changes in community character that could alter social interactions or affect community cohesion
- Whether the project would displace key community facilities or services
- Whether the project would create changes in motorized and nonmotorized circulation and access that could affect community cohesion

Community cohesion refers to residents' sense of belonging to their neighborhood, their level of commitment to their community, or "a strong attachment to neighbors, groups, and institutions, usually as a result of continued association over time" (California Department of Transportation 2011). Demographic data compiled by the U.S. Census Bureau, including the 2010–2014 American Community Survey (ACS), were used to help measure a community's level of cohesion.

The following demographic indicators tend to correlate with a higher degree of community cohesion and were used in this analysis to determine the degree of community cohesion that currently exists within each city or community in the population and community impacts RSAs:

- Percentage of housing units that are owner-occupied.
- Percentage of the population that consists of long-term residents (defined as residents that moved in prior to the year 2000)
- Average household size
- Percentage of the population that is age 65 and older
- Percentage of the population that is ethnically homogenous (e.g., majority Hispanic)
- Percentage of the population that is transit-dependent

When two or more of these indicators for a particular community are higher than the corresponding indicators for Los Angeles County, those communities are considered to have moderate cohesion for the purpose of this discussion. If four or more indicators are higher than those for Los Angeles County, a high level of community cohesion is assumed. Disruption of existing communities could include (but is not limited to) interference with established patterns of interactions among community residents, isolation of one part of a community from another, or disruption of residents' access to community facilities and services. Established patterns of interaction refer to regular contact among community members, which may include regular meetings at community facilities or regular interaction at businesses.

Additionally, the potential division of communities through the physical removal of residences, businesses, and important community facilities is considered when analyzing community cohesion.

Displacements and Relocations

Full-parcel acquisition was determined by evaluating the extent to which the HSR Build Alternative would displace existing structures and/or acquire a substantial portion of the property that would affect its continued use. In the case of full acquisition, all residences and businesses on the parcel are assumed to be displaced. Many parcels would also be partially acquired under the HSR Build Alternative, and displacement of the residences or businesses located on these parcels may not be necessary. In order to be conservative in this analysis and to avoid

underestimating displacements, most of the residences and businesses on partially acquired parcels, including those that may ultimately be only temporarily affected, are counted as displacements. The final full- and partial-parcel acquisition decisions would ultimately be determined on a case-by-case basis during the land acquisition and real estate appraisal phase of the project. For a description of methods used to analyze displacements and relocations, please refer to the *Burbank to Los Angeles Project Section: Relocation Impact Report* (Authority 2019b).

The number of employee displacements that could occur under the HSR Build Alternative was estimated by researching employment data in the Reference USA database for each business that could be displaced. The number of employees that could be displaced from each jurisdiction was then compared to the total number of employed persons in that jurisdiction according to preliminary data issued by the California Employment Development Department for November 2017 to determine the percentage of the current employment base that would be lost under the HSR Build Alternative.

Community Facilities

Analysts reviewed aerial photographs, GIS layers, and assessor's parcel data to identify parcels with key community facilities within the indirect impacts RSA for population and community impacts. Other databases (e.g., Reference USA) were used to identify the number and type of community facilities that may be displaced or disrupted.

This analysis considers the following types of impacts:

- **Property Acquisition**—Direct impacts on community facilities resulting from permanent property acquisition, permanent easements, and/or temporary construction easements (TCE).
- **Traffic/Access**—Impacts on access to/from community facilities from construction and detour-related traffic and/or temporary street closures/detours during construction. These types of impacts would occur when access to/from a community facility is blocked or substantially delayed during construction. These impacts are expected to be limited to within approximately 500 feet of the construction limits for the proposed project.
- **Parking**—Impacts on community facilities from temporary or permanent loss of parking for community facilities or loss/reduction of access to parking.
- **Air Quality and Noise**—Short- and long-term air quality or noise impacts on community facilities that are sensitive to this type of impact (e.g., schools) but not for facilities not sensitive to this type of impact (e.g., fire stations). These short- and long-term impacts are expected to be limited to within approximately 500 feet of the HSR Build Alternative's footprint.

In general, community facilities more than 500 feet from the direct and indirect population and community impacts RSAs of the HSR Build Alternative would not experience direct or indirect impacts during project construction or operation.

Economic

Analysts evaluated the economic impacts of the HSR Build Alternative by assessing changes in property and sales tax revenues, employment, school district funding, physical deterioration, and construction- and operation-related sales tax gains. The sections below summarize the methodology for assessing each type of potential impact.

Property and Sales Tax Revenues

Reduced property tax revenues were estimated for all permanent property acquisitions. For full acquisitions, the total assessed value of the parcel was assumed to be lost. For partial acquisitions, the reduction was calculated by identifying the number of square feet to be acquired

What is a "displacement" and what is a "relocation"?

The term "displacement" refers to property acquisition of a parcel or structure, while the term "relocation" represents finding new properties for displaced residents, businesses, and organizations in acquired structures (*Environmental Methodology Guidelines, Version 5* [Authority 2017]).

as a percentage of the parcel's overall land value. The assessed value of the parcels to be potentially acquired was multiplied by the appropriate Assembly Bill 8² property tax rate to determine the tax loss for each jurisdiction, then compared to the total property tax base in that jurisdiction.

Sales tax losses are an indirect impact of construction and were estimated for permanently displaced businesses that collect sales tax for products, goods, or services. The annual sales tax revenue generated by each of the businesses that would be relocated was based on the average taxable sales per business in 2014 (the most recent year for which data are available), as reported by the State Board of Equalization, for Los Angeles County.

Employment

Analysts used the Bureau of Economic Analysis Regional Input-Output Modeling System II (Bureau of Economic Analysis 2016) and the bill of goods³ method to estimate the short-term region-wide direct, indirect, and induced⁴ job creation resulting from spending associated with the HSR Build Alternative in the construction sector.

School District Funding

The HSR Build Alternative 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 relocating students outside of their current school districts. Therefore, the school district funding analysis focuses on the HSR Build Alternative'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 a large number of 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. The assessed value reductions on the parcels that would be acquired under the HSR Build Alternative were then multiplied by the appropriate Assembly Bill 8 property tax rate to determine the tax loss for each school district, then compared to the total property tax revenue in that school district in Fiscal Year (FY) 2014–2015.

Physical Deterioration

To identify potential impacts related to physical deterioration in communities, analysts evaluated the potential for the HSR Build Alternative to result in the following types of changes:

- Considerable residential migration out of a community that would be expected to change its character

² In California, property owners pay 1 percent of the assessed value of their property in property taxes. This allocation system, referred to as Assembly Bill 8, provides a share of the total property taxes collected within a community to each local government that provides services within a community. The county allocates each jurisdiction's share of the property taxes locally to service providers, including school districts. This allocation is unique to each Tax Rate Area, which is defined as a small geographical area within the county that contains properties that are all served by a unique combination of local governments (county, city, special districts, and school districts). Each jurisdiction's Assembly Bill 8 rate is updated each fiscal year.

³ Refers to a delivery of goods or a consignment.

⁴ A directly created job is a position working on the project itself. Indirect job creation is related to purchases made as result of spending by the project on goods and services. Induced jobs are those created in response to spending by people who have jobs either directly or indirectly created by the project.

- Extensive changes to the business environment in a community that would be expected to result in closures of key “anchor” businesses that support the area and draw in consumers, or a substantial number of smaller businesses in a commercial district.
- Large reductions in the fiscal revenue (i.e., property and sales tax) collected that would be expected to reduce the local government’s ability to provide necessary services that maintain community quality

Construction- and Operation-Related Sales Tax Gains

To evaluate the HSR Build Alternative’s contribution to local sales tax revenues during construction and operation, the total local sales tax revenues generated from local purchases (e.g., wood, concrete, steel, and electrical equipment) were calculated for the HSR Build Alternative. Sales tax revenue during construction was derived using the sales tax rate for Los Angeles County (as of April 1, 2016) and the estimated local expenditures on materials and supplies for each year of construction. Annual sales tax revenue during operation was also estimated using the sales tax rate for Los Angeles County (as of April 1, 2016) and the estimated local expenditures on materials and supplies.

3.12.4.4 Method for Determining Significance under CEQA

CEQA requires that an EIR identify the significant environmental impacts of a project (CEQA Guidelines § 15126). One of the primary differences between NEPA and CEQA is that CEQA requires a significance determination for each impact using a threshold-based analysis (see Section 3.1.3.4, Methods for Evaluating Impacts, for further information). By contrast, under NEPA, significance is used to determine whether an EIS would be required; NEPA requires that an EIS be prepared when the proposed federal action (project) as a whole has the potential to “significantly affect the quality of the human environment.” 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.” 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.”

The Authority used the thresholds listed below to determine if the HSR Build Alternative would cause a significant impact on socioeconomics and community resources. A significant impact is one that would:

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

3.12.5 Affected Environment

This section describes the affected environment for socioeconomics and communities, and it provides the context for the environmental analysis and evaluation of impacts.

3.12.5.1 Region

The region is defined as Los Angeles County. Los Angeles County encompasses approximately 4,100 square miles and includes coastal, desert, and mountain areas. It includes 75 miles of coastline along the Pacific Ocean and two islands: Santa Catalina Island and San Clemente Island. Los Angeles County is largely characterized by urban and suburban development, but it also includes rural areas. Employment centers are distributed throughout the county. Increased population growth and the limited availability of affordable housing have contributed to the

expansion of development into more rural areas of Los Angeles County, which has contributed to increases in commute distances.

3.12.5.2 City

The cities of Burbank and Glendale were examined together as a whole because their overall geographic areas and populations are small compared to the city of Los Angeles (see Section 3.12.5.4, Population). Information for the City of Los Angeles is presented both as a whole and for specific neighborhood council areas (NCA).

The city of Burbank, located in the San Fernando Valley, is approximately 12 miles northwest of downtown Los Angeles. The city of Burbank covers approximately 17 square miles and is bordered by the city of Glendale to the east and the city of Los Angeles in all other directions.

The city of Glendale, located in the San Fernando Valley, is approximately 10 miles north of downtown Los Angeles and covers approximately 31 square miles. It is bordered by the city of La Cañada Flintridge and the unincorporated community of Montrose-La Crescenta to the northeast, the city of Pasadena to the east, the city of Burbank to the west, and the city of Los Angeles to the north and south.

The city of Los Angeles lies mostly within a basin generally located to the southwest of the San Gabriel Mountains and bordered to the west by several Pacific coastal cities. The city of Los Angeles is divided into almost 100 neighborhoods.

3.12.5.3 Neighborhood

The neighborhoods discussed in this section are NCAs located within the direct and indirect impacts RSAs for population and community impacts. NCAs are discussed from north to south along the Burbank to Los Angeles Project Section and include:

- Sun Valley
- Los Feliz
- Atwater Village
- Glassell Park
- Arroyo Seco
- Silver Lake
- Elysian Valley Riverside
- Greater Echo Park Elysian
- Greater Cypress Park
- Lincoln Heights
- Historic Cultural NCA
- Downtown Los Angeles
- Boyle Heights

The boundaries of these NCAs are shown on Figure 3.12-4. Individual figures for the NCAs can be found in the *Community Impact Assessment* (Authority 2019a).

Neighborhood Councils

Neighborhood councils are city-certified local groups made up of community members who are elected or selected to their positions by their neighborhoods. Neighborhood councils were established by the City of Los Angeles Department of Neighborhood Empowerment to foster local engagement in addressing communities' issues of concern, such as safety or health services. The City of Los Angeles provides operational support to neighborhood councils, such as supplying meeting spaces and translators, and the councils receive public funds to support their local projects, programs, and events that address the unique needs of their communities. Council meetings are held at least once every 3 months. Neighborhood councils represent neighborhoods with a minimum population of 20,000 people.

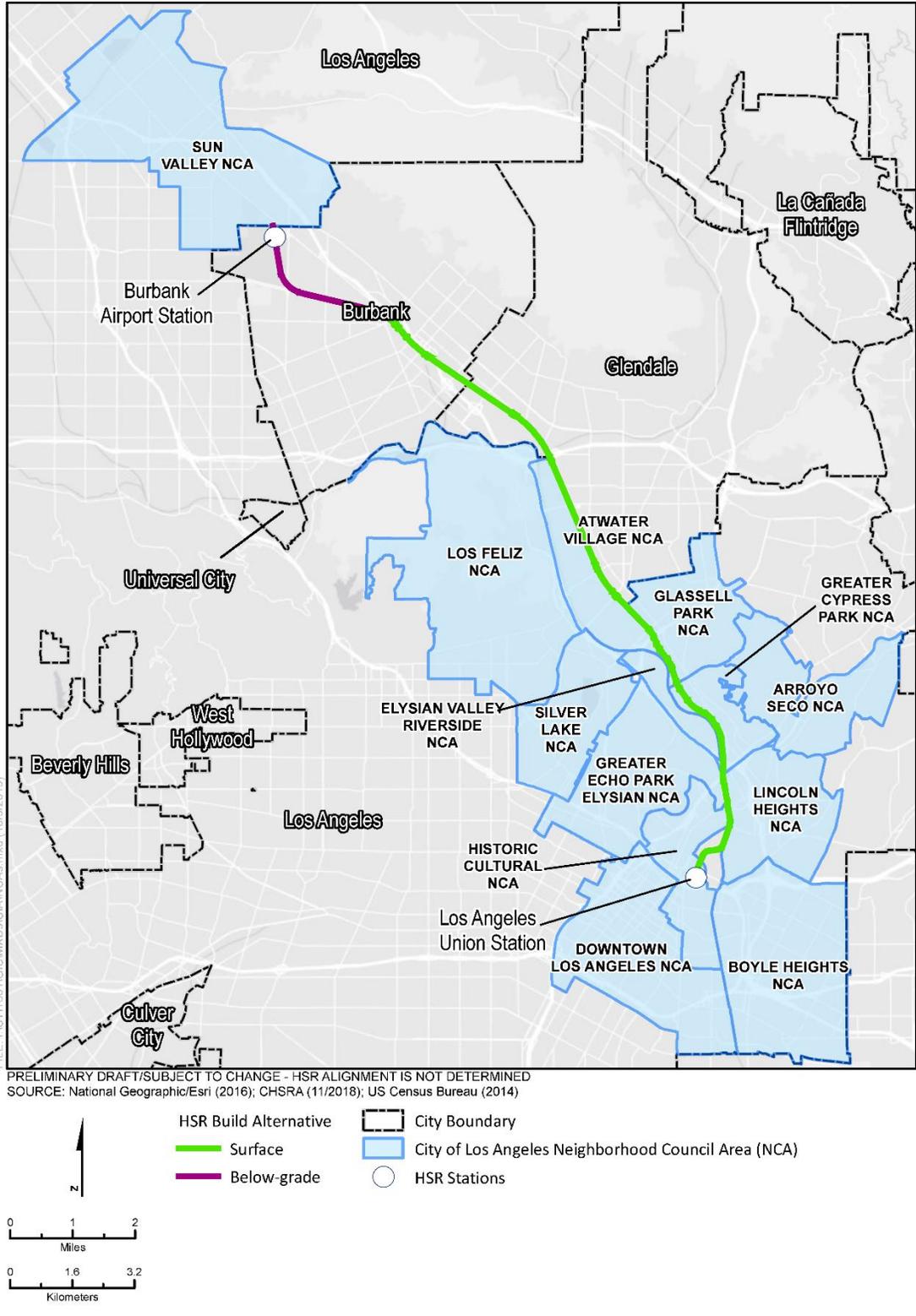


Figure 3.12-4 Cities and Communities Adjacent to the High-Speed Rail Build Alternative

The Sun Valley NCA is located across portions of Los Angeles City Council Districts 2 and 6, and it was certified⁵ in 2002. The Sun Valley NCA is bordered by the city of Burbank to the south. A small part of the Sun Valley NCA's southern boundary contains the Verdugo Foothills, where Sun Valley also abuts the city of Burbank and the Foothills Trails District NCA (City of Los Angeles 2013).

The Los Feliz NCA is located across portions of Los Angeles City Council Districts 4 and 13, and it was certified in 2002. The Los Feliz NCA encompasses a portion of Griffith Park. The remaining area is divided into five representative districts, each with its own representatives. Generally, the Los Feliz NCA is bordered to the south by the East Hollywood and Silver Lake NCAs, to the east by the Atwater Village NCA, and to the west by the Hollywood United NCA (City of Los Angeles 2015).

The Atwater Village NCA is within Los Angeles City Council District 13 and was officially certified in 2003. Atwater Village lies between the Los Angeles River to the west and the city of Glendale to the north and east. In addition, the Atwater Village NCA shares borders with the Silver Lake NCA to the south, the Elysian Valley Riverside NCA to the southeast, the Glassell Park NCA to the northeast, and the Los Feliz and Griffith Park NCAs across the river to the west.

The Glassell Park NCA is located across portions of Los Angeles City Council Districts 1, 13, and 14 and was certified in 2002. The Glassell Park NCA is bordered by the city of Glendale to the north, the Eagle Rock NCA to the east, and the Greater Cypress Park and Arroyo Seco NCAs to the south. A small part of the Glassell Park NCA's western boundary is defined by the Los Angeles River, where the Glassell Park NCA also abuts the Elysian Valley Riverside NCA (City of Los Angeles 2013).

The Arroyo Seco NCA is located across portions of Los Angeles City Council District 14 and was certified in 2002. The Arroyo Seco NCA is bordered by the Glassell Park NCA to the north and by the Cypress Park and Lincoln Heights NCAs to the south. State Route 110 and the Arroyo Seco bisect the Arroyo Seco NCA and define a portion of its border with the Historic Highland Park NCA (City of Los Angeles 2013). A small part of the Arroyo Seco NCA's western boundary is defined by the Los Angeles River, where the Glassell Park NCA also abuts the Elysian Valley Riverside NCA.

The Silver Lake NCA is located across portions of Los Angeles City Council Districts 4 and 13, and it was certified in 2003. The Silver Lake NCA is bounded on the northeast by the Los Angeles River. It shares borders on the northwest with the Los Feliz NCA and on the south with the East Hollywood, Rampart Village, and Greater Echo Park Elysian NCAs. The Silver Lake NCA is situated around the Silver Lake Reservoir (City of Los Angeles 2015).

The Elysian Valley Riverside NCA is located within Los Angeles City Council District 13 and was certified in 2002. The Elysian Valley Riverside NCA is bounded to the north and east by the Los Angeles River, which is its defining geographical characteristic. In addition, the Elysian Valley Riverside NCA borders the Silver Lake NCA to the northwest and the Greater Echo Park Elysian NCA to the southwest, where each of those neighborhoods borders the Elysian Park property (City of Los Angeles 2015).

The Greater Echo Park Elysian NCA is located in portions of Los Angeles City Council Districts 1 and 13, and it was certified in 2002. The Greater Echo Park Elysian NCA borders the Silver Lake and Rampart Village NCAs to the northwest, the Westlake North and Downtown Los Angeles NCAs to the southwest, and the Historic Cultural NCA to the southeast. The Greater Echo Park Elysian NCA encompasses several notable attractions, including Dodger Stadium, Echo Park, and Elysian Park.

The Greater Cypress Park NCA is located in Los Angeles City Council District 1 and was certified in 2002. The Greater Cypress Park NCA's western border is the Los Angeles River. The Greater Cypress Park NCA is adjacent to the Arroyo Seco NCA to the east, the Lincoln Heights NCA to the south, and the Glassell Park NCA on the north (City of Los Angeles 2015).

⁵ NCAs are certified under the City of Los Angeles Department of Neighborhood Empowerment. For more information, refer to <http://empowerla.org/councils/>.

The Lincoln Heights NCA is located across portions of Los Angeles City Council Districts 1 and 14, and it was certified in 2002. The Lincoln Heights NCA’s western border is defined by the Los Angeles River. To the north, the Lincoln Heights NCA borders both the Cypress Park and Arroyo Seco NCAs, mostly along the Arroyo Seco. To the south and west, the Lincoln Heights NCA borders the Boyle Heights and LA-32 NCAs, respectively (City of Los Angeles 2013).

The Historic Cultural NCA is located across portions of Los Angeles City Council Districts 1 and 14, and it was certified in 2002. The Historic Cultural NCA is made up of six historic communities around the original center of Los Angeles. The Historic Cultural NCA borders the Boyle Heights and Lincoln Heights NCAs to the east and the Downtown Los Angeles NCA to the south-southwest. To the north the Historic Cultural NCA borders and partially overlaps the boundary of the Greater Echo Park Elysian NCA (City of Los Angeles 2015).

The Downtown Los Angeles NCA is located across portions of Los Angeles City Council Districts 1, 9, and 14, and it was officially certified in 2002. The Downtown Los Angeles NCA is bounded to the east by the Los Angeles River and the Historic Cultural NCA; to the west by the Greater Echo Park Elysian, Westlake North and South, Pico Union, and Empowerment Congress North NCAs; and to the south by the South Central NCA (City of Los Angeles 2015).

The Boyle Heights NCA is located within Los Angeles City Council District 14 and was officially certified in 2002. Boyle Heights is bounded to the north and west by the Historic Cultural and Downtown Los Angeles NCAs; to the west by the unincorporated community of East Los Angeles; and to the south by the city of Vernon (City of Los Angeles 2015).

3.12.5.4 Population

The sections below describe population characteristics for the region and the cities and NCAs in the RSAs.

Region

Table 3.12-3 shows the population growth in California and Los Angeles County, from 2010 to 2040. The population in Los Angeles County increased between 2000 and 2010 and is forecast to continue to grow through 2040. The table shows data from 2000 and 2010 to illustrate the changes in population over time and to provide context for the continued population changes that are forecasted up to the year 2040. As shown in the table, the county’s total population increased by approximately 0.3 percent annually from 2000 to 2010, and it will increase by approximately 17 percent between 2010 and 2040, reaching over 11.5 million residents by 2040. The county’s annual growth rate from 2010 and 2010 (0.3 percent) was lower than the state’s growth rate during the same period (0.9 percent). The projected increase in population for the county (17 percent) is also lower than that of the state (26 percent) between 2010 and 2040.

Table 3.12-3 State and Region Population Growth (2000–2040)

Location	2000 Total Population	2010 Total Population ¹	Percent Average Annual Growth Rate, 2000–2010	2040 Forecasted Population	Percent Change, 2010–2040
California ²	33,871,648	37,253,956	0.9%	47,233,240	26%
Los Angeles County	9,519,338	9,818,605	0.3%	11,514,000	17%

Sources: U.S. Census Bureau, 2010c; Southern California Association of Governments, 2016a, 2016b

¹ Because decennial Census data are less susceptible to estimation fluctuation, data from the 2000 and 2010 Census are used to demonstrate population growth, rather than the more updated 2010–2014 American Community Survey estimates.

² Source for the 2040 forecasted population for California: California Department of Finance, 2016

City

Table 3.12-4 shows the population growth for the cities within the population and community impacts RSAs. The projected population growth between 2010 and 2040 for the cities of Burbank and Glendale is lower than for Los Angeles County (17 percent), while the projected population growth for the city of Los Angeles is the same as that projected for the county.

Table 3.12-4 City Population Growth (2010–2040)

Location	2010 Total Population	2040 Forecasted Population
City of Burbank	103,340	118,700
City of Glendale	191,719	214,000
City of Los Angeles	3,792,621	4,609,400

Sources: U.S. Census Bureau, 2010c; Southern California Association of Governments 2016a, 2016b

Neighborhood

Table 3.12-5 shows the 2010 population for the NCAs within the population and community impacts RSAs. Growth forecasts for 2040 are not available for the NCAs within the city of Los Angeles.

Table 3.12-5 Neighborhood Council Area Population (Census 2010)

Neighborhood Council Area ¹	2010 Total Population
Sun Valley	50,966
Los Feliz	35,402
Atwater Village	14,101
Glassell Park	26,776
Arroyo Seco	30,087
Silver Lake	38,392
Elysian Valley Riverside	6,889
Greater Echo Park Elysian	52,564
Greater Cypress Park	15,145
Historic Cultural	30,133
Lincoln Heights	27,997
Downtown Los Angeles	38,286
Boyle Heights	86,354

Sources: U.S. Census Bureau, 2010b

¹ 2040 growth forecasts are not available for the neighborhood council areas within the city of Los Angeles.

3.12.5.5 Ethnicity

Minorities include all individuals who identified their race as anything but “White only” in the U.S. Census and all individuals who identified their ethnicity as Hispanic in the U.S. Census, regardless of race.

Region

As shown in Table 3.12-6, minority groups represented a substantial part of the total population in Los Angeles County in the 2010–2014 ACS estimate period (72.8 percent). The 2010–2014 ACS estimates are used instead of the 2010 Decennial Census estimates to provide more recent data. Hispanic of All Races was the largest minority represented in Los Angeles County (48.1 percent of the total county population). Minority groups represented a larger percentage of the population in the county (72.8 percent) than in the state (60.8 percent). The county also had a higher percentage of Hispanic of All Races (48.1 percent) than the state (38.2 percent).

Table 3.12-6 State and Region Minority Group Representation

Location	Percentage of Population							
	Hispanic of All Races	Native American	Asian	Hawaiian and Pacific Islander	African American	Some Other Race	Two or More Races	Minority
California	38.2	0.4	13.3	0.4	5.7	0.2	1.7	60.8
Los Angeles County	48.1	0.2	13.8	0.2	8.0	0.3	2.2	72.8

Source: U.S. Census Bureau, 2010–2014 American Community Survey

City

Table 3.12-7 provides the percentages of minority populations in the cities within the population and community impacts RSAs in the 2010–2014 ACS estimate period. The percentages of minority populations in the cities of Burbank (43.3 percent) and Glendale (37.3) were lower than that of Los Angeles County (72.8 percent), and the total minority population in the city of Los Angeles (71.5 percent) was higher than that of the county. Hispanic of All Races was the largest minority represented in the cities of Burbank (25.8 percent), Glendale (17.4 percent), and Los Angeles (48.6 percent). The Hispanic of All Races populations of the cities of Burbank and Glendale were lower than that of Los Angeles County (48.1 percent). The Hispanic of All Races population in the city of Los Angeles was similar to that of Los Angeles County.

Table 3.12-7 City Minority Group Representation (2010–2014 American Community Survey)

Location	Percentage of Population							
	Hispanic of All Races	Native American	Asian	Hawaiian and Pacific Islander	African American	Some Other Race	Two or More Races	Minority
City of Burbank	25.8	0.1	11.4	0.0	1.7	0.7	3.6	43.3
City of Glendale	17.4	0.2	16.0	0.1	1.1	0.1	2.4	37.3
City of Los Angeles	48.6	0.2	11.4	0.2	8.9	0.3	2.1	71.5

Source: U.S. Census Bureau, 2010–2014 American Community Survey

Neighborhood

Table 3.12-8 provides the percentages of minority populations in the NCAs within the population and community impacts RSAs in the 2010–2014 ACS estimate period. The percentage of minority populations exceeded that of Los Angeles County in all NCAs except the Los Feliz, Atwater Village, Silver Lake, and Downtown Los Angeles NCAs. Hispanic of All Races was the largest minority represented in all of the NCAs, with the exception of the Historic Cultural NCA, where Asian represented the largest minority group.

Table 3.12-8 Neighborhood Council Area Minority Group Representation (2010–2014 American Community Survey)

Neighborhood Council Area	Percentage of Population							
	Hispanic of All Races	Native American	Asian	Hawaiian and Pacific Islander	African American	Some Other Race	Two or More Races	Minority
Sun Valley	70.4	0.2	8.1	0.0	1.9	0.1	0.6	81.4
Los Feliz	15.8	0.0	13.6	0.1	2.2	0.4	2.8	34.9
Atwater Village	48.0	0.8	20.8	0.4	1.0	0.0	2.0	72.2
Glassell Park	57.2	0.0	21.4	0.2	1.1	0.2	2.5	82.6
Arroyo Seco	54.6	0.4	17.3	0.1	3.8	0.2	1.6	78.0
Silver Lake	32.5	0.2	15.5	0.1	2.9	0.4	3.0	54.4
Elysian Valley Riverside	61.8	0.0	28.1	0.9	0.9	0.2	1.5	93.4
Greater Echo Park Elysian	54.0	0.3	19.9	0.1	2.6	0.4	1.3	78.6
Greater Cypress Park	75.4	0.4	9.3	0.0	2.1	0.0	0.6	87.7
Historic Cultural	26.2	0.2	41.7	0.4	13.4	0.2	1.8	83.8
Lincoln Heights	69.6	0.0	25.2	0.0	0.4	0.3	0.9	96.4
Downtown Los Angeles	30.4	0.4	19.5	0.4	17.5	0.6	2.3	71.1
Boyle Heights	93.1	0.1	3.2	0.1	1.0	0.0	0.1	97.7

Source: U.S. Census Bureau, 2010–2014 American Community Survey

3.12.5.6 Age Distribution

Age distribution data present the median age and percentage of the population for three age group categories: under 18 years of age, between 18 and 64 years of age, and 65 and over years of age.

Region

The age distribution of the populations in the state and Los Angeles County in the 2010–2014 ACS estimate period is summarized in Table 3.12-9. As shown, more than 20 percent of the population of Los Angeles County was under 18 years of age, with 65 percent in the middle-age group (18 to 64 years of age) and 12.1 percent in the senior group (65 and over). The median age was 35.3, which is approximately the same as the median age of the state. The state also possessed a larger population of residents under age 18 and over age 65, and fewer in the middle-age group.

Table 3.12-9 Region Population Age Distribution (2010–2014 American Community Survey)

Location	Percentage Under 18 Years of Age	Percentage 18 to 64 Years of Age	Percentage 65 and Over Years of Age	Median Age (years)
California	24.2	63.7	12.1	35.6
Los Angeles County	23.5	65.0	11.5	35.3

Source: American Community Survey 2010–2014.

City

Table 3.12-10 shows the age distribution of the cities within the population and community impacts RSAs in the 2010–2014 ACS estimate period. The city of Los Angeles had the highest percentage of people under 18 but the smallest proportion of people 65 and over (22.2 percent and 10.9 percent, respectively). The three cities had similar percentages of population of people in the 18 to 64 Years of Age category, the largest age group in each city.

Table 3.12-10 City Population Age Distribution (2010–2014 American Community Survey)

Location	Percentage Under 18 Years of Age	Percentage 18 to 64 Years of Age	Percentage 65 and Over Years of Age	Median Age (years)
City of Burbank	19.6	65.2	15.7	39.1
City of Glendale	18.5	66.5	15.9	41.0
City of Los Angeles	22.2	66.9	10.9	34.6

Source: U.S. Census Bureau, 2010-2014 American Community Survey

Neighborhood

Table 3.12-11 shows the age distributions of the NCAs in the population and community impacts RSAs in the 2010–2014 ACS estimate period. The Sun Valley (25.0 percent), Lincoln Heights (25.2 percent), and Boyle Heights (29.1 percent) NCAs had a similar or higher percentage of the population under 18 years of age than Los Angeles County (23.5 percent). The Los Feliz (13.9 percent), Atwater Village (15.5 percent), Glassell Park (12.5 percent), Arroyo Seco (14.3 percent), Silver Lake (11.9 percent), Elysian Valley Riverside (14.9 percent), Greater Cypress Park (11.7 percent), Historic Cultural (12.6 percent), and Downtown Los Angeles (12.3 percent) NCAs had a similar or higher percentage of the population 65 years and over of age than the county (11.5 percent).

Median age data from the U.S. Census Bureau are not available at the NCA level.

Table 3.12-11 Neighborhood Council Area Population Age Distribution (2010–2014 American Community Survey)

Neighborhood Council Area	Percent Under 18 Years of Age	Percent 18 to 64 Years of Age	Percent 65 and Over Years of Age
Sun Valley	25.0	65.8	9.2
Los Feliz	11.3	74.8	13.9
Atwater Village	16.1	68.4	15.5
Glassell Park	21.5	66.0	12.5
Arroyo Seco	19.8	65.9	14.3
Silver Lake	14.4	73.7	11.9
Elysian Valley Riverside	19.3	65.8	14.9
Greater Echo Park Elysian	18.3	71.7	10.0
Greater Cypress Park	22.7	65.7	11.7
Historic Cultural	10.6	76.7	12.6
Lincoln Heights	25.2	63.8	11.0
Downtown Los Angeles	8.3	79.4	12.3
Boyle Heights	29.1	61.6	9.3

Source: U.S. Census Bureau, 2010–2014 American Community Survey.
Median age is not available at the neighborhood council area level.

3.12.5.7 Income

Income data present the median annual household income and percentage of families below the federal poverty level for the region, the cities, the NCAs, and the reference community (Los Angeles County).

Region

Table 3.12-12 provides a summary of median annual household income in California and Los Angeles County for the 2010–2014 ACS estimate period. The median annual household income in Los Angeles County was lower than that of California. The percentage of families below the federal poverty level in Los Angeles County was higher than that of the state.

Table 3.12-12 Regional Median Annual Household Income and Percentage of Families Below the Poverty Level (2010–2014 American Community Survey)

Location	Median Annual Household Income	Percentage of Families Below Poverty Level
California	\$61,489	12.3
Los Angeles County	\$55,870	14.6

Source: U.S. Census Bureau, 2010–2014 American Community Survey

City

Table 3.12-13 illustrates the median annual household income and percentage of families below the poverty level of the cities within the population and community impacts RSAs in the 2010–2014 ACS estimate period. The city of Burbank is the only city within the population and community impacts RSAs with a higher median household income and a lower percentage of families below the poverty level than Los Angeles County.

Table 3.12-13 City Median Annual Household Income and Percentage of Families Below the Poverty Level (2010–2014 American Community Survey)

Location	Median Annual Household Income	Percentage of Families Below Poverty Level
City of Burbank	\$66,111	12.8
City of Glendale	\$52,451	17.4
City of Los Angeles	\$49,682	18.2

Source: U.S. Census Bureau, 2010–2014 American Community Survey

Neighborhood

Table 3.12-14 shows the median annual household income and percentage of families living below the poverty level of the City of Los Angeles NCAs within the population and community impacts RSAs in the 2010–2014 ACS estimate period. Several of the NCAs had higher rates of families living below the poverty level when compared to Los Angeles County. The NCAs of Sun Valley, Glassell Park, Arroyo Seco, Greater Echo Park Elysian, Greater Cypress Park, Historic Cultural, Lincoln Heights, Downtown Los Angeles, and Boyle Heights all had lower median household incomes and higher percentages of families living below the poverty level than Los Angeles County.

Table 3.12-14 Neighborhood Council Area Median Annual Household Income and Percentage of Families Below the Poverty Level (2010–2014 American Community Survey)

Neighborhood Council Area	Median Annual Household Income	Percentage of Families Below Poverty Level
Sun Valley	\$51,582	18.5
Los Feliz	\$70,532	8.8
Atwater Village	\$63,542	8.6
Glassell Park	\$52,364	16.5
Arroyo Seco	\$55,197	17.3
Silver Lake	\$66,152	13.2
Elysian Valley Riverside	\$42,619	13.1
Greater Echo Park Elysian	\$48,540	21.4
Greater Cypress Park	\$50,594	18.2
Historic Cultural	\$32,569	32.8
Lincoln Heights	\$31,823	31.6
Downtown Los Angeles	\$34,260	19.3
Boyle Heights	\$32,778	26.6

Source: U.S. Census Bureau, 2010–2014 American Community Survey

3.12.5.8 Households

Household data provide the total number of households; the average household size; and the percentage of each type of household (i.e., family households, married-couple family, female householders [no husband present], male householder [no wife present], and nonfamily households).

Region

Table 3.12-15 provides the average household size, total number of households, and percentage of each type of household in Los Angeles County in the 2010–2014 ACS estimate period. Data for California are not provided here because it would not provide a meaningful comparison due to the size and diversity of the state’s households. Los Angeles County had 3,242,391 households (a 4.3 percent increase over 2000), with an average household size of approximately 3 persons (also increased from 2000).

Table 3.12-15 Regional Household Characteristics (2010–2014 American Community Survey)

Location	Number of Households	Average Household Size	Total Households (percent)				
			Family Household	Married-Couple Family	Female Householder (No Husband Present)	Male Householder (No Wife Present)	Nonfamily Household
Los Angeles County	3,242,391	3.04	67.1	44.5	15.8	6.8	32.9

Source: U.S. Census Bureau, 2010–2014 American Community Survey

City

Table 3.12-16 provides the average household size, total number of households, and percentage of each type of household in the cities within the population and community impacts RSAs in the 2010–2014 ACS estimate period. The cities of Burbank, Glendale, and Los Angeles all have household sizes similar to that of Los Angeles County. The cities of Burbank (61.5 percent) and Los Angeles (60.2 percent) both have a smaller percentage of family households than Los Angeles County (67.1 percent). The city of Los Angeles is the only city within the population and community impacts RSAs with a similar ratio of single-parent householders (male or female householders) (22.2 percent) as Los Angeles County (22.6 percent).

Table 3.12-16 City Household Characteristics (2010–2014 American Community Survey)

Location	Number of Households	Average Household Size	Total Households (percent)				
			Family Household	Married-Couple Family	Female Householder (No Husband Present)	Male Householder (No Wife Present)	Nonfamily Household
City of Burbank	41,414	2.51	61.5	44.7	11.5	5.4	38.5
City of Glendale	71,132	2.72	69.2	50.7	13.2	5.3	30.8
City of Los Angeles	1,329,372	2.84	60.2	38.0	15.4	6.8	39.8

Source: U.S. Census Bureau, 2010–2014 American Community Survey

Neighborhood

Table 3.12-17 provides the average household size, total number of households, and percentage of each type of household within each NCA in the 2010–2014 ACS estimate period. The NCAs of Sun Valley, Glassell Park, Elysian Valley Riverside, Greater Cypress Park, Lincoln Heights, and Boyle Heights have average household sizes that exceed Los Angeles County’s average household size (3.04). The NCAs of Sun Valley (79.1 percent), Glassell Park (68.7 percent), Greater Cypress Park (67.6 percent), Lincoln Heights (73.9 percent), Elysian Valley Riverside (73.7 percent) and Boyle Heights (77.7 percent) have higher concentrations of family households overall than Los Angeles County (67.1 percent).

Table 3.12-17 Neighborhood Council Area Household Characteristics (2010–2014 American Community Survey)

Neighborhood Council Area	Number of Households	Average Household Size	Total Households (percent)				
			Family Household	Married-Couple Family	Female Householder (No Husband Present)	Male Householder (No Wife Present)	Nonfamily Household
Sun Valley	13,236	3.76	79.1	51.0	19.1	9.0	20.9
Los Feliz	18,103	1.98	36.8	26.8	7.1	3.0	63.2
Atwater Village	5,429	2.43	56	36	15.6	4.4	44.0
Glassell Park	8,686	3.08	68.7	42.3	17.6	8.8	31.3
Arroyo Seco	10,666	2.79	62.0	41.8	14.1	6.1	38.0
Silver Lake	17,259	2.22	43.1	30.9	8.5	3.7	56.9
Elysian Valley Riverside	2,016	3.39	73.7	47.0	13.0	13.7	26.3
Greater Echo Park Elysian	19,652	2.69	54.1	31.8	16.1	6.2	45.9
Greater Cypress Park	4,597	3.36	67.6	43.6	16.9	7.1	32.4
Historic Cultural	9,389	2.26	43.6	28.7	10.2	4.6	56.4
Lincoln Heights	7,941	3.47	73.9	42.9	22.5	8.6	26.1
Downtown Los Angeles	19,826	1.55	19.9	13.6	3.2	3.1	80.1
Boyle Heights	21,937	3.87	77.7	43.1	24.3	10.3	22.3

Source: U.S. Census Bureau, 2010–2014 American Community Survey

The NCAs of Sun Valley (28.1 percent), Glassell Park (26.4 percent), Elysian Valley Riverside (26.7 percent), Greater Echo Park Elysian (22.3 percent), Greater Cypress Park (24 percent), Lincoln Heights (31.1 percent), and Boyle Heights (34.6 percent) have similar or higher concentrations of single-parent households (male or female householders) than Los Angeles County (22.6 percent).

3.12.5.9 Linguistic Isolation

Linguistically isolated households are defined as households in which all members aged 14 years and older speak a non-English language and also speak English less than “very well.” The percentage of total households that consists of LEP individuals represents the linguistic isolation of each jurisdiction.

Region

Table 3.12-18 provides the percentages of the LEP households in the region that are linguistically isolated in California and Los Angeles County, as reported in the 2010–2014 ACS. The percentage of linguistically isolated households in Los Angeles County (14.0 percent) was higher than that of the state (9.9 percent).

Table 3.12-18 Regional Limited English Proficiency Characteristics (2010–2014 American Community Survey)

Location	Total Households	Limited English Proficiency Households	Percentage of Total Households
California	12,617,280	1,216,152	9.9
Los Angeles County	3,242,391	453,234	14.0

Source: U.S. Census Bureau, 2010–2014 American Community Survey

City

Table 3.12-19 shows the LEP households for the cities within the population and community impacts RSAs, as reported in the 2010–2014 ACS. The city of Glendale (25.1 percent) and the city of Los Angeles (16.3 percent) had a higher percentage of households classified as LEP than Los Angeles County (14.0 percent).

Table 3.12-19 City Limited English Proficiency Characteristics (2010–2014 American Community Survey)

Location	Total Households	Limited English Proficiency Households	Percentage of Total Households
City of Burbank	41,414	4,122	10
City of Glendale	71,132	17,852	25.1
City of Los Angeles	1,329,372	217,253	16.3

Source: U.S. Census Bureau, 2010–2014 American Community Survey

Neighborhood

Table 3.12-20 shows the LEP characteristics for the NCAs within the population and community impacts RSAs, as reported in the 2010–2014 ACS. All but two of the NCAs (the Los Feliz and Silver Lake NCAs) had a higher percentage of linguistically isolated households than Los Angeles County (14.0 percent).

Table 3.12-20 Neighborhood Council Area Limited English Proficiency Characteristics (2010–2014 American Community Survey)

Neighborhood Council Area	Total Households	Limited English Proficiency Households	Percentage of Total Households
Sun Valley	13,236	2,576	19.5
Los Feliz	18,103	2,267	12.5
Atwater Village	5,429	888	16.4
Glassell Park	8,686	1,356	15.6
Arroyo Seco	10,666	1,762	16.5
Silver Lake	17,259	1,622	9.4
Elysian Valley Riverside	2,016	442	21.9
Greater Echo Park Elysian	19,652	3,419	17.4
Greater Cypress Park	4,597	897	19.5
Historic Cultural	9,389	3,470	37.0
Lincoln Heights	7,941	2,367	29.8
Downtown Los Angeles	19,826	3,557	17.9
Boyle Heights	28,152	9,009	32.0

Source: U.S. Census Bureau, 2010–2014 American Community Survey

3.12.5.10 Disabilities

Data on people with disabilities present the percentage of the population reporting a disability, self-care limitation, or low-mobility issue for the age ranges of 5 to 64 and 65 and above.

Region

Table 3.12-21, Table 3.12-22, and Table 3.12-23 show the percentages of individuals reporting some sort of disability, self-care limitation, or low-mobility issue in the state, Los Angeles County, and the cities and NCAs in the population and community impacts RSAs, as reported in the 2010–2014 ACS.

Table 3.12-21 State and Regional Disability Status (2010–2014 American Community Survey)

Location	Percentage of Population with Disability Status, Age 5 to 64	Percentage of Population with Disability Status, Age 65+
California	7.1	36.4
Los Angeles County	6.4	37.6

Source: U.S. Census Bureau, 2010–2014 American Community Survey

Table 3.12-22 City Disability Status (2010–2014 American Community Survey)

Location	Percentage of Population with Disability Status, Age 5 to 64	Percentage of Population with Disability Status, Age 65+
City of Burbank	5.5	40.1
City of Glendale	6.5	49.2
City of Los Angeles	6.5	39.1

Source: U.S. Census Bureau, 2010–2014 American Community Survey

Table 3.12-23 Neighborhood Council Area Disability Status (2010–2014 American Community Survey)

Neighborhood Council Area	Percentage of Population with Disability Status, Age 5 to 64	Percentage of Population with Disability Status, Age 65+
Sun Valley	7.5	41.5
Los Feliz	4.8	36.2
Atwater Village	6.6	37.9
Glassell Park	7.2	39.3
Arroyo Seco	8.3	33.2
Silver Lake	5.5	31.4
Elysian Valley Riverside	4.6	39.7
Greater Echo Park Elysian	6.8	36.7
Greater Cypress Park	6.5	33.9
Historic Cultural	9.9	43.9
Lincoln Heights	9.9	47.1
Downtown Los Angeles	11.0	47.6
Boyle Heights	7.2	47.1

Source: U.S. Census Bureau, 2010–2014 American Community Survey

As shown in Table 3.12-21, nearly 38 percent of the population above the age of 65 in Los Angeles County reported some type of disability, which is higher than the state (36.4 percent). The rate of people ages five to 64 with disabilities (6.4 percent) is lower than that of the state (7.1 percent).

City

As shown in Table 3.12-22, the rate of people ages 65 and over with reported disabilities was higher in the city of Burbank (40.1 percent), the city of Glendale (49.2 percent), and the city of Los Angeles (39.1 percent) than in Los Angeles County (37.6 percent). The rate of people ages 5 to 64 with reported disabilities in the city of Glendale (6.5 percent) and the city of Los Angeles (6.5 percent) was similar to that of Los Angeles County (6.4 percent), and the rate of people ages 5 to 64 with reported disabilities in the city of Burbank (5.5 percent) was lower than that of the county.

Neighborhood

As shown in Table 3.12-23, among the NCAs in the city of Los Angeles that were analyzed, the Sun Valley (41.5 percent), Atwater Village (37.9 percent), Glassell Park (39.3 percent), Elysian Valley Riverside (39.7 percent), Historic Cultural (43.9 percent), Lincoln Heights (47.1 percent), Downtown Los Angeles (47.6 percent), and Boyle Heights (47.1 percent) NCAs had similar or higher percentages of people 65 years of age or older reporting disabilities compared to Los Angeles County overall (37.6 percent). Among the NCAs that were analyzed, the Sun Valley (7.5 percent), Atwater Village (6.6 percent), Glassell Park (7.2 percent), Arroyo Seco (8.3 percent), Greater Echo Park Elysian (6.8 percent), Greater Cypress Park (6.5 percent), Historic Cultural (9.9 percent), Lincoln Heights (9.9 percent), Downtown Los Angeles (11.0 percent), and Boyle Heights (7.2 percent) NCAs had similar or higher percentages of people ages 5 to 64 with reported disabilities than Los Angeles County (6.4).

3.12.5.11 Community Cohesion

Factors that indicate community cohesion include (1) the presence of specific demographic indicators (identified in Table 3.12-24 and Table 3.12-25); and (2) the presence of residences, businesses, and important community facilities that are adjacent to each other or otherwise linked, and mobility/access between these key areas. Figure 3.12-4 depicts cities and communities that are adjacent to the HSR Build Alternative alignment, much of which follows an existing railroad corridor. Residential areas, housing, and local businesses are discussed in Section 3.12.5.12, Housing and Business Setting; important community facilities are discussed in Section 3.12.5.13, Public Services and Facilities; and mobility/access is discussed in Section 3.12.5.14, Nonmotorized Circulation and Access. Each of these discussions contributes to the identification of cohesive communities.

Table 3.12-24 City Community Cohesion Indicators (2010–2014 American Community Survey)

Location	Racial Minority Population ¹	Hispanic/Latino Population ²	Owner-Occupied Residences	Elderly Residents (65+ years old)	Average Household Size (persons)	Transit-Dependent Population ³	Long-Term Residents (moved in 1999 or earlier) ⁴
Los Angeles	71.5%	48.6%*	37.1%	10.9%	2.84	31.6%*	30.9%
Burbank	43.3%	25.8%	41.6%	14.3%*	2.51	19.8%	31.8%
Glendale	37.3%	17.4%	36.2%	15.9%*	2.72	29.2%*	30.3%
Los Angeles County	72.8%	48.1%	46.4%	11.5%	3.02	27.4%	33.7%

Source: U.S. Census Bureau, 2010–2014 American Community Survey

Numbers in **bold** and an asterisk indicate the values are higher than Los Angeles County average.

¹ Includes individuals who identify as Black/African American, Asian, Native Hawaiian/Pacific Islander, Native American/Native Alaskan, Some Other Race, or two or more races.

² Persons of Hispanic/Latino origin may be of any race.

³ The transit-dependent population was calculated by taking the number of residents aged 15 and over (as reported in Table B01001 of the 2010–2014 American Community Survey), subtracting the number of persons living in group quarters (as reported in Table B26001 of the 2010–2014 American Community Survey), subtracting the number of vehicles available (as reported in Table B25046 of the 2010–2014 American Community Survey), and then dividing the difference by the population aged 15 and over.

⁴ Includes those residents who moved into their current residence in 1999 or earlier, as reported in Table DP04 of the 2010–2014 American Community Survey.

Table 3.12-25 Neighborhood Council Area Community Cohesion Indicators (2010–2014 American Community Survey)

Location	Racial Minority Population ¹	Hispanic/Latino Population ²	Owner-Occupied Residences	Elderly Residents (65+ years old)	Average Household Size (persons)	Transit-Dependent Population ³	Long-Term Residents (moved in 1999 or earlier) ⁴
Sun Valley	81.4%*	70.4%*	53.0%*	9.2%	3.76*	33.3%*	42.5%*
Los Feliz	34.9%	15.8%	27.4%	13.9%*	1.98	17.3%	31.3%
Atwater Village	72.2%	48.0%	37.1%	15.5%*	2.43	25.7%	38.4%*
Glassell Park	82.6%*	57.2%*	41.9%	12.5%*	3.08*	34.2%*	37.9%*
Arroyo Seco	78.0%*	54.6%*	56.0%*	14.3%*	2.79	27.0%	38.5%*
Silver Lake	54.4%	32.5%	31.3%	11.9%*	2.22	23.7%	33.5%
Elysian Valley Riverside	93.4%*	61.8%*	44.7%	14.9%*	3.39*	32.2%*	49.3%*
Greater Echo Park Elysian	78.6%*	54.0%*	22.6%	10.0%	2.69	38.6%*	30.7%

Location	Racial Minority Population ¹	Hispanic/Latino Population ²	Owner-Occupied Residences	Elderly Residents (65+ years old)	Average Household Size (persons)	Transit-Dependent Population ³	Long-Term Residents (moved in 1999 or earlier) ⁴
Greater Cypress Park	87.7%*	75.4%*	47.6%*	11.7%*	3.36*	38.6%*	43.5%*
Historic Cultural	83.8%*	26.2%	16.4%	12.6%*	2.26	46.3%*	20.5%
Lincoln Heights	96.4%*	69.6%*	24.5%	11.0%	3.47*	48.0%*	31.8%
Downtown Los Angeles	71.1%	30.4%	10.5%	12.3%*	1.55	36.9%*	9.4%
Boyle Heights	97.7%*	93.1%*	23.4%	9.3%	3.87*	52.4%*	34.9%*
Los Angeles County	72.8%	48.1%	46.4%	11.5%	3.02	27.4%	33.7%

Source: U.S. Census Bureau, 2010–2014 American Community Survey

Numbers in **bold** and an asterisk indicate the values are higher than Los Angeles County average.

¹ Includes individuals who identify as Black/African American, Asian, Native Hawaiian/Pacific Islander, Native American/Native Alaskan, Some Other Race, or two or more races.

² Persons of Hispanic/Latino origin may be of any race.

³ The transit-dependent population was calculated by taking the number of residents aged 15 and over (as reported in Table B01001 of the 2010–2014 American Community Survey), subtracting the number of persons living in group quarters (as reported in Table B26001 of the 2010–2014 American Community Survey), subtracting the number of vehicles available (as reported in Table B25046 of the 2010–2014 American Community Survey), and then dividing the difference by the population aged 15 and over.

⁴ Includes those residents who moved into their current residence in 1999 or earlier, as reported in Table DP04 of the 2010–2014 American Community Survey.

The demographic indicators in Table 3.12-24 and Table 3.12-25 correlate with a higher degree of community cohesion and are used to determine the relative degree of community cohesion present within each city/community in the population and community impacts RSAs.

In the analysis of demographic indicators of community cohesion, the Greater Cypress Park NCA in the city of Los Angeles exhibits the highest degree of community cohesion, because it shows higher measurements than those of Los Angeles County in all seven demographic categories. The Sun Valley, Glassell Park, Arroyo Seco, Elysian Valley Riverside, Lincoln Heights, and Boyle Heights NCAs all have four or more indicators that are higher than those of Los Angeles County and are therefore also considered highly cohesive communities.

Demographic indicators are not the only factors that suggest community cohesion. Within the city of Burbank, there are commercial areas at Burbank Boulevard and N Victory Place that are easily accessible by local residential areas, and it is likely these are community hubs that add some moderate degree of cohesion to this area. The city of Glendale may have a stronger degree of community cohesion where residential areas are close to parks and schools, such as near the Grandview Avenue/Cleveland Road intersection and along Pacific Avenue south of Colorado Street. Within the city of Los Angeles, several of the NCAs have residential areas that are linked to commercial areas and public facilities. The Atwater Village and Lincoln Heights NCAs, which do not show strong demographic indicators of cohesion, appear to demonstrate stronger community cohesion than the other NCAs in terms of the presence of residences, businesses, and important community facilities that are adjacent to each other or otherwise linked and mobility/access between these key areas.

3.12.5.12 Housing and Business Setting

Region

Table 3.12-26 provides 2010–2014 ACS data regarding the various types of housing stock, the housing vacancy rate, and the percentage of owner-occupied housing units in Los Angeles County. The predominant housing type in the county was single-family homes (detached and attached), which accounted for more than 56 percent of the total housing units. Multifamily housing units and mobile homes accounted for approximately 42 percent and approximately 2 percent of the housing stock, respectively, in Los Angeles County. The housing vacancy rate for the county as a whole was approximately 6 percent, and the percentage of owner-occupied units in the county was approximately 46 percent. Similar state data are not provided, as the drastic diversity and sheer number of housing stock across the state would not provide for meaningful comparison.

Table 3.12-26 Regional Housing Characteristics (2010–2014 American Community Survey)

Location	Total Housing Units	Single-Family Housing Units		Multifamily Housing Units		Mobile Homes	Occupied	Vacant	Percentage of Units Occupied by Owners
		Detached	Attached	2 to 4	5-Plus				
Los Angeles County	3,462,075	1,720,032 (49.7%)	226,435 (6.5%)	280,101 (8.1%)	1,180,554 (34.1%)	52,995 (1.5%)	3,242,391 (93.7%)	219,684 (6.3%)	46.4%

Source: U.S. Census Bureau, 2010–2014 American Community Survey

Table 3.12-27 summarizes the housing unit tenures in California and Los Angeles County. According to 2010–2014 ACS data, approximately 40 percent of the householders in the county moved into their housing units between 2000 and 2009. In contrast, approximately 4 percent of householders moved into their housing units prior to 1969. The tenure in Los Angeles County was higher than the state’s rate. In California, approximately 50 percent of householders in the state moved into their housing between 2000 and 2009 and approximately 2 percent moved into their housing units prior to 1969.

Table 3.12-27 Regional Housing Unit Tenure (2010–2014 American Community Survey)

Location	Moved in 2010 or later	Moved in 2000 to 2009	Moved in 1990 to 1999	Moved in 1980 to 1989	Moved in 1970 to 1979	Moved in 1969 or earlier
California	19.0%	50.1%	17.4%	7.2%	4.0%	2.3%
Los Angeles County	26.7%	39.5%	17.1%	7.7%	5.2%	3.7%

Source: U.S. Census Bureau, 2010–2014 American Community Survey

Table 3.12-28 provides recent foreclosure data for Los Angeles County. Higher foreclosure rates decrease levels of community cohesion and could affect property values as a whole. As of October 2019, the foreclosure rate in the county (1 in every 2,790 housing units) was similar to the overall rate for the state (1 in every 2,932 housing units).

Table 3.12-28 State and Regional Foreclosure Rates

Location	Foreclosure Rate (%)	Foreclosure Rate (per housing unit)
California	0.03	1 in every 2,932
Los Angeles County	0.04	1 in every 2,790

Source: RealtyTrac, 2019

There are approximately 2,400 businesses in the population and community impacts RSAs.

City

As shown in Table 3.12-29, the 2010–2014 ACS reports that the cities of Burbank (51.3 percent), Glendale (60.2 percent), and Los Angeles (54.5 percent) had a larger percentage of multifamily housing units than Los Angeles County (42.1 percent). The housing vacancy rate in the cities of Burbank (5.0 percent) and Glendale (5.2 percent) was lower than that of Los Angeles County (6.3 percent), while the housing vacancy rate in the city of Los Angeles (6.9 percent) was higher than that of the county. The percentage of owner-occupied units in the cities of Burbank (41.6 percent), Glendale (36.2 percent), and Los Angeles (37.2 percent) was lower than in the county (46.4 percent). As shown in Table 3.12-30, the cities of Burbank, Glendale, and Los Angeles had housing unit tenure rates that were similar to those of Los Angeles County overall.

Table 3.12-29 City Housing Characteristics (2010–2014 American Community Survey)

Location	Total Housing Units	Single-Family Housing Units		Multifamily Housing Units		Mobile Homes	Occupied	Vacant	Percentage of Units Occupied by Owners
		Detached	Attached	2 to 4	5-Plus				
City of Burbank	43,571	19,470 (44.7%)	1,642 (3.8%)	4,362 (10.0%)	17,998 (41.3%)	99 (0.2%)	41,414 (95.0%)	2,157 (5.0%)	41.6%
City of Glendale	75,033	26,995 (36.0%)	2,763 (3.7%)	6,557 (8.7%)	38,626 (51.5%)	79 (0.1%)	71,132 (94.8%)	3,901 (5.2%)	36.2%
City of Los Angeles	1,427,355	554,006 (38.8%)	86,296 (6.0%)	121,135 (8.5%)	656,837 (46.0%)	8,471 (0.6%)	1,329,372 (93.1%)	97,983 (6.9%)	37.2%

Source: U.S. Census Bureau, 2010–2014 American Community Survey

Note: Percentages may not total 100 percent due to rounding.

Table 3.12-30 City Housing Unit Tenure (2010–2014 American Community Survey)

Location	Moved in 2010 or later	Moved in 2000 to 2009	Moved in 1990 to 1999	Moved in 1980 to 1989	Moved in 1970 to 1979	Moved in 1969 or earlier
City of Burbank	28.5%	39.7%	17.9%	6.0%	4.5%	3.4%
City of Glendale	28.5%	41.2%	17.1%	7.0%	3.7%	2.5%
City of Los Angeles	29.7%	39.4%	16.3%	6.6%	4.6%	3.4%

Source: U.S. Census Bureau, 2010–2014 American Community Survey

Note: Percentages may not total 100 percent due to rounding.

As shown in Table 3.12-31, the foreclosure rates in the cities of Burbank (1 in every 2,325 housing units), Glendale (1 in every 5,305 housing units), and Los Angeles (1 in every 3,152 housing units) were all lower than the foreclosure rate in Los Angeles County (1 in every 2,790 housing units).

Table 3.12-31 City Foreclosure Rates

Location	Foreclosure Rate (%)	Foreclosure Rate (per housing unit)
City of Burbank	0.04	1 in every 2,325
City of Glendale	0.02	1 in every 5,305
City of Los Angeles	0.03	1 in every 3,152

Source: RealtyTrac, 2019

There are 200 to 250 businesses in the city of Burbank within 700 feet⁶ of the existing rail corridor, including a diverse mix of industrial, retail, entertainment and media sales, and service-oriented businesses. Within the city of Glendale, there are 900 to 1,000 businesses within 700 feet of the existing rail corridor, including fast-food and casual restaurants, grocery stores, retail shops, personal services, professional offices, and industrial and commercial businesses. There are 1,100 to 1,400 businesses within 700 feet of existing rail corridor in the city of Los Angeles. Due to the immense diversity and scale of the city of Los Angeles, business characteristics are discussed in greater detail at the neighborhood level in the following section.

Neighborhood

Table 3.12-32 provides data on housing stock for the NCAs within the population and community impacts RSAs. According to 2010–2014 ACS data, the Los Feliz, Silver Lake, Greater Echo Park Elysian, Historic Cultural, Lincoln Heights, Downtown Los Angeles, and Boyle Heights NCAs had a higher percentage of multifamily housing units than Los Angeles County. All of the NCAs except Sun Valley and Elysian Valley Riverside had a similar or higher housing vacancy rate compared to the county. All of the NCAs except Sun Valley and Greater Cypress Park had a lower percentage of owner-occupied units than the county. As shown in Table 3.12-33, over 60 percent of the population of all NCAs except for Elysian Valley Riverside moved to the neighborhood after 2000. Compared to Los Angeles County overall, where almost 70 percent of the population moved into the area after 2000, the Los Feliz, Greater Echo Park Elysian, Historic Cultural, Lincoln Heights, and Downtown Los Angeles NCAs had similar or higher percentages of the population that moved into the community after 2000. Foreclosure data are compiled at the city and ZIP code levels. Therefore, foreclosure rates at the NCA level are not available.

Table 3.12-32 Neighborhood Council Area Housing Characteristics (2010–2014 American Community Survey)

NCA	Total Housing Units	Single-Family Housing Units		Multifamily Housing Units		Mobile Homes	Occupied	Vacant	Percentage of Units Occupied by Owners
		Detached	Attached	2 to 4	5-Plus				
Sun Valley	13,655	8,077 (59.2%)	1,085 (7.9%)	644 (4.7%)	3,643 (26.7%)	147 (1.1%)	13,236 (96.9%)	419 (3.1%)	7,020 (53.0%)
Los Feliz	19,621	5,589 (28.5%)	560 (2.9%)	2,355 (12.0%)	11,079 (56.5%)	38 (0.2%)	18,103 (92.3%)	1,518 (7.7%)	4,962 (27.4%)
Atwater Village	5,825	3,076 (52.8%)	463 (7.9%)	1,065 (18.3%)	1,209 (20.8%)	12 (0.2%)	5,429 (93.2%)	396 (6.8%)	2,012 (37.1%)
Glassell Park	9,240	5,053 (54.7%)	535 (5.8%)	945 (10.2%)	2,700 (29.2%)	7 (0.1%)	8,686 (94.0%)	554 (6.0%)	3,638 (41.9%)
Silver Lake	18,568	7,070 (38.1%)	1,279 (6.9%)	3,937 (21.2%)	6,227 (33.5%)	29 (0.2%)	17,259 (93.0%)	1,309 (7.0%)	5,404 (31.3%)
Elysian Valley Riverside	2,099	1,432 (68.2%)	188 (9.0%)	367 (17.5%)	101 (4.8%)	11 (0.5%)	2,016 (96.0%)	83 (4.0%)	901 (44.7%)
Greater Echo Park Elysian	20,989	6,580 (31.3%)	1,322 (6.3%)	4,797 (22.9%)	8,226 (39.2%)	28 (0.1%)	19,652 (93.6%)	1,337 (6.4%)	4,449 (22.6%)

⁶ This 700-foot buffer represents the area in which the business environment could be affected by the HSR Build Alternative.

NCA	Total Housing Units	Single-Family Housing Units		Multifamily Housing Units		Mobile Homes	Occupied	Vacant	Percentage of Units Occupied by Owners
		Detached	Attached	2 to 4	5-Plus				
Greater Cypress Park	4,953	3,115 (62.9%)	513 (10.4%)	661 (13.3%)	634 (12.8%)	30 (0.6%)	4,597 (92.8%)	356 (7.2%)	2,186 (47.6%)
Historic Cultural	10,538	680 (6.5%)	387 (3.7%)	863 (8.2%)	8,591 (81.5%)	0 (0.0%)	9,389 (89.1%)	1,149 (10.9%)	1,540 (16.4%)
Lincoln Heights	8,474	3,209 (37.9%)	878 (10.4%)	1,334 (15.7%)	3,013 (35.6%)	40 (0.5%)	7,941 (93.7%)	533 (6.3%)	1,946 (24.5%)
Downtown Los Angeles	23,262	235 (1.0%)	152 (0.7%)	307 (1.3%)	22,552 (96.9%)	0 (0.0%)	19,826 (85.2%)	3,436 (14.8%)	2,076 (10.5%)
Boyle Heights	23,477	9,469 (40.3%)	3,278 (14.0%)	3,464 (14.8%)	7,164 (30.5%)	102 (0.4%)	21,937 (93.4%)	1,540 (6.6%)	5,129 (23.4%)

Source: U.S. Census Bureau, 2010–2014 American Community Survey

NCA = neighborhood council area

Table 3.12-33 Neighborhood Council Area Housing Unit Tenure (2010–2014 American Community Survey)

Neighborhood Council Area	Moved in 2010 or later	Moved in 2000 to 2009	Moved in 1990 to 1999	Moved in 1980 to 1989	Moved in 1970 to 1979	Moved in 1969 or earlier
Sun Valley	19.8%	37.7%	21.4%	11.1%	5.9%	4.1%
Los Feliz	33.0%	35.7%	18.7%	5.1%	4.7%	2.9%
Atwater Village	23.7%	37.9%	19.8%	9.3%	5.8%	3.5%
Glassell Park	21.9%	40.2%	19.6%	9.0%	6.1%	3.2%
Silver Lake	29.6%	36.9%	19.0%	6.7%	5.5%	2.3%
Elysian Valley Riverside	22.5%	28.2%	23.7%	10.3%	11.1%	4.2%
Greater Echo Park Elysian	30.1%	39.2%	17.4%	7.3%	4.3%	1.7%
Greater Cypress Park	20.8%	35.8%	18.5%	9.0%	9.1%	6.9%
Historic Cultural	37.0%	42.5%	12.6%	4.3%	2.5%	1.1%
Lincoln Heights	28.8%	39.4%	15.1%	7.5%	6.3%	2.9%
Downtown Los Angeles	49.0%	41.5%	6.3%	2.6%	0.4%	0.2%
Boyle Heights	22.4%	42.7%	18.0%	6.9%	5.7%	4.4%

Source: U.S. Census Bureau, 2010–2014 American Community Survey

Table 3.12-34 provides the approximate number of existing businesses within 0.5 mile of the existing rail corridor within each NCA and describes the types of businesses for each. These estimates are based on a review of recent aerial imagery and photographs taken at the street level.

Table 3.12-34 Neighborhood Council Area Existing Businesses

Neighborhood Council Area	Number of Businesses	Types of Businesses
Sun Valley	Approximately 25 to 50 businesses are within 0.5 mile of the existing rail corridor.	Businesses are predominantly industrial, with a mix of retail and auto-related businesses such as wholesale retailers, industrial complexes, and warehouses. Two small commercial areas include cafés and restaurants, retail shops, beauty salons and barber shops, thrift stores, and professional offices.
Los Feliz	The existing rail corridor is within 0.5 mile of the Los Feliz NCA's northwestern edge. The predominant land use in this area is open space, and no businesses within the Los Feliz NCA are within 0.5 mile of the existing rail corridor.	Not available
Atwater Village	Approximately 200 to 250 businesses are within 0.5 mile of the existing rail corridor.	Businesses are predominantly industrial on the north end of the Atwater Village NCA, with cafés and restaurants, retail shops, beauty salons and barber shops, thrift stores, and professional offices associated with two small commercial areas south of W Fernando Road.
Glassell Park	Approximately 150 to 200 businesses are within 0.5 mile of the existing rail corridor.	Businesses are predominantly industrial, with a mix of retail and service-oriented businesses, including wholesale retailers, auto body centers, used car lots, fast-food and fast-casual dining, grocery stores, and self-storage facilities.
Arroyo Seco	The existing rail corridor is greater than 0.5 mile away from the Arroyo Seco NCA's southwestern edge. Therefore, no businesses within the Arroyo Seco NCA are located near the existing rail corridor.	Not available
Silver Lake	The existing rail corridor is more than 0.5 mile from the Silver Lake NCA's northeastern edge. No businesses within the Silver Lake NCA are located within 0.5 mile of the existing rail corridor.	Not available
Elysian Valley Riverside	Approximately 50 to 100 businesses are within 0.5 mile of the existing rail corridor.	Businesses include manufacturing centers, distribution centers, and self-storage facilities.
Greater Echo Park Elysian	Approximately 5 to 10 businesses are within 0.5 mile of the existing rail corridor, because the predominant land use in the Greater Echo Park Elysian NCA is open space associated with the Chavez Ravine and Dodger Stadium.	Businesses include a theatre company, professional offices, and businesses associated with Dodger Stadium.

Neighborhood Council Area	Number of Businesses	Types of Businesses
Greater Cypress Park	Approximately 150 to 200 businesses are within 0.5 mile of the existing rail corridor.	Businesses include distribution centers, stone and metal fabricators, manufacturing centers, used car lots, and automotive repair services. There is also a predominantly commercial area with fast-food and casual restaurants, grocery stores, gas stations, retail shops, beauty salons and barber shops, and tattoo studios.
Historic Cultural	Approximately 350 to 400 businesses are within 0.5 mile of the existing rail corridor.	Many of the businesses are situated in Chinatown, a vibrant commercial center, and the Plaza District, a cultural center known for its historic buildings and monuments, as well as a small industrial area. The existing businesses include retail shops, restaurants, bakeries, markets, hotels and motels, personal services, professional services, and offices.
Lincoln Heights	Approximately 200 to 250 businesses are within 0.5 mile of the existing rail corridor.	These businesses are positioned on the western side of the Lincoln Heights NCA and include distribution centers, manufacturing centers, storage yards, towing yards, automotive repair services, and some professional offices. Businesses associated with a small commercial area include restaurants, markets, gas stations, retail shops, beauty salons and barber shops, and tattoo studios.
Downtown Los Angeles	No businesses within the Downtown Los Angeles NCA are located within 0.5 mile of the existing rail corridor.	Not available
Boyle Heights	Approximately 200 to 250 businesses are within 0.5 mile of the existing rail corridor.	These businesses are positioned on the western side of the Boyle Heights NCA and include distribution centers, manufacturing centers, storage yards, towing yards, automotive repair services, and some professional offices.

NCA = neighborhood council area

3.12.5.13 Public Services and Facilities

Region

Public buildings; public safety, fire, and police stations; medical services; schools, places of worship; and parks are important to communities. In addition to the amenities that give the various communities in Los Angeles County their unique sense of place, some amenities may be viewed as more regional in nature.

Los Angeles County is one of oldest and largest counties in California; it provides numerous public services, including law enforcement, tax collection, public health protection, public social services, elections, and flood control. The county owns 178 local, community, and regional parks; wildlife sanctuaries; golf courses; lakes; gardens; nature centers; and cultural venues, including the John Anson Ford Amphitheatre and the world-famous Hollywood Bowl. There are also numerous state-operated public services and facilities (e.g., university campuses and medical facilities) in Los Angeles County. In addition, Los Angeles International Airport is a commerce leader in the county and is designated as a world-class airport for its convenient location, modern facilities, and superior sea/air/land connections.

There are key public services and community facilities within Los Angeles County, including:

- Emergency facilities (fire stations, police stations, and correctional facilities)
- Educational facilities (early childhood centers, public and private schools, and adult education facilities)
- Medical facilities (hospitals and facilities for seniors)
- Libraries
- Museums
- Parks and recreational facilities
- Postal facilities
- Homeless shelters
- Places of worship
- Generally accessible public facilities

A map of all of the public services and facilities within the population and community indirect impacts RSA, along with a table outlining all of the public and community facilities within the RSA, is provided in the *Community Impact Assessment (Authority 2019a)*.

Los Angeles County is home to several dozen utility providers, both nationwide and local. This section focuses on the major utility providers that generally have larger service areas, encompassing Los Angeles County and beyond. Table 3.12-35 lists the major utility providers within the population and community impacts RSAs, the type of service they provide, and their approximate service areas.

Table 3.12-35 Utility Providers within the Population and Community Impacts Resource Study Areas

Utility Type	Provider	County/City
Electrical	Southern California Edison	Cities of Burbank, Glendale, and Los Angeles
	Glendale Water and Power	City of Glendale
	Los Angeles Department of Water and Power	City of Los Angeles
Natural Gas	Southern California Gas	Cities of Burbank, Glendale, and Los Angeles
Petroleum and Fuel Pipelines	Pacific Pipeline	Cities of Burbank, Glendale, and Los Angeles
	Kinder Morgan	
Communications	AT&T, MCI, Verizon, Qwest, MFS, Sprint, Metro	Cities of Burbank, Glendale, and Los Angeles
Water Supply	Burbank Water and Power	City of Burbank
	Glendale Water and Power	City of Glendale
	Los Angeles Department of Water and Power	City of Los Angeles
	Metropolitan Water District of Southern California	Cities of Burbank, Glendale, and Los Angeles
	State Water Project	Cities of Burbank and Glendale
Sewer/Wastewater	City of Burbank Public Works	City of Burbank
	City of Glendale Public Works	City of Glendale
	City of Los Angeles Department of Public Works	City of Los Angeles

Utility Type	Provider	County/City
Solid Waste Collection	Burbank Landfill Site No. 3	City of Burbank
	Scholl Canyon Landfill (Sanitation Districts of Los Angeles County)	City of Glendale
	Chiquita Canyon Sanitary Landfill	City of Los Angeles
	Calabasas Landfill	
	Sunshine Canyon Landfill	

City

The city of Burbank is approximately 13 miles northwest of downtown Los Angeles and approximately 8 miles northeast of Hollywood. Aviation and entertainment businesses moved to the city of Burbank in the mid-1920s due to the proximity to Hollywood and the available space. The city is home to the headquarters of numerous media and entertainment companies. The city of Burbank is also home to Hollywood Burbank Airport; the airport serves the Los Angeles area, including the cities of Glendale and Pasadena, and the San Fernando Valley. The airport is the only airport in the greater Los Angeles area with a direct rail connection to downtown Los Angeles.

Forty public services and facilities are located within the population and community indirect impacts RSA in the city of Burbank. A single public high school—Burbank Unified School District Community Day School—is located within the population and community indirect impacts RSA. Additionally, two elementary-level private charter schools are in this RSA: Little Angels Academy Burbank Inc. and Scholars Preparatory School.

Burbank Water and Power is the city-owned public utility providing water and electric services to Burbank businesses and residents, as well as fiber-optic communication services to Burbank businesses. The City of Burbank Street and Solid Waste Division also provides solid waste services and street sweeping to residents and some businesses within the city of Burbank. The nearby Puente Hills Landfill, operated by the Sanitation Districts of Los Angeles County, served the City of Burbank until the landfill's closure in 2013.

The city of Glendale is the fourth-largest city in Los Angeles County and is located at the center of the county. The city of Glendale is also one of Southern California's leading office markets, featuring a wide range of properties and amenities. The city has over 6 million square feet of office space and is home to such recognized firms as Walt Disney Imagineering, Nestlé USA, International House of Pancakes/Applebee's, DreamWorks, LegalZoom, and Public Storage.

Thirty public facilities have been identified within the population and community indirect impacts RSA in the city of Glendale. These facilities include schools, parks and park facilities, places of worship, general public facilities (such as transportation centers), a public library, a hospital, and a homeless shelter.

There are seven schools in the city of Glendale within the population and community indirect impacts RSA, including one public high school (College View of Glendale) and five public elementary schools (Benjamin Franklin Elementary School, Cerritos Elementary School, Mark Keppel Elementary School, Thomas Edison Elementary School, and Thomas Jefferson Elementary School).

Glendale Water and Power is the municipal utility providing water and electric services to the city of Glendale, serving over 33,000 water and 85,000 electric customers (City of Glendale no date-a). The agency is owned by the City of Glendale and governed by the Glendale City Council. The City of Glendale also provides integrated waste management services through a division of its Public Works Department as the exclusive provider for single-family residences in the city of Glendale, as well as street sweeping and other related services (City of Glendale no date).

The City of Glendale is served by Scholl Canyon Landfill, which is within the Glendale city limits and operated by the Sanitation Districts of Los Angeles County. The cities of Glendale and Los

Angeles co-own the Los Angeles-Glendale Water Reclamation Plant, which is operated by the Los Angeles (city) Sanitation Bureau.

The city of Los Angeles is the largest city in Los Angeles County and in California. The city of Los Angeles serves as one of the main cultural, economic, and service hubs in Los Angeles County. The City of Los Angeles also offers a wide array of amenities compared with the smaller cities and communities in Los Angeles County. These amenities include a convention center, art and cultural facilities, art museums, a natural history museum, theaters and music venues, a downtown historic district, sports venues, parks and recreation resources, universities and colleges, libraries, community centers, public safety facilities, hospitals and medical facilities, and religious facilities. The city has its own professional baseball, basketball, soccer, football, and hockey teams. The city of Los Angeles is home to Los Angeles Memorial Sports Arena and Los Angeles Memorial Coliseum. The City of Los Angeles maintains 7 public golf courses and 444 park sites offering a variety of recreation resources, as well as miles of biking and hiking trails.

The city of Los Angeles is home to several major university campuses, including the University of Southern California; the University of California, Los Angeles; California State University, Los Angeles; and California State University, Dominguez Hills.

Community facilities within the city of Los Angeles and within the population and community indirect impacts RSA that do not fall within one of the NCAs discussed below include seven schools (including Los Angeles Unified School District, private, and charter schools), several homeless shelters and facilities, four parks or recreational centers, one hospital (White Memorial Medical Center), and six places of worship.

The Los Angeles Department of Water and Power is the largest municipal water and power utility in the United States and is over 100 years old. It provides water and electric power services to 681,000 water customers and 1.4 million electric customers, and is governed by the Board of Water and Power Commissioners.

City of Los Angeles Sanitation serves the city of Los Angeles and surrounding communities (over 4 million residents) by collecting, cleaning, and recycling solid and liquid waste via the planning and administration of the Solid Resources Program, Clean Water Program, and Watershed Protection Program. The cities of Glendale and Los Angeles co-own the Los Angeles-Glendale Water Reclamation Plant, which is operated by City of Los Angeles Sanitation (Sanitation Districts of Los Angeles County no date).

Figure 3.12-A-1 in Appendix 3.12-A shows community facilities within the population and community indirect impacts RSA, including the cities of Burbank, Glendale, and Los Angeles.

Because utilities are not provided on a neighborhood level, no discussion of utility providers for each NCA is provided here.

Neighborhood

Sun Valley is a neighborhood in the San Fernando Valley region of the city of Los Angeles. There are three recreation centers in Sun Valley (Sun Valley Recreation Center, Stonehurst Recreation Center, and Sunland Recreation Center), one of which is a historic site: the Stonehurst Recreational Center Building. Additionally, the neighborhood has 13 public schools operated by Los Angeles Unified School District (including 2 public high schools), as well as 4 privately operated schools. One school (Glenwood Elementary School) and one recreational facility (De Garmo Park) are within the population and community indirect impacts RSA.

The Los Feliz NCA is divided into five districts: Los Feliz Hills, Laughlin Park, Los Feliz Village, The Knolls and Waverly Heights, and Franklin Hills. Many unique and widely recognized landmarks are within the Los Feliz NCA, such as the Los Angeles Zoo, Griffith Observatory Park, and the Hollywood sign. Community facilities within the population and community indirect impacts RSA that fall within this Los Feliz NCA include Griffith Park and the Griffith Recreation Center.

Community facilities within Atwater Village include three schools, two parks (North Atwater Park and Juntos Family Park), one public facility (Chevy Chase Park and Recreation Center), a library (Los Angeles Public Library – Atwater Village Branch), and a post office. Los Angeles Unified School District operates the Atwater Avenue and Glenfeliz Boulevard Elementary School; additionally, Holy Trinity Elementary School is a privately operated school in the Atwater Village NCA. Glenhurst Park and Chevy Chase Park and Recreation Center (a public facility) are within the Atwater Village NCA. The Atwater Village Branch of the Los Angeles Public Library System and the Griffith Station Post Office are also community facilities within the Atwater Village NCA.

The Arroyo Seco NCA encompasses several smaller community districts, including Hermon, Montecito Heights, Monterey Hills, Mount Washington, and Sycamore Grove. There are several parks and recreation facilities within the Arroyo Seco NCA. Also, Los Angeles Unified School District operates three schools within the NCA, including a junior high school and a magnet school. However, there are no community facilities within the Arroyo Seco NCA that fall within the population and community indirect impacts RSA.

Development of the Glassell Park NCA began in the early 20th century. Community facilities within the Glassell Park NCA include a fire station, a recreation center and park, and 10 publicly and privately administered schools. Additionally, there are several places of worship within the Glassell Park NCA, including Chinese Baptist and Roman Catholic congregations.

The Silver Lake NCA has always had a reputation for being home to artists, musicians, writers, and creative people. The Silver Lake NCA has been unique in its acceptance of a racially and ideologically diverse as well as politically progressive population. There are no community facilities within the Silver Lake NCA that fall within the population and community indirect impacts RSA.

The Elysian Valley Riverside NCA is bounded to the east by the Los Angeles River and consists mostly of residential and commercial uses. Community facilities within the Elysian Valley Riverside NCA include Dorris Place Elementary School, a Los Angeles Unified School District campus, and the Elysian Valley Recreation Center.

The Greater Echo Park Elysian NCA encompasses Elysian Park and its attendant public facilities. Dodger Stadium, a private organization but a large, publicly accessible facility, falls within the Greater Echo Park Elysian NCA. There is a police/sheriff station within the population and community indirect impacts RSA in the Greater Echo Park Elysian NCA.

The Greater Cypress Park NCA consists mostly of residential uses and includes Rio de Los Angeles State Park as well as other recreational facilities. Community facilities within the Greater Cypress Park NCA include a fire station, a library, a police/sheriff station, four publicly and privately administered schools, and places of worship, including Roman Catholic congregations.

The Historic Cultural NCA consists of six historic communities—the Arts District, Chinatown, El Pueblo, Little Tokyo, Solano Canyon, and Victor Heights—around the original center of the city of Los Angeles. The Historic Cultural NCA has several public facilities, but those falling within the population and community indirect impacts RSA include six publicly and privately administered schools, several museums, three medical facilities, two parks, two police/sheriff stations, and one fire station. There are several places of worship, including Christian and Buddhist congregations. There are three postal facilities, as well as Los Angeles Union Station (LAUS).

The Lincoln Heights NCA is a diverse community offering recreational and athletic facilities to its residents. The Lincoln Heights NCA encompasses several public facilities. Public facilities within the indirect impacts RSA include nine publicly and privately administered schools, one park and one fire station, as well as several places of worship, including Buddhist and Christian congregations.

The Downtown Los Angeles NCA is the civic, cultural, and commercial heart of the city of Los Angeles. The Downtown Los Angeles NCA offers a wide array of amenities, including Walt Disney Concert Hall and Music Center, LA Live, the Southern California Institute of Architecture, and City Market. Community facilities in the Downtown Los Angeles NCA include fire stations, police stations, a library, schools, and parks. Within the population and community indirect impacts RSA, there are several public facilities, including Los Angeles City Hall, the Kenneth Hahn Hall of

Administration, the Hall of Records, the U.S. District Court Complex, and the Los Angeles County Superior Court Complex. Additionally, the City Hall Park Center is a public facility with accessible park areas. The Pacific Ohana Academy, a privately operated school; the Los Angeles Public Library-Little Tokyo Branch; and the Los Angeles Police Department Headquarters are also within the Downtown Los Angeles NCA.

Only a small portion (a small part of the northwestern portion of the NCA) of the Boyle Heights NCA overlaps with the population and community impacts RSA. Within the portion of the Boyle Heights NCA that is within the RSA, Bridge Street Elementary School is located at 605 N Boyle Avenue. There are no other noteworthy community facilities within the Boyle Heights NCA that are also within the RSA.

Figure 3.12-A-1 in Appendix 3.12-A shows community facilities within the population and community indirect impacts RSA, including the NCAs described above.

3.12.5.14 Nonmotorized Circulation and Access

Circulation and access in a community are important to the community’s character, cohesion, and quality of life. Table 3.12-36 provides the mileage of existing and proposed bikeways within the direct population and community impacts RSA. The numbers in the table represent the total planned and existing miles of each bikeway type (Class I, II, III, or IV) for the cities of Burbank, Glendale, and Los Angeles.

Table 3.12-36 Proposed and Existing Bikeways within the Direct Resource Study Area

City	Proposed Bikeways (miles)				Existing Bikeways (miles)		
	Class I ¹	Class II ²	Class III ³	Class IV ⁴	Class I ¹	Class II ²	Class III ³
Burbank	3.6	1.8	0	0	0.7	5.0	3.3
Glendale	5.3	6.2	12.6	0	0.4	6.1	4.0
Los Angeles	1.7	0	N/A	7.1	4.5	6.4	4.3
Total	10.7	8.0	12.6	7.1	5.5	17.5	11.6

Sources: City of Glendale, 2015; Los Angeles County Metropolitan Transportation Authority, 2012, 2015; City of Burbank, 2016

¹ Class I bikeways, also known as bike paths, provide a separate right-of-way for the exclusive use of bicycles and pedestrians, with minimal motorized cross-traffic.

² Class II bikeways, also known as bike lanes, provide a one-way striped lane for bike travel on a street or highway.

³ Class III bikeways, also known as bike routes, provide for shared use with pedestrian or motor vehicle traffic.

⁴ Class IV bikeways, also known as separated bikeways, cycle tracks, or protected bike lanes, are physically separated from motor vehicle traffic by a vertical feature such as a grade separation, flexible posts, inflexible barriers, or on-street parking.

Data may appear to not add up correctly due to rounding. The total bikeway miles are calculated using unrounded data.

The cities’ planning documents recognize the importance of the availability and accessibility of alternative modes of transportation, and they plan for additional pedestrian- and bicycle-friendly features in the future. Bicycle master plans for the cities of Los Angeles, Glendale, and Burbank emphasize the importance of encouraging bicycle use in communities because it creates more livable street environments, promotes active lifestyles, and acts as an environmentally sustainable form of transportation. Additionally, all three cities have adopted mobility plans that outline the future focus on creating “complete streets,” which emphasize integration among pedestrians, bicycles, and motor vehicles. A “complete street” is a transportation facility that is planned, designed, operated, and maintained to provide safe mobility for all users, including bicyclists, pedestrians, transit vehicles, truckers, and motorists, appropriate to the function and context of the facility (California Department of Transportation 2014). This is imperative in a densely populated, urban environment, where there may be limited space for separate facilities.

Critical pedestrian or bicycle paths are those where disruption could lead to a loss of community access, cohesion, or character. No critical pedestrian or bicycle paths were identified within the population and community impacts RSAs. The Burbank Airport Station would be pedestrian-accessible from most directions at the northern terminus of the HSR Build Alternative. The

primary pedestrian access for the Burbank Airport Station would be along N San Fernando Boulevard, N Hollywood Way, W Empire Avenue, and Sherman Way. LAUS would also be pedestrian-accessible from most directions at the southern terminus of the Burbank to Los Angeles Project Section. The primarily accessed pedestrian corridors for approaching the existing LAUS are along Alameda Street, Cesar Chavez Avenue, and Vignes Street. Patrons approaching LAUS from the north can use Alameda Street or Vignes Street to access the station. Patrons approaching LAUS from the south can use Alameda Street, Los Angeles Street, or Ramirez Street. Sidewalks are provided along both sides of these streets, but bike lanes are not provided along Alameda Street, Cesar Chavez Avenue, Vignes Street, or Ramirez Street. Access along other north-south streets is less convenient because of U.S. Route 101, south of LAUS. The only trail that falls within the RSAs is the Los Angeles River Trail, which is owned and operated by the Los Angeles County Department of Parks and Recreation.

3.12.5.15 Local Economy

Employment

Region

Table 3.12-37 presents the number of employed and unemployed persons in Los Angeles County and the cities within the population and community impacts RSAs, as well as the unemployment rate, according to preliminary data issued by the California Employment Development Department for November 2017. Major employers in Los Angeles County include Los Angeles County, Los Angeles Unified School District, the City of Los Angeles (including the Department of Water and Power), and the University of California, Los Angeles. The region's unemployment rate is 4.1 percent, which is similar to that of California (4.0 percent).

Table 3.12-37 State and Regional Unemployment (November 2017)

Location	Total Labor Force	No. of Employed	No. of Unemployed	Unemployment Rate (%)
California	19,344,400	18,568,900	775,500	4.0
Los Angeles County	5,152,800	4,940,200	212,600	4.1

Source: State of California Employment Development Department, 2017

Data may appear to not add up correctly due to rounding. The unemployment rate is calculated using unrounded data. The California Employment Development Department does not provide labor market data at the neighborhood level.

No. = number

As shown in Table 3.12-38, the Educational Services, and Health Care and Social Assistance sector is Los Angeles County's largest in terms of employment (20.7 percent), followed by Professional and Business Services (12.3 percent).

City

Rates of unemployment in the cities within the population and community impacts RSAs as of November 2017 are provided in Table 3.12-39. City employment by industry is provided in Table 3.12-40. The unemployment rate in the city of Burbank (3.4 percent) was lower than that of Los Angeles County (4.1 percent), and the unemployment rate in the city of Glendale (4.0 percent) was similar to that of the county. The city of Los Angeles' unemployment rate in November 2017 (4.4 percent) was higher than that of Los Angeles County (4.1 percent) and the state (4.0 percent).

Educational Services, and Health Care and Social Assistance is the largest industry sector in terms of employment in the cities of Burbank (20.5 percent), Glendale (23.6 percent), and Los Angeles (19.7 percent). The Information sector was the second-largest in the city of Burbank (13.8 percent), and the Professional and Business Services sector was the second-largest in the cities of Glendale (12.6 percent) and Los Angeles (13.8 percent).

Major employers in Burbank include Warner Bros. Entertainment, Inc., The Walt Disney Company, Providence Saint Joseph Medical Center, and Hollywood Burbank Airport. Major

employers in Glendale include The Walt Disney Company, DreamWorks Studios, and Glendale Memorial Hospital and Health Center. Major employers in the city of Los Angeles include the Los Angeles County, Los Angeles Unified School District, the City of Los Angeles (including the Department of Water and Power), and the University of California, Los Angeles.

Table 3.12-38 by Industry (2010–2014 American Community Survey)

Industry	Los Angeles County
Agriculture	23,848 (0.5%)
Construction	256,082 (5.6%)
Educational Services, and Health Care and Social Assistance	943,128 (20.7%)
Financial Activities	286,493 (6.3%)
Information	198,576 (4.4%)
Leisure and Hospitality	478,191 (10.5%)
Manufacturing	478,309 (10.5%)
Other Services	284,924 (6.3%)
Professional and Business Services	560,301 (12.3%)
Public Administration	149,135 (3.3%)
Retail Trade	487,221 (10.7%)
Transportation, Warehousing, and Utilities	238,160 (5.2%)
Wholesale Trade	164,278 (3.6%)
Total	4,548,646

Source: U.S. Census Bureau, 2010–2014 American Community Survey, Table DP03

Table 3.12-39 City Unemployment (November 2017)

Location	Total Labor Force	No. of Employed	No. of Unemployed	Unemployment Rate (%)
City of Burbank	59,400	57,500	2,000	3.4
City of Glendale	104,000	99,800	4,100	4.0
City of Los Angeles	2,075,900	1,985,000	90,800	4.4

Source: State of California Employment Development Department, 2017

Data may appear to not add up correctly due to rounding. The unemployment rate is calculated using unrounded data. The California Employment Development Department does not provide labor market data at the neighborhood level.

No. = number

Table 3.12-40 City Employment by Industry (2010–2014 American Community Survey)

Industry	City of Burbank	City of Glendale	City of Los Angeles
Agriculture	65 (0.1%)	166 (0.2%)	9,318 (0.5%)
Construction	1,710 (3.2%)	4,343 (4.8%)	109,370 (6.0%)
Educational Services, and Health Care and Social Assistance	10,952 (20.5%)	21,416 (23.6%)	358,042 (19.7%)
Financial Activities	3,973 (7.4%)	6,927 (7.6%)	115,032 (6.3%)
Information	7,407 (13.8%)	5,205 (5.7%)	105,732 (5.8%)
Leisure and Hospitality	5,684 (10.6%)	8,136 (9.0%)	221,904 (12.2%)
Manufacturing	4,190 (7.8%)	6,867 (7.6%)	162,006 (8.9%)
Other Services	3,016 (5.6%)	5,837 (6.4%)	131,106 (7.2%)
Professional and Business Services ¹	6,848 (12.8%)	11,451 (12.6%)	250,345 (13.8%)
Public Administration	1,633 (3.1%)	3,154 (3.5%)	42,130 (2.3%)
Retail Trade	5,040 (9.4%)	10,349 (11.4%)	189,844 (10.4%)
Transportation, Warehousing, and Utilities	1,968 (3.7%)	4,176 (4.6%)	73,389 (4.0%)
Wholesale Trade	1,040 (1.9%)	2,625 (2.9%)	52,362 (2.9%)
Total	53,526	90,652	1,820,580

Source: U.S. Census Bureau, 2010–2014 American Community Survey

¹ This category refers to the professional, scientific, and management, and administrative and waste management services

Neighborhood

As economic and employment conditions are better understood on a broader level, and employment data are not available at the NCA level, no further discussion is provided here.

Fiscal Conditions

Table 3.12-41 presents the total revenues collected by Los Angeles County and each of the cities in the indirect impacts RSA for population and community impacts in FY 2014–2015, including a breakout of the property and sales tax revenues collected by the county and those cities. Los Angeles County had total revenues of over \$22 billion; the City of Los Angeles had total revenues of over \$14 billion.

Table 3.12-41 Local Government Revenues in the Burbank to Los Angeles Project Section (Fiscal Year 2014–2015)

Jurisdiction	Property Tax Revenue	Sales Tax Revenue	Total Revenue
City of Burbank ¹	\$32,936,000	\$31,657,000	\$494,329,000
City of Glendale ²	\$50,883,000	\$36,330,000	\$599,075,000
City of Los Angeles ³	\$1,782,124,000	\$541,844,000	\$14,183,222,000
Los Angeles County ⁴	\$5,553,336,000	\$99,690,000	\$22,019,523,000

Sources: City of Burbank, 2016; City of Glendale, 2015; City of Los Angeles, 2016; County of Los Angeles, 2016

School District Funding

Funding for California's K–12 public schools 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 school district has its own particular combination of federal, state, and local sources. The amount depends on the average daily attendance of students at district schools during the year, the general-purpose money the district receives for each student, and the support for specific programs for which it qualifies (typically referred to as categorical aid) (EdSource 2009). While it typically represents a smaller share of school district funding in comparison to other funding sources, property tax revenue plays an important role in the school district funding picture.

The RSAs for population and community impacts include portions of three school districts that provide school services from kindergarten through high school: Burbank Unified School District, Glendale Unified School District, and Los Angeles Unified School District. Table 3.12-42 lists the school districts, cities served by those school districts, the average daily attendance during the 2014–2015 school year, and the total revenue received by each school district during FY 2014–2015, with a breakout of the revenues derived from property tax and average daily attendance funding sources.

Table 3.12-42 School Districts in the Burbank to Los Angeles Project Section (Fiscal Year 2014–2015)

School District	City within School District	Average Daily Attendance	Average Daily Attendance-Based Revenue	Total Property Tax Revenue	Total Revenue ¹
Burbank Unified School District	Burbank	14,745	\$54,408,050	\$35,141,155	\$130,012,530
Glendale Unified School District	Glendale	25,155	\$90,856,578	\$55,959,763	\$241,689,737
Los Angeles Unified School District	Los Angeles	516,451	\$3,136,074,287	\$872,519,096	\$6,420,068,851

Source: California Department of Education, 2015

¹ Total revenues include those derived from Local Control Funding Formula sources, as well as federal, other state, and other local revenues, in addition to the amounts included under the Average Daily Attendance-Based Revenue and Total Property Tax Revenue columns.

3.12.6 Environmental Consequences

3.12.6.1 Overview

This section evaluates how the No Project Alternative and the HSR Build Alternative could affect socioeconomics and communities. The impacts of the HSR Build Alternative are described and organized as follows:

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 Existing Communities from Construction
- Impact SOCIO #3: Permanent Displacement and Relocation of Local Residents from Construction
- Impact SOCIO #4: Permanent Displacement and Relocation of Local Businesses from Construction
- Impact SOCIO #5: Permanent Displacement and Relocation of Sensitive Populations during Construction
- Impact SOCIO #6: Permanent Displacement and Relocation of Community Facilities from Construction
- Impact SOCIO #7: Temporary Disruption to Community Facilities from Construction
- Impact SOCIO #8: Temporary Construction Employment Resulting in the Need for Additional Community Facilities
- Impact SOCIO #9: Permanent Disruption to Community Facilities from Construction
- Impact SOCIO #10: Temporary Sales Tax Revenue Gains from Construction
- Impact SOCIO #11: Permanent Property and Sales Tax Revenue Losses from Construction
- Impact SOCIO #12: Permanent Changes in School District Funding from Construction
- Impact SOCIO #13: Potential for Permanent Physical Deterioration from Construction
- Impact SOCIO #14: Temporary Impacts on Children's Health and Safety from Construction

Operations Impacts

- Impact SOCIO #15: Permanent Disruption to Community Cohesion or Division of Existing Communities from Operation
- Impact SOCIO #16: Permanent Employment from Operation Resulting in the Need for Additional Community Facilities
- Impact SOCIO #17: Permanent Property and Sales Tax Revenue Losses from Operation
- Impact SOCIO #18: Permanent Impacts on Children's Health and Safety from Operation

3.12.6.2 No Project Alternative

Under the No Project Alternative, recent development trends within the Burbank to Los Angeles Project Section are anticipated to continue, leading to ongoing socioeconomic and community impacts. The No Project Alternative represents the condition of the Burbank to Los Angeles Project Section as it existed in 2015 and as it would exist without the HSR system at the horizon year (2040). Under the No Project Alternative, the existing rail corridor would continue to be a division between some communities adjacent to the rail corridor. The job creation, other beneficial economic activity, and improvements to community connectivity in new grade-separated areas

that would occur under the HSR Build Alternative would likely not occur under the No Project Alternative.

Under the No Project Alternative, the *2016–2040 Regional Transportation Plan/Sustainable Communities Strategy* adopted by the Southern California Association of Governments (2016a) would encourage both compact development and greater investment in local transit modes as a means of reducing greenhouse gas emissions. These plans include provisions to reduce these emissions and are considered by cities and counties during planning and zoning deliberations in order to comply with the CEQA requirement to mitigate the impacts of planning and zoning decisions on greenhouse gas emissions.

The No Project Alternative assumes that all currently known programmed and funded improvements to the intercity transportation system (highway, Amtrak, and regional rail) and reasonably foreseeable local land development projects with funding sources identified would be developed by 2040. The No Project Alternative includes many planned projects that would likely be implemented by the year 2040. Chapter 2, Alternatives, describes the No Project Alternative in depth. Appendix 3.19-A, Cumulative Projects, provides foreseeable future development projects in the Burbank to Los Angeles Project Section that could affect socioeconomics and communities, including transportation changes like the Los Angeles County Metropolitan Transportation Authority Red Line Extension from the community of North Hollywood to Hollywood Burbank Airport. These foreseeable future development projects include bikeways, freeway widenings, small and large residential and mixed-use developments, a private school, a commercial facility, and transportation projects. The No Project Alternative could result in other transportation improvement projects (e.g., road widening or construction of new roadways) that may be implemented in the future to meet growing regional transportation needs.

These projects could result in impacts on communities and neighborhoods (including displacements and relocations), environmental justice populations (e.g., minority and low-income populations), and local and regional economies (e.g., school district funding and county and city property and sales tax revenues). All projects requiring discretionary action under the No Project Alternative would be subject to environmental review through which impacts associated with these projects would be addressed.

3.12.6.3 High-Speed Rail Build Alternative

Construction Impacts

Construction of the HSR Build Alternative would involve demolition of existing structures, clearing, and grubbing; reduction of permeable surface area; handling, storing, hauling, excavating, and placing fill; possible pile driving; and construction of aerial structures, bridges, road modifications, utility upgrades and relocations, HSR electrical systems, and railbeds. Construction activities are further described in Chapter 2, Alternatives.

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

Creation of Physical Barriers or Isolation of Communities

Construction activities would generally occur along the existing rail right-of-way, adjacent to residential, commercial, and industrial uses. Construction would result in new track from the Burbank Airport Station to the existing railroad tracks near Vanowen Street and Buena Vista Street where the HSR Build Alternative deviates from the existing railroad corridor. The tunnel would be built using the sequential excavation method, which minimizes surface disruption during construction. Surface disruption would be limited to the tunnel entry and exit points, which would be located outside of the runway safety area, and there would be no disruptions to airport operations. More details on the construction methods are provided in Section 2.9.5, Major Construction Activities. South of the Burbank Airport Station, across Hollywood Way, to where the tunnel would join the existing railroad right-of-way, there would be cut-and-cover and trench segments. These would not occur entirely within the existing railroad right-of-way and would introduce a new physical barrier.

Parking Loss

Construction of the HSR Build Alternative would result in temporary on-street parking loss at the HSR grade separation and roadway improvement locations. The temporary on-street parking loss associated with construction of the HSR Build Alternative would represent a short-term disruptive impact on the surrounding communities.

Increased Noise

Indirect construction impacts would also include temporary increases in noise, which can cause annoyance and disruption to communities and affect community character. Noise impacts on residential properties during construction would be greater during any required nighttime construction due to the generally quieter environment associated with nighttime hours and the extra sensitivity of residents to noise when many people are trying to sleep. Noise impacts on commercial properties would be greater in the day during business operating hours. Overall, construction noise impacts on both residential and commercial properties would vary depending on the distance of the sensitive receptor to the construction activities, as discussed in Section 3.4.6.3, Noise and Vibration.

Increased Traffic

Road and lane closures and detours during construction can increase traffic congestion, limit access to neighborhoods and businesses, and disrupt communities. Construction crew vehicles and construction equipment operation on the local roadways would also increase traffic. Traffic delays from construction of the HSR Build Alternative could result in increased response times for emergency responders, including law enforcement, fire, and emergency services.

While increased traffic would occur throughout the entire RSA during construction, most of the impacts would occur in the city of Burbank, where most of the street closures and detours are proposed. Figure 3.12-5 shows the locations of street closures in Burbank. Closures and detours in Burbank would take place at the following locations:

- Hollywood Way—The construction of the cut-and-cover tunnel alignment would require Hollywood Way to be partially closed, with one lane in each direction open.
- Empire Avenue—Proposed cut-and-cover and extended Lockheed channel structure may require closures along Empire Avenue. One lane in each direction would be maintained during construction, if possible. However, potential full closure of the roadway may be required during construction. Vehicles would be detoured to Buena Vista Street to the east and Clybourn to the West.
- Vanowen Street—The shoofly track would be constructed partially within the existing rail right-of-way; however, most of the shoofly track would be built within Vanowen Street to the south. The shoofly would temporarily reduce the width of Vanowen Street to one lane in each direction. After construction, Vanowen Street would be fully restored, but its width would be reduced by 3 feet.
- Buena Vista Street—Buena Vista Street would be grade-separated for HSR tracks, while Metrolink and UPRR would be maintained at-grade. During construction, Buena Vista Street would potentially be fully closed. Detours would occur at Pacific Avenue to the south and Empire Avenue to the north.
- Burbank Boulevard—The temporary closure of Burbank Boulevard (at the Interstate 5 interchange) would be required during construction of a new overhead roadway structure for Burbank Boulevard over Interstate 5. This closure would require traffic to be rerouted to Verdugo Avenue/Olive Avenue interchange to the south and the Empire Avenue/San Fernando Road or Buena Vista interchanges to the north. Detours would occur via Buena Vista Street, Victory Boulevard, Victory Place, and San Fernando Boulevard.

Temporary construction impacts would occur at grade crossing locations where permanent new grade separations are not being constructed, but existing structures would be modified. Construction of modified undercrossings at these locations would require temporary long-term lane closures or roadway closures during construction of support segments and decking. Pier foundation, column, and pier cap construction may require long-term lane closures. Depending on the duration for these closure operations, delays would be experienced by drivers that traverse the construction area when partial lane capacity is provided. The following provides a brief discussion of each location:

- North Victory Place—Detoured vehicles would need to use Buena Vista Street to the west to travel north and south over the alignment. San Fernando Boulevard to the east could also serve as a detour route.
- Magnolia Boulevard—Work would not be conducted over the roadway; however, if detours are necessary, vehicles would need to use Olive Avenue to the south to travel east and west over the alignment.
- Olive Avenue—Work would not be conducted over the roadway; however, if detours are necessary, Magnolia Boulevard would be used to travel east and west over the alignment.
- Alameda Avenue—Detoured vehicles would use Western Avenue to the south to travel north and south over the alignment.
- Western Avenue—Detoured vehicles would use Alameda Avenue to the north or Sonora Avenue to the south to travel north and south over the alignment.

Disruption of Access

Access to some neighborhoods, businesses, and community facilities may temporarily be disrupted from road closures and detours during construction, particularly in the city of Burbank from the partial or full closures of Hollywood Way, Empire Avenue, Vanowen Street, Burbank Boulevard, and Buena Vista Street. Increased traffic may worsen travel times, and detours may require out-of-the-way travel to access destinations within the community. However, access to the neighborhoods, businesses, and community facilities would not be eliminated. If roadways require closure or relocation, alternate access would be identified, and detours would be provided prior to closure for continuity of access to neighborhoods. As described in Chapter 2, Section 2.5.2.8, Freight and Passenger Railroad Modifications, construction of the HSR Build Alternative would result in the relocation of the Terry Lumber Spur and the closure of Glendale Spur Tracks. Only one business in Burbank at the intersection of N Victory Blvd and W Chandler Street (BMC) would be affected by the temporary closure of the rail spur serving the business (Terry Lumber Spur). However, it would be feasible to serve this business by truck.

Pedestrian and Cyclist Safety Hazards

As discussed above, construction of the HSR Build Alternative would require roadway closures and detours. Lane closures and detours could create a distraction to automobile drivers, pedestrians, and cyclists and increase the risk of vehicle conflicts with pedestrians or cyclists. Compliance with TR-IAMF#2, TR-IAMF#5, and TR-IAMF#12 would avoid or minimize impacts with regard to construction-related detours, including distractions, pedestrian/cyclist and vehicle conflicts, and congestion. TR-IAMF#2 would require the contractor to prepare a detailed Construction Transportation Plan to minimize the impact of construction and construction traffic. TR-IAMF#5 would require the contractor to prepare specific construction management plans to address maintenance of bicycle access during the construction period. TR-IAMF#12 would provide a technical memorandum describing how pedestrian and bicycle accessibility would be provided and supported across the HSR corridor, to and from stations, and on station property.

Changes in Visual Quality or Aesthetics

Construction activities and staging areas can introduce visual changes to the surrounding area that can be seen as visually chaotic, unsightly, and disruptive by viewers within the community and can degrade or conflict with the existing community character. Although lighting would be directed downward and on-site, temporary lighting for nighttime construction could spill over to off-site areas, resulting in disturbances to nearby residents and motorists. Construction activities

would introduce heavy equipment and associated vehicles, and could potentially cause substantial visual intrusions in any given area. Grading or excavation could involve the release of dust, which could affect visibility. Lighting of temporary structures (e.g., trailers, fencing, parking) and for nighttime construction could spill over to off-site areas, resulting in disturbance to nearby residents and motorists. Temporary visual changes would also result from the erection of support structures, such as falsework platforms and approach structures necessary to construct the grade separations. Due to the lengthy construction period, visual effects would be substantial and would affect community character if these support structures were located near any high-sensitivity receptors, such as residential areas, schools, and community facilities. The temporary visual changes associated with construction activities would represent a short-term disruption to the surrounding communities and would temporarily degrade community character.

Disruption of Established Patterns of Interactions among Community Members

This analysis addresses whether the indirect effects that could temporarily disrupt communities during construction of the HSR Build Alternative, which are discussed above, would result in the disruption of established patterns of interactions among community members. Refer to Section 3.12.4.3 for discussion on the methods used to analyze established patterns of interaction among community members. As discussed above, construction of the HSR Build Alternative would require temporary closures and detours, which would result in temporary disruptions of access to communities and community facilities. Most temporary street closures and detours would occur in the city of Burbank during the partial or full closures of Hollywood Way, Empire Avenue, Vanowen Street, Burbank Boulevard, and Buena Vista Street. These impacts would be severe in the city of Burbank and may temporarily disrupt established patterns of interactions among community members. Within the cities of Glendale and Los Angeles, construction of the HSR Build Alternative would affect individuals and individual property owners through access disruptions, increased noise and traffic, and other effects associated with construction activities, but the impacts would not be severe enough to disrupt established patterns of interactions among community members because most impacts would occur in Burbank. Only a few closures and detours would occur in the cities of Glendale and Los Angeles along San Fernando Road and Main Street.

Alteration of Physical Shape, Character, or Function of Communities or Neighborhoods

This analysis addresses whether the indirect impacts that could temporarily disrupt communities during construction of the HSR Build Alternative, which are discussed above, would alter the physical shape, character, or function of communities or neighborhoods. Construction activities would generally occur along the existing rail right-of-way and would therefore not alter the physical shape of the community. However, construction activities would increase traffic congestion, alter access, increase noise, and add visual elements that, individually or combined, would degrade or conflict with the existing community character. As discussed above, construction of the HSR Build Alternative would require temporary closures and detours, which would result in temporary disruptions of access to communities and community facilities that could affect the function of the communities and neighborhood, particularly in the city of Burbank.

As discussed in Section 3.12.4.2, IAMFs would be incorporated as part of the HSR Build Alternative design to help avoid and minimize impacts. As discussed above, construction activities would occur primarily along the existing railroad right-of-way, adjacent to residential, commercial, and industrial communities, and would not create a new physical barrier, bisect, or isolate established communities. However, construction of the HSR Build Alternative would have temporary disruptive impacts related to parking loss, increased noise, visual changes, increased emergency response times, and disruption of established patterns of interactions among community members, and it would affect the function of communities and neighborhoods.

More specifically, compliance with IAMF NV-IAMF#1 would avoid and minimize impacts related to temporary increases in noise from construction of the HSR Build Alternative. IAMF NV-IAMF#1 (Noise and Vibration) would require the contractor to document how federal guidelines for minimizing noise and vibration would be employed when construction occurs near sensitive receptors (e.g., residential neighborhoods and schools).

Implementation of TR-IAMF#2 through TR-IAMF#8, TR-IAMF#11, and TR-IAMF#12 would avoid and minimize impacts related to temporary disruptions to community circulation patterns and parking from construction of the HSR Build Alternative. TR-IAMF#2 would require the implementation of a plan to maintain traffic flow during peak travel periods, and includes a traffic control plan to provide safe pedestrian and bicycle access or detours, safe vehicular and pedestrian access to local businesses and residents during construction, and reduce access disruptions to residents, businesses, customers, delivery vehicles, and buses. Implementation of TR-IAMF#3, TR-IAMF#4, TR-IAMF#5, TR-IAMF#6, TR-IAMF#7, TR-IAMF#8, TR-IAMF#11, and TR-IAMF#12 together would accomplish the following: minimize impacts to public on-street parking areas; maintain bicycle, pedestrian, and transit access; restrict construction hours; manage construction truck routes; include mechanisms for construction during special events; and prioritize pedestrian and bicycle safety during construction of the HSR Build Alternative. In addition, SS-IAMF#1 would implement a plan to establish coordination efforts with local jurisdictions for maintaining emergency vehicle access, thereby minimizing the HSR Build Alternative's temporary impacts on emergency response times during construction of the HSR Build Alternative.

After implementation of the IAMFs described above, effects from temporary parking losses, increased noise and traffic, changes in visual quality, and alteration of function of communities and neighborhoods from construction of the HSR Build Alternative would temporarily disrupt communities. Mitigation measures N&V-MM#1, AVQ-MM#1, and AVQ-MM#2 are described in Section 3.12.7 and would be implemented to address impacts from temporary increases in noise and visual changes.

CEQA Conclusion

Within the context of CEQA, this analysis addresses the potential for the HSR Build Alternative to result in the division of communities from temporary construction impacts on communities. The HSR Build Alternative would result in a temporary new physical barrier from tunnel construction south of the Burbank Airport Station and temporarily increased noise and vibration impacts. The HSR Build Alternative would also result in temporary visual changes and parking and circulation impacts from construction and alteration of the function of communities and neighborhoods. Even with implementation of NV-IAMF#1, and NV-IAMF#1, which would avoid noise and vibration impacts; TR-IAMF#2 through TR-IAMF#8, TR-IAMF#11, and TR-IAMF#12, which would avoid and minimize impacts related to temporary disruptions to community circulation patterns and parking from construction; and SS-IAMF#1, which would minimize the HSR Build Alternative's temporary impacts on emergency response times during construction, the division of existing communities under CEQA would be a significant impact before mitigation. After implementation of these IAMFs, effects from temporary parking losses, increased noise and traffic, changes in visual quality, and alteration of function of communities and neighborhoods from construction of the HSR Build Alternative would still temporarily disrupt communities. Mitigation measures N&V-MM#1 and AVQ-MM#1 would minimize impacts from temporary noise and visual changes. Specifically, to minimize potential impacts associated with construction staging and laydown areas during the construction period, the construction contractor would prepare a technical memorandum identifying how it would minimize construction-related aesthetic and visual quality disruption, per the requirements included in AVQ-MM#1. This technical memorandum would include the requirement that, to the extent feasible, contractors shall not locate construction staging sites within the immediate foreground distance (0 to 500 feet) of existing residential neighborhoods, recreational areas, or other land uses that include high-sensitivity viewers. This technical memorandum would be reviewed and approved by the Authority. There are no mitigation measures that would fully minimize or avoid the temporary disruption of community character and cohesion from temporary parking losses and the associated altered function of communities and neighborhoods or the introduction of a new temporary physical barrier resulting from the construction of the cut-and-cover trench segments. However, the time-limited nature of these temporary construction impacts and the mitigation measures described above would reduce the degree to which temporary parking losses and the temporary introduction of a physical barrier south of Burbank Airport Station would divide existing communities. Therefore, the impact under CEQA would be less than significant.

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

Acquisitions and Displacements

The HSR Build Alternative would result in one single-family residential displacement in the city of Los Angeles and five single-family residential displacements in the city of Burbank. The HSR Build Alternative would displace two multifamily residential units in the city of Burbank and four multifamily residential units in the city of Los Angeles. As described under Impacts SOCIO #4 and SOCIO #5, there would be 39 business acquisitions (16 commercial, 3 industrial, and 20 retail units) within the city of Burbank. A total of 20 business acquisitions (3 commercial units, 4 industrial units, and 13 retail units) would occur within the city of Glendale, and 25 business displacements (12 commercial units, 5 industrial units, and 8 retail units) would occur in the city of Los Angeles. Acquisitions and displacements are discussed under Impacts SOCIO #4 and SOCIO #5 and in the *Relocation Impact Report* (Authority 2019b). Property acquisitions and displacements of community facilities or businesses/services that are important to a community can disrupt that community and affect its character and cohesion, as discussed below. Please refer to Appendix 3.12-B for detailed maps of potential property acquisitions and easements and Figure 3.12-A-5 in Appendix 3.12-A for a visual reference of the location of the business and residential displacements in the cities and NCAs in the RSAs.

No community facilities that provide public services would be displaced as a result of construction of the HSR Build Alternative. No important community facilities or gathering spaces would be displaced or relocated as a result of construction of the HSR Build Alternative. Therefore, there would be no related impacts on community cohesion during construction of the HSR Build Alternative.

Business displacements within the city of Burbank would generally occur within the following areas:

- In the northwest corner of the Burbank Airport Station area south of N San Fernando Road and west of the intersection of N Hollywood Way and N San Fernando Road in and around the triangular area bounded by Interstate 5 and the existing rail corridor, N Victory Place, and W Burbank Boulevard
- South of the existing rail corridor between W Chestnut Street and W Providencia Avenue

Most of the commercial, retail, and industrial businesses affected by construction of the HSR Build Alternative would occur on the periphery of the Burbank community, along frontage roads or adjacent to existing railroad right-of-way. Therefore, the acquisitions and displacements would not change the existing community character or cohesion within the city of Burbank.

Business displacements in Glendale would generally be concentrated in the following areas:

- Along existing railroad rights-of-way between Western Avenue and Sonora Avenue
- Along San Fernando Road near Pelanconi Avenue and Alma Street
- In the area surrounding San Fernando Road and Goodwin Avenue, including all parcels north of W Windsor Road and south of San Fernando Road

Many of the businesses subject to displacement are commercial in nature and do not appear to be open to the public, do not serve as a community gathering area, and do not contain “anchor businesses” that support the local community and draw in consumers. Therefore, acquisitions and displacements would not change the existing community character or cohesion within the city of Glendale.

In Los Angeles, commercial displacements within the Atwater Village and Historic Cultural NCAs would generally be scattered, would occur adjacent to the existing rail corridor and on the peripheries of established neighborhoods and communities, and would not occur in areas where community gatherings takes place. Therefore, these acquisitions and displacements would not change the existing community character or cohesion.

Within the Lincoln Heights NCA, the displacements would be clustered within the area of the new Main Street overcrossing. Businesses that would be subject to displacement in the area are generally industrial and commercial establishments directly adjacent to a residential neighborhood, where a single-family residential displacement would also occur. The removal of these businesses and this residence would change the nature and character of this community by removing swaths of businesses that may be used as community gathering spaces and that are directly adjacent to established neighborhoods. Several neighborhoods within the city of Los Angeles show high community cohesion based on demographic indicators, including Lincoln Heights. Because Lincoln Heights possesses a high degree of community cohesion, it is reasonable to conclude that the right-of-way displacements in this neighborhood as a result of the HSR Build Alternative would have disruptive effects on the community and would contribute to a degradation of community character and cohesion within the Lincoln Heights neighborhood.

As discussed in Section 3.12.4.2, IAMFs would be incorporated as part of the HSR Build Alternative design to help avoid and minimize impacts. The HSR Build Alternative would be constructed within the existing railroad right-of-way, adjacent to residential, commercial, and industrial communities, and it would not permanently create a new physical barrier, bisect, or isolate established communities. However, construction of the HSR Build Alternative would have permanent disruptive impacts related to residential and business displacements. SOCIO-IAMF#2 would provide relocation assistance to all residents displaced by the HSR Build Alternative in compliance with the Uniform Act. SOCIO-IAMF#3 would establish an appraisal, acquisition, and relocation process in consultation with affected cities, counties, and property owners. These IAMFs would minimize the potential for construction of the HSR Build Alternative to relocate businesses outside their existing communities; however, the HSR Build Alternative would still permanently disrupt community character and cohesion as a result of the business displacements and relocations.

CEQA Conclusion

Within the context of CEQA, this analysis addresses the potential for the HSR Build Alternative to result in the division of communities from permanent construction impacts on communities. As discussed in this analysis, with the implementation of SOCIO-IAMF#2, which would provide relocation assistance to all residents displaced by the HSR Build Alternative, and SOCIO-IAMF#3, which would establish an appraisal, acquisition, and relocation process in consultation with affected cities, counties, and property owners, permanent construction impacts on communities would not divide existing communities, and the impact under CEQA would be less than significant. Therefore, CEQA does not require any mitigation.

Impact SOCIO #3: Permanent Displacement and Relocation of Local Residents from Construction

The HSR Build Alternative would displace one residential unit in the city of Los Angeles (one single-family residential parcel), which equates to an estimated three residents that would be displaced.⁷ This displacement would occur from construction of the Main Street grade separation (an early action project). The HSR Build Alternative would displace 5 single-family residential units in the city of Burbank, which correlates to an estimated 13 residents.⁸ For more information on displacements, please refer to the *Relocation Impact Report* (Authority 2019b). The High-Speed Rail Build Alternative would displace an estimated 2 multifamily residential units in the city of Burbank, which correlates to an estimated 6 residents, and four multifamily residential units in the city of Los Angeles, which correlates to an estimated 12 residents. Table 3.12-43 lists estimated the units and residents that would be displaced by the HSR Build Alternative.

⁷ Calculated using number of units multiplied by the average household size per the City of Los Angeles from the 2010–2014 ACS.

⁸ Calculated using number of units multiplied by the average household size per the City of Burbank from the 2010–2014 ACS.

Table 3.12-43 Residential Displacements under the High-Speed Rail Build Alternative

Location	Residential Units Displaced	Estimated Residents to Be Displaced ¹
Single-Family Residential Displacements		
City of Burbank	5	13
City of Glendale	0	0
City of Los Angeles	1	3
Total Single-Family	6	16
Multifamily Residential Displacements		
City of Burbank	2	6
City of Glendale	0	0
City of Los Angeles	4	12
Total Multifamily	6	18

Sources: Multiple Listing Service, 2017; Loopnet, 2017; Google Earth, 2017; Google Street View, 2017

¹ Calculated using number of units multiplied by the average household size per city from the 2010–2014 American Community Survey.

A sufficient number of comparable replacement residences are available in all areas as of 2017 where there would be displacements and relocations. Table 3.12-44 shows the number of residential properties (single-family and multifamily) that are available for relocation.

Table 3.12-44 Number of Residential Units Available for Relocation

Location	Residential Units Displaced	Residential Units Available	Size of Surplus
Single-Family Residential			
City of Burbank	5	46	41
City of Glendale	0	63	63
City of Los Angeles ¹	1	56	55
Total Single-Family	6	165	159
Multifamily Residential			
City of Burbank	2	55	53
City of Glendale	0	91	91
City of Los Angeles	4	58	54
Total Multifamily	6	204	198

Sources: Multiple Listing Service 2017; Zillow, 2017; Google Earth, 2017; Google Street View, 2017

¹ Includes only the portions of the city within the replacement area in which to relocate these displaced residences.

There are 56 vacant single-family residential and 58 vacant multifamily residential units within the city of Los Angeles, which exceeds the 1 single-family and 4 multifamily residential displacements in the city of Los Angeles. The city of Burbank has 46 vacant single-family residential units and 55 vacant multifamily residential units, which also exceeds the 5 potential single-family and 2 potential multifamily residential displacements in the city of Burbank. Based on a review of vacant home prices in the cities of Burbank, Glendale, and Los Angeles, housing units are available at prices similar to those of the displaced residential properties (Zillow 2017). The displaced multifamily residential units in the city of Los Angeles have estimated rental rates ranging between \$1,100 and \$1,500. At the time of this report, very few comparable replacement properties are available within the replacement area. The replacement area is the area in which displaced residential units and businesses would be relocated. Replacement properties currently

for lease would likely demand slightly higher rents. In the event the cost to rent a comparable replacement unit is higher than the present rent of the unit to be displaced, occupants may be entitled to a rental differential payment as set forth under the Uniform Act. Therefore, the existing supply of vacant residential units would be greater than necessary to house the relocated residents. Refer to Appendix 3.12-B, Relocation Assistance Benefits, for information on the Relocation Advisory Assistance Program, which would aid residents displaced by the HSR Build Alternative in locating a suitable replacement property, in compliance with the Uniform Act.

As discussed in Section 3.12.4.2, IAMFs would be incorporated as part of the HSR Build Alternative design to help avoid and minimize impacts. SOCIO-IAMF#2 would provide relocation assistance to all residents displaced by the HSR Build Alternative in compliance with the Uniform Act, and SOCIO-IAMF#3 would establish an appraisal, acquisition, and relocation process in consultation with affected cities, counties, and property owners. Implementation of these IAMFs would minimize impacts from the permanent displacement and relocation of local residents from construction of the HSR Build Alternative. No mitigation would be required.

CEQA Conclusion

Within the context of CEQA, this analysis addresses the potential for the HSR Build Alternative to displace a substantial number of existing people or housing units, necessitating the construction of replacement housing elsewhere. With the implementation of SOCIO-IAMF#2 and SOCIO-IAMF#3, which would provide relocation assistance to all residents displaced by the HSR Build Alternative in compliance with the Uniform Act and establish an appraisal, acquisition, and relocation process in consultation with affected cities, counties, and property owners, the displacements of residential units would not necessitate the construction of replacement housing. Therefore, the impact under CEQA would be less than significant. Therefore, CEQA does not require any mitigation.

Impact SOCIO #4: Permanent Displacement and Relocation of Local Businesses from Construction

The HSR Build Alternative would require the relocation of an estimated 84 commercial, industrial, and retail businesses in the cities of Burbank, Glendale, and Los Angeles. Table 3.12-45 provides a breakdown of the commercial, industrial, and retail business relocations and estimated employee displacements that would occur under the HSR Build Alternative.

Table 3.12-45 Commercial, Industrial, and Retail Relocations under the High-Speed Rail Build Alternative

Location	Businesses Displaced	Estimated Employees Displaced ¹
City of Burbank	39	1,264
City of Glendale	20	136
City of Los Angeles	25	347
Total	84	1,747

Sources: Multiple Listing Service, 2017; Loopnet, 2017; Google Earth, 2017; Google Street View, 2017; Reference USA, 2017

¹ The number of estimated employees displaced was determined through Reference USA (2017). For those businesses for which no information was available via Reference USA, similar business types with a known number of employees were used as an estimate.

Table 3.12-46 shows the distribution of commercial, industrial, and retail displacements in each city by property category. Approximately 42 of the total business displacements identified in the table would occur from construction of the early action projects, including 1 business displacement at the Downtown Burbank Metrolink station, 1 displacement at the Sonora Avenue grade separation in Glendale, 7 displacements at the Flower Street grade separation, 17 displacements at the Goodwin Avenue/Chevy Chase Drive grade separation, and 17 displacements at the Main Street grade separation (Authority 2019).

Table 3.12-46 Commercial, Industrial, and Retail Displacements by City and Category

Location	Commercial	Industrial	Retail	Total
City of Burbank	16	3	20	39
City of Glendale	3	4	13	20
City of Los Angeles	12	5	8	25
Total	31	12	41	84

Sources: Multiple Listing Site, 2017; Loopnet, 2017; Google Earth, 2017; Google Street View, 2017

The types of businesses that would be displaced include warehousing, used car dealerships, automotive/tire shops, maintenance yards, rentals and leasing services, tow yards, food services, retail, wholesalers, manufacturing centers, recycling centers, studio centers, recreation services, healthcare services, banks, and business centers. The highest number of businesses and employees displaced would occur in the city of Burbank. Displacements of commercial and industrial businesses can cause community disruptions and impacts on community cohesion. For detailed discussion of this type of impact, refer to Impact SOCIO #2 above.

Table 3.12-47 shows the commercial and industrial business properties located within the replacement area available for lease or sale that would be suitable relocation sites.

Table 3.12-47 Available Commercial, Industrial, and Retail Properties for Lease and Sale

Location	Commercial	Industrial	Retail
For Lease			
City of Burbank	51	13	28
City of Glendale	54	8	43
City of Los Angeles	35	14	15
Total for Lease	140	35	86
For Sale			
City of Burbank	6	6	13
City of Glendale	10	9	9
City of Los Angeles	14	28	32
Total for Sale	30	43	54

Sources: California High-Speed Rail Authority, 2017; Loopnet, 2017; Multiple Listing Service, 2017

There are enough sites available among the industrial, commercial, and retail properties in the replacement area for the businesses that would be displaced by the HSR Build Alternative.

Table 3.12-48 shows the results of the gap analysis of the total number of commercial, industrial, and retail properties, respectively within the replacement area.

Table 3.12-48 Gap Analysis of Commercial, Industrial, and Retail Displacements under the High-Speed Rail Build Alternative

Location	Businesses Displaced	Replacement Units Available	Size of Surplus
Commercial Displacements			
City of Burbank	16	57	41
City of Glendale	3	64	61
City of Los Angeles ¹	12	49	37
Total Commercial	31	170	139
Industrial Displacements			
City of Burbank	3	19	16
City of Glendale	4	17	13
City of Los Angeles ¹	5	42	37
Total Industrial	12	78	66
Retail Displacements			
City of Burbank	20	41	21
City of Glendale	13	52	39
City of Los Angeles	8	47	39
Total Retail	41	140	99

Sources: California High-Speed Rail Authority, 2017; Loopnet, 2017; Multiple Listing Service, 2017; Google Earth, 2017; Google Street View, 2017

¹ Industrial and commercial displacements for the city of Los Angeles include only ZIP codes adjacent to the High-Speed Rail Build Alternative (i.e., 90012, 90015, 90031, and 90039).

Preliminary research was conducted to address current business vacancy rates in the San Fernando Valley, Central Los Angeles, and Los Angeles Basin areas to provide the overall business vacancies and support the findings above. The San Fernando Valley, Central Los Angeles, and Los Angeles Basin areas have the following business vacancy rates for office, industrial, and retail space as shown in Table 3.12-49 (Colliers 2017).⁹

Table 3.12-49 Regional Business Vacancy Rates in Percent

Location	Office	Industrial	Retail
San Fernando Valley and Ventura County	13.9%	1.9%	NA%
Central Los Angeles	18.5%	1.4%	Not available
Los Angeles Basin	14.5 %	2.2%	5.4%

Source: Colliers, 2017

Automotive repair is an important class of businesses that would be relocated in the replacement area. Automotive businesses usually require specialized facilities, given the services they perform. Two automotive repair businesses or related services would be displaced in the city of Burbank, two automotive repair businesses would be displaced in the city of Glendale, and three automotive repair businesses or related services would be displaced in the city of Los Angeles. Relocating automotive businesses could require modification of equipment or configuration of other properties to meet needed specifications. Based on examination of alternative automotive-specific locations, current vacancies are available to meet the relocation needs of displaced

⁹ Data are based on Colliers' Market Reports Greater Los Angeles, www.colliers.com/en-us/greaterlosangeles/insights/research. This source did not track San Fernando Valley or Central Los Angeles retail businesses for the same time period as the Los Angeles Basin retail data were collected. Therefore, no comparable San Fernando Valley or Central Los Angeles retail estimates are provided.

automotive businesses. Refer to Appendix 3.12-B, Relocation Assistance Benefits, for information on the Relocation Advisory Assistance Program, which would aid businesses and nonprofit organizations in locating a suitable property. However, automotive businesses would need special consideration during the property acquisition and relocation process based on facility requirements for the operation of an automotive business.

As discussed in Section 3.12.4.2, IAMFs would be incorporated as part of the HSR Build Alternative design to help avoid and minimize impacts. SOCIO-IAMF#2 would provide relocation assistance to all residents displaced by the HSR Build Alternative in compliance with the Uniform Act, and SOCIO-IAMF#3 would establish an appraisal, acquisition, and relocation process in consultation with affected cities, counties, and property owners. These IAMFs would minimize the potential for construction of the HSR Build Alternative to relocate businesses outside their existing communities; however, the HSR Build Alternative would still relocate a substantial number of businesses in Burbank, Glendale, and Los Angeles. No IAMFs are available to fully minimize or avoid the impacts of the displacement of businesses from construction of the HSR Build Alternative, because business properties must be acquired in order to construct the HSR Build Alternative.

CEQA Conclusion

Within the context of CEQA, this analysis addresses the potential for the HSR Build Alternative to physically divide an established community due to the displacement of businesses. Implementation of SOCIO-IAMF#2 and SOCIO-IAMF#3 would provide relocation assistance to all residents displaced by the HSR Build Alternative in compliance with the Uniform Act and establish an appraisal, acquisition, and relocation process in consultation with affected cities, counties, and property owners. As discussed under Impact SOCIO #2, the displacement and relocation of local businesses from permanent construction impacts would not divide existing communities. With implementation of SOCIO-IAMF#2 and SOCIO-IAMF#3, the impact under CEQA would be less than significant. Therefore, CEQA does not require any mitigation.

Impact SOCIO #5: Permanent Displacement and Relocation of Sensitive Populations during Construction

High concentrations of residential unit displacements associated with construction of the HSR Build Alternative could result in the relocation of large percentages of sensitive populations, including the elderly (over age 65), the disabled, female heads of households, and linguistically isolated residents. 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.

Construction of the HSR Build Alternative would result in 12 residential displacements and relocations, which would occur in the Lincoln Heights and Sun Valley NCAs. According to U.S. Census Bureau 2010–2014 ACS data, and as discussed previously in Section 3.12.5.1, the city of Burbank has higher percentages of elderly and disabled households (15.7 and 55.7 percent, respectively) than Los Angeles County. The city of Los Angeles as a whole has higher percentages of disabled and linguistically isolated households (45.6 and 16.3 percent, respectively). The Lincoln Heights NCA within the city of Los Angeles has higher percentages of female heads of households, disabled, and linguistically isolated households (22.5, 57.0, and 29.8 percent, respectively) than Los Angeles County (14.3, 44.0, and 14.0 percent, respectively). The Sun Valley NCA within the city of Los Angeles has higher percentages of female head of households, disabled, and linguistically isolated households (19.1, 49.0, and 19.5 percent, respectively). Table 3.12-50 provides a breakdown of the sensitive population percentages in the reference community of Los Angeles County, the city of Los Angeles, and the Lincoln Heights NCA, the neighborhood in which the residential displacement would occur.

Table 3.12-50 Sensitive Populations in Areas of Residential Displacements and Los Angeles County

Location	Female Head of Household	Elderly	Disabled	Linguistically Isolated Household
City of Burbank	11.5%	15.7%*	55.7%*	8.3%
City of Los Angeles	15.4%	10.9%	45.6%*	16.3%*
Lincoln Heights NCA	22.5%*	11.0%	57.0%*	29.8%*
Sun Valley NCA	19.1%*	9.2%	49.0%*	19.5%*
Los Angeles County (reference community)	15.8%	14.3%	44%	14%

Source: U.S. Census Bureau 2010–2014 American Community Survey,

Bolded numbers with asterisks indicate values higher than that of the reference community (Los Angeles County).

NCA = neighborhood council area

These comparisons suggest that the residential displacements could affect sensitive populations at a somewhat higher rate within the cities of Los Angeles and Burbank, and in the specifically affected neighborhoods. However, the relocation plans and resources provided would take these populations into account during the acquisition process.

While the displacement of 12 residential units from the construction of the HSR Build Alternative could affect a household with sensitive populations, these impacts would not affect the overall quality of life in the affected community. In addition, the Relocation Advisory Assistance Program would aid residents (including sensitive populations) displaced by the HSR Build Alternative in locating a suitable replacement property in compliance with the Uniform Act (see Appendix 3.12-B, Relocation Assistance Benefits).

As discussed in Section 3.12.4.2, IAMFs would be incorporated as part of the HSR Build Alternative design to help avoid and minimize impacts. SOCIO-IAMF#2 would provide relocation assistance to all residents displaced by the HSR Build Alternative in compliance with the Uniform Act, including sensitive populations. SOCIO-IAMF#3 would establish an appraisal, acquisition, and relocation process in consultation with the affected cities, counties, and property owners. Implementation of these IAMFs would fully minimize the impacts from the potential permanent displacement and relocation of sensitive populations from construction of the HSR Build Alternative. No mitigation would be required.

CEQA Conclusion

Within the context of CEQA, this analysis addresses the potential for the HSR Build Alternative to displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere. With implementation of SOCIO-IAMF#2, which would provide relocation assistance to all residents displaced by the HSR Build Alternative in compliance with the Uniform Act, and SOCIO-IAMF#3, which would establish an appraisal, acquisition, and relocation process in consultation with the affected cities, counties, and property owners, the impact under CEQA would be less than significant. Therefore, CEQA does not require any mitigation.

Impact SOCIO #6: Permanent Displacement and Relocation of Community Facilities from Construction

The HSR Build Alternative would not displace any community facilities or other properties that provide public services. No impacts on emergency fire or hospital facilities are anticipated, and no large community or civic center facilities would be affected under the HSR Build Alternative. Other types of temporary impacts on community facilities from construction of the HSR Build Alternative are discussed under Impact SOCIO #7: Temporary Disruption to Community Facilities from Construction.

As discussed in Section 3.12.4.2, IAMFs would be incorporated as part of the HSR Build Alternative design to help avoid and minimize impacts. The HSR Build Alternative would not displace any community facilities or other properties that provide public services. No IAMFs would be necessary, and no mitigation would be required.

CEQA Conclusion

Within the context of CEQA, this analysis addresses the potential for the HSR Build Alternative to result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities in order to maintain public services. As discussed in the analysis above, construction of the HSR Build Alternative would not displace or relocate any community facilities. There would be no impact under CEQA. Therefore, CEQA does not require any mitigation.

Impact SOCIO #7: Temporary Disruption to Community Facilities from Construction

The HSR Build Alternative would avoid temporary construction impacts on most community facilities and other properties that provide public services. Table 3.12-51 lists the community facilities that would experience direct impacts related to TCEs required for construction of the HSR Build Alternative within the city of Los Angeles. Construction of the HSR Build Alternative would have no direct impacts on community facilities in the cities of Glendale or Burbank.

Table 3.12-51 Temporary Impacts on Community Facilities from Construction

Name	General Category	City/Community	Construction Impacts
Sonia M. Sotomayor Learning Academies	School (public)	Los Angeles	A small portion of the property would be affected under a TCE (1,755 square feet).
Rio de Los Angeles State Park	Park	Los Angeles	The southern portion of the park would be used as a TCE (4,838 square feet).

Source: California High-Speed Rail Authority, 2018
TCE = temporary construction easement

Construction of the HSR Build Alternative tunnel would not disrupt the Hollywood Burbank Airport, specifically the east-west runway (Runway 8/26). In addition, Sonia M. Sotomayor Learning Academies and Rio de Los Angeles State Park would experience indirect impacts such as increased noise and vibration and effects on traffic/access. Construction of the HSR Build Alternative would also result in traffic delays and could result in increased response times for emergency responders, including law enforcement, fire, and emergency services. Impacts on emergency access during construction are evaluated in Section 3.11.6.3, Safety and Security.

As discussed in Section 3.12.4.2, IAMFs would be incorporated as part of the HSR Build Alternative design to help avoid and minimize impacts. LU-IAMF#3 would ensure that construction and staging areas used temporarily during construction would be returned to a condition equal to the pre-construction staging condition. The HSR Build Alternative’s temporary impacts related to noise would be minimized through compliance with NV-IAMF#1, which requires documentation of how federal guidelines for minimizing noise and vibration would be employed near sensitive receptors. The HSR Build Alternative’s temporary impacts related to air quality would be minimized through compliance with AQ-IAMF#1, which requires the preparation of a fugitive dust control plan identifying the features that, at a minimum, would be implemented during ground-disturbing activities, and AQ-IAMF#2, which requires the use of low-volatile organic compound paint during construction. Implementation of TR-IAMF#2, which requires the preparation of a construction transportation plan, would minimize access disruptions on residents, businesses, customers, delivery vehicles, and buses by limiting any road closures to the hours that are least disruptive to access for the adjacent land uses. SS-IAMF#2 requires the preparation of a Safety and Security Management Plan to protect construction workers and the public, and it would minimize impacts on public safety from construction of the HSR Build Alternative. Implementation of these IAMFs would fully minimize the potential for temporary construction

impacts to disrupt community facilities, and no mitigation would be required to address the potential for construction of the HSR Build Alternative to temporarily disrupt community facilities.

CEQA Conclusion

Within the context of CEQA, this analysis addresses the potential for the HSR Build Alternative to result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities in order to maintain public services. The HSR Build Alternative would require a portion of the Sonia M. Sotomayor Learning Academies and Rio de Los Angeles State Park parcels to be used as TCEs, and the facilities would experience indirect impacts such as increased noise and vibration and effects on traffic and access. LU-IAMF#3 would require construction and staging areas used temporarily during construction to be returned to a condition equal to the pre-construction staging condition. NV-IAMF#1, AQ-IAMF#1, and AQ-IAMF#2 would minimize noise, vibration and air quality impacts. TR-IAMF#2 would minimize the impacts of access disruptions on residents, businesses, customers, delivery vehicles, and buses, and SS-IAMF#2 would protect construction workers and the public and minimize impacts on public safety from construction. These IAMFs would minimize temporary impacts and would address the potential for the construction of the HSR Build Alternative to result in substantial adverse physical impacts on these facilities. With the implementation of these IAMFs during construction, the impact under CEQA would be less than significant. Therefore, CEQA does not require any mitigation.

Impact SOCIO #8: Temporary Construction Employment Resulting in the Need for Additional Community Facilities

This analysis discusses the potential for construction of the HSR Build Alternative to create short-term jobs and whether these temporary jobs would result in a temporary influx of people residing in the area that would require the construction of additional community facilities. Other potential impacts of short-term population growth include increased demand for public services, including police and fire protection, and increased demand for public utilities. Refer to Section 3.18, Regional Growth, for a discussion of potential impacts on public services from population growth.

Construction of the HSR Build Alternative has the potential to stimulate short-term employment, creating an estimated 27,923 additional direct, indirect, and induced jobs in Los Angeles County during construction. It could also have spillover impacts in neighboring Orange County during the construction period. Most (22,350) of the jobs created by construction of the HSR Build Alternative would be centered in Los Angeles County. The largest job growth is expected in the construction industry, followed by the retail trade sector.

As discussed in Section 3.18.6.3, Regional Growth, the HSR Build Alternative would support approximately 5,987 direct and 5,906 indirect jobs, for a total of 11,893 jobs, during the peak years of construction. The 1,497 direct jobs in the peak construction years (2022 and 2023) would represent a 1.05 percent increase in construction jobs projected for the year 2022 in Los Angeles County. Given the size of the local unemployed civilian labor force (212,600 [California Employment Development Department 2017]), it is anticipated that the available local workforce could absorb these jobs. Overall, construction of the HSR Build Alternative would require a large number of employees but is not expected to have impacts related to temporary population increases and the need for increased housing or services because of the available labor pool within Los Angeles County.

Although construction of the HSR Build Alternative would result in a short-term increase in direct, indirect, and induced jobs in Los Angeles County, these jobs would likely be absorbed by local workers, and therefore there would be no need for additional community facilities. The short-term increase in jobs would be a temporary net benefit to Los Angeles County. No mitigation would be required to address the potential for temporary employment related to construction of the HSR Build Alternative to result in the need for additional community facilities.

CEQA Conclusion

Within the context of CEQA, this analysis addresses the potential for the HSR Build Alternative to result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities in order to maintain public services. As discussed in the above

analysis, temporary employment from construction of the HSR Build Alternative would not require the provision of new or physically altered governmental facilities. The impact under CEQA would be less than significant. Therefore, CEQA does not require any mitigation.

Impact SOCIO #9: Permanent Disruption to Community Facilities from Construction

The HSR Build Alternative would avoid permanent construction impacts on most community facilities and other properties that provide public services. Table 3.12-52 lists the community facilities that would experience permanent direct impacts related to permanent acquisitions required for construction of the HSR Build Alternative within the city of Los Angeles. Construction of the HSR Build Alternative would have no direct impacts on community facilities in the cities of Burbank and Glendale.

Table 3.12-52 Permanent Impacts on Community Facilities from Construction

Name	General Category	City/Community	Construction Impacts (permanent)
Sonia M. Sotomayor Learning Academies	School (public)	Los Angeles	Road access easement to school parcel

Source: California High-Speed Rail Authority, 2018

In addition, Sonia M. Sotomayor Learning Academies would experience permanent indirect impacts such as increased noise and vibration.

The road access easement at the Sonia M. Sotomayor Learning Academies would also be small and would not affect operations at the facility. Overall, easements and acquisitions would be restricted to limited portions of the parcels associated with the affected community facilities and would not affect operations at the facilities.

CEQA Conclusion

Within the context of CEQA, this analysis addresses the potential for the HSR Build Alternative to result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities in order to maintain public services. As discussed above, construction of the HSR Build Alternative would not permanently disrupt any community facilities. There would be no impact under CEQA. Therefore, no mitigation would be required.

Impact SOCIO #10: Temporary Sales Tax Revenue Gains and Losses from Construction

Construction of the HSR Build Alternative would have the potential to generate temporary sales tax revenues. These impacts have the potential to offset sales tax losses that could occur from business relocations (refer to the discussion under Impact SOCIO #4: Permanent Displacement and Relocation of Local Businesses from Construction).

A temporary increase in sales tax revenues as a result of spending on construction equipment and materials is expected for Los Angeles County and the communities in the county from the construction of the HSR Build Alternative. Unless specifically exempted, all transactions for tangible assets related to the HSR system would be subject to sales tax. Approximately 17 percent of the total HSR spending on construction equipment and materials would occur within Los Angeles County (Authority 2019), with an estimated increase in county tax revenue of \$1,167,900.

As discussed in Section 3.12.4.2, IAMFs would be incorporated as part of the HSR Build Alternative design to help avoid and minimize impacts. The temporary increase in sales tax revenue from construction of the HSR Build Alternative would result in a net benefit to Los Angeles County and the communities in the county. No IAMFs would be necessary, and no mitigation would be required.

CEQA Conclusion

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

Impact SOCIO #11: Permanent Property and Sales Tax Revenue Losses from Construction

Property Tax Revenue

The HSR Build Alternative would require parcel acquisitions, which would result in permanent property tax revenue losses for local jurisdictions as those properties are removed from the property tax assessment roll. In the State of California, property taxes are collected by each county and allocated to cities, the county, special districts, redevelopment agencies, and school districts within the county from which they are collected. State laws control the allocation of property tax revenue to more than 4,000 local governments, including school districts, special districts, and counties. The distribution of property tax revenue varies significantly by locality (Legislative Analyst's Office 2012).

As discussed under Impacts SOCIO #3 and SOCIO #4, the HSR Build Alternative would require the relocation of 12 residential units in the cities of Burbank and Los Angeles and 84 commercial, industrial, and retail businesses in the cities of Burbank, Glendale, and Los Angeles. The parcel acquisitions under the HSR Build Alternative could result in a total permanent loss of \$686,956 in annual property tax revenue, based on the assessed values of those properties in FY 2014–2015 (City of Burbank 2016; City of Los Angeles 2016; City of Glendale 2015). Because no residential properties within unincorporated Los Angeles County would be displaced as a result of construction of the HSR Build Alternative, the permanent property tax revenue loss for Los Angeles County is derived from the county's share of property taxes within the cities of Burbank, Glendale, and Los Angeles.

Table 3.12-53 shows the estimated loss in annual property tax revenue for each of the jurisdictions where property acquisitions would occur, the total property tax revenue collected and distributed to each jurisdiction's general fund in FY 2014–2015, and the percentage of the FY 2014–2015 property tax collections that could be permanently lost as a result of property acquisitions.

Table 3.12-53 Estimated Changes in Property Tax Revenue

Jurisdiction	Property Tax Revenue (Fiscal Year 2014–2015)	Estimated Permanent Property Tax Loss	Estimated % Loss in Permanent Property Tax Revenue
City of Burbank	\$37,351,000	\$222,254	0.06
City of Glendale	\$50,883,000	\$13,726	0.01
City of Los Angeles	\$1,782,124,000	\$53,726	<0.01
Los Angeles County	\$5,533,336,000	\$397,250	<0.01
Regional Total	\$7,403,694,000	\$686,956	<0.01

Sources: Los Angeles County, 2015; California High-Speed Rail Authority, 2019

Because these acquisitions would permanently remove these properties from the tax rolls, the impacts would be long term. Given the small percentages of total revenue that would be permanently lost as a result of property acquisitions, the overall impact of these long-term revenue losses would be generally minor for each jurisdiction and would not be perceptible to residents.

County and City Sales Tax Impacts

California's sales tax rate varies across cities and counties, ranging from 7.5 to 10 percent. According to the State Board of Equalization, all local jurisdictions in California receive 0.75 percent of the taxable sales generated within their jurisdictional boundaries for allocation to their general funds, which are typically funded from a combination of sources, including property tax. Each jurisdiction uses its general fund to fund its budget, which can include, but is not limited to, police and fire services, parks and recreation services, and funding for public works services and employees.

The HSR Build Alternative would displace 84 businesses; however, only 40 of these businesses generate sales tax. In addition, as discussed under Impact SOCIO #4, Permanent Displacement and Relocation of Local Businesses from Construction, an adequate supply of replacement properties is available in the replacement area in which to relocate these displaced businesses. If these businesses were to relocate outside the respective jurisdictions in which they are currently located, these jurisdictions would experience losses in sales tax revenues.

Table 3.12-54 shows the estimated loss in annual sales tax revenue for each of the jurisdictions where the displacement of sales tax-generating businesses would occur, along with the percentage of the total sales tax revenue distributed to each jurisdiction’s general fund in 2015 that would be lost as a result of the HSR Build Alternative. The HSR Build Alternative would result in a total loss of \$162,188 in annual sales tax revenue.

Table 3.12-54 Estimated Permanent Changes in Sales Tax Revenue

Jurisdiction	Total Sales Tax Revenue Apportioned to City/County	Estimated Permanent Sales Tax Loss	Percent Estimated Permanent Sales Tax Loss
City of Burbank	\$487,321,000	\$68,930	0.01
City of Glendale	\$599,075,000	\$56,766	<0.01
City of Los Angeles	\$14,183,222,000	\$36,492	<0.01
Regional Total	\$15,269,618,000	\$162,188	<0.01

Sources: California State Board of Equalization, 2013; California High-Speed Rail Authority, 2019

Sales tax losses are associated with the displacement of sales tax-generating businesses in unincorporated Los Angeles County jurisdictions. Sales tax revenue losses could be temporary because they would occur during the time when affected businesses are closed for construction of the HSR Build Alternative or while displaced businesses relocate to a new location. In many cases, relocations would generate tax revenue within the same taxing jurisdiction, so the losses estimated in the table above may be temporary.

As discussed in Section 3.12.4.2, IAMFs would be incorporated as part of the HSR Build Alternative design to help avoid and minimize impacts. There are no IAMFs that would avoid or minimize the indirect impacts of municipal revenue losses from the construction of the HSR Build Alternative. However, given the small percentage of total revenues that could be permanently lost as a result of property acquisitions, no mitigation would be required.

CEQA Conclusion

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

Impact SOCIO #12: Permanent Changes in School District Funding from Construction

School district funding is largely derived from two revenue sources that could be affected by the HSR Build Alternative: (1) a portion of property tax revenue, and (2) student attendance. Analysis of potential impacts on school district funding is based on whether the HSR Build Alternative would remove a substantial amount of land from the property tax assessment roll or affect attendance-based funding sources by displacing large populations of students outside of existing school district boundaries. School district funding partially depends on student attendance, and the relocation of large populations of students outside of existing school districts could therefore reduce funding for the affected districts.

Table 3.12-55 shows that construction of the HSR Build Alternative would displace seven residential units in Burbank and five residential units in Los Angeles. The table also identifies the estimated student population that could be displaced and the percentage of the student population that could be displaced from each unified school district within or adjacent to the HSR Build Alternative footprint. The HSR Build Alternative could displace five students out of Burbank Unified School District, which is 0.03 percent of the total student population, and four students out of Los Angeles Unified School District's enrollment, which is less than 0.01 percent of the total student population.

Table 3.12-55 Residential and Student Displacements in School Districts

School District	Residential Units Displaced	Estimated Number of Students Displaced ¹	School District Enrollment/Average Daily Attendance ²	Percentage of Student Population Displaced
Burbank Unified	7	5	14,745	0.03
Glendale Unified	0	0	25,115	0
Los Angeles Unified	5	4	516,451	<0.01
Regional Total	12	9	556,311	0.02

Source: California High-Speed Rail Authority, 2017; California Department of Education, 2015

¹ A student generation factor of 0.7 student per dwelling unit was used to represent the number of student displacements associated with each displaced residential unit. The generation factor is based on the Statewide Average Student Yield Factor for unified school districts published by the California Office of Public School Construction, Form SAB 50-01 (revised May 2009).

² Information is for Fiscal Year 2014–2015.

Table 3.12-56 shows the estimated property tax revenue losses from property acquisition (including properties with residential units and/or businesses) for the school districts. The greatest revenue loss would occur in Burbank Unified School District, which would lose \$189,929 (0.15 percent) of its total revenue. Average daily revenue loss would account for \$18,081 of the total revenue loss. Glendale Unified School District would experience a total revenue loss of \$15,303. All of this revenue loss would come from the decrease in property tax revenue. Los Angeles Unified School District would experience losses in average daily attendance revenue accounting for \$21,253 of its total estimated revenue loss of \$69,061.

Table 3.12-56 School District Revenue Losses

School District	Estimated Property Tax Revenue Loss	Estimated Average Daily Attendance Revenue Loss	Estimated Total Revenue Loss	Total Revenue	Estimated Revenue Loss as a Percentage of Total Revenue ¹
Burbank Unified	\$171,849	\$18,081	\$189,929	\$130,012,530	0.15
Glendale Unified	\$15,303	\$0	\$15,303	\$241,689,737	0.01
Los Angeles Unified	\$47,807	\$21,253	\$69,061	\$6,420,068,851	<0.01
Regional Total	\$234,959	\$39,334	\$274,293	\$3,281,338,915	<0.01

Source: California High-Speed Rail Authority, 2019a; California Department of Education, 2016

All information is for Fiscal Year 2014–2015.

As discussed in Impact SOCIO #3, Permanent Displacement and Relocation of Local Residents from Construction, the high number of residential vacancies in the cities within or adjacent to the HSR Build Alternative footprint would most likely allow the affected residents in Burbank and Los Angeles to relocate within the same school districts, which could help offset or eliminate revenue losses to Los Angeles Unified School District and the Burbank Unified School District due to reductions in average daily attendance. Burbank Unified School District and Los Angeles Unified School District would experience revenue losses from reductions in average daily attendance due to the potential displacement of five students in Burbank Unified School District and four students in Los Angeles Unified School District, as shown in Table 3.12-56. With the availability of vacant housing within these school districts, loss of school district funding due to reductions in average daily attendance would be short-term or avoidable.

As discussed in Section 3.12.4.2, IAMFs would be incorporated as part of the HSR Build Alternative design to help avoid and minimize impacts. SOCIO-IAMF#2 would provide relocation assistance to all residents displaced by the HSR Build Alternative in compliance with the Uniform Act, including sensitive populations. SOCIO-IAMF#3 would establish an appraisal, acquisition, and relocation process in consultation with affected cities, counties, and property owners. Implementation of the IAMFs described above would fully minimize the permanent impacts on school district revenue from the relocation of students. There are no IAMFs that would avoid or minimize school district revenue losses from property tax losses. No feasible mitigation measures are available to minimize or mitigate losses in school district revenue from the construction of the HSR Build Alternative.

CEQA Conclusion

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

Impact SOCIO #13: Potential for Permanent Physical Deterioration from Construction

Construction of the HSR Build Alternative would have temporary disruptive impacts on communities and community cohesion. Displacements from construction of the HSR Build Alternative, as well as temporary construction-related impacts, such as increases in dust, noise, and traffic congestion, visual changes, and access disruption associated with changes in circulation patterns, detours, and road closures, would have some disruptive effects on the community (see Impact SOCIO #1). However, these impacts would be temporary and would only last for the duration of construction. Because of this temporary duration, these impacts would not result in considerable residential migration from communities or the closure of key “anchor” businesses. Therefore, temporary construction impacts are not anticipated to result in the physical deterioration of area communities (as defined in Section 3.12.4.3).

The HSR Build Alternative would have permanent disruptive impacts on communities through displacements and relocations, impacts on community character and cohesion, and economic impacts. The removal of homes and businesses would have disruptive impacts on community cohesion, as discussed under Impact SOCIO #2. However, the HSR Build Alternative would also improve regional access, reduce travel times and congestion, and construct grade-separated crossings along the existing railroad corridor, thereby improving access within the communities within or adjacent to the population and community impacts RSAs. Displacements would generally occur along an existing railroad corridor or at the edges of neighborhoods, and would not divide or isolate existing cohesive communities. Therefore, it is not reasonably foreseeable that these impacts would result in substantial residential or business migration out of these communities. No extensive changes to the business environment or closures of either key “anchor” businesses or a substantial number of smaller businesses in a commercial district that may result in physical deterioration would occur as a result of the HSR Build Alternative.

Temporary revenue from increased construction spending and an increase in sales tax revenue associated with the creation of construction jobs would occur, thereby lessening any existing physical deterioration from disruptive impacts on communities from construction of the HSR Build

Alternative. Impacts SOCIO #8, SOCIO #10, and SOCIO #11 discuss in more detail the anticipated economic impacts of the HSR Build Alternative.

Construction spending would result in short-term positive impacts on sales tax and employment within Los Angeles County. In the short term, there would be negative impacts on property and sales tax revenues. However, any short-term impacts on local government tax revenues would be minor and temporary, only lasting as long as the construction period within the jurisdiction. Therefore, no physical deterioration from construction of the HSR Build Alternative is anticipated, and no mitigation would be required.

CEQA Conclusion

Construction of the HSR Build Alternative would not physically divide an established community, displace substantial numbers of existing people or housing, or result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities in order to maintain public services and therefore would not cause permanent physical deterioration. Permanent physical deterioration from construction of the HSR Build Alternative is a less than significant impact under CEQA. Therefore, CEQA does not require any mitigation.

Impact SOCIO #14: Temporary Impacts on Children's Health and Safety from Construction

The potential for the construction of the HSR Build Alternative to result in impacts on children's health and safety is evaluated in Appendix 3.12-C, Children's Health and Safety Risk Assessment. The HSR Build Alternative would be primarily within an existing railroad corridor in urban areas of Burbank, Glendale, and Los Angeles. Construction impacts that could affect children's health and safety (e.g., traffic hazards, air emissions, noise and vibration, and use of hazardous materials near schools) are described below.

Construction activities 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 3.2.6.3, Transportation, for information on the location and nature of temporary impacts on circulation. Although access to some neighborhoods, businesses, or community facilities would be disrupted and detoured for short periods during construction, access would remain available. Any roadway realignments would be built before the closure of the existing roadway to minimize impacts. In addition, construction activities would affect pedestrians, bicyclists, and transit because of detours, traffic delays, and increased congestion.

Construction activities, such as earthmoving, could result in fugitive dust emissions and potential exposure to cancer risks and Valley Fever. Refer to Section 3.3.6.3, Air Quality and Global Climate Change, for information on temporary construction emissions from fugitive dust and exhaust from construction and on-road vehicles. These emissions could have potential impacts on children near construction sites.

Noise and vibration from construction activities would temporarily exceed noise and vibration standards and affect sensitive receivers along the entire project corridor. Refer to Section 3.4.6.3, Noise and Vibration, for information on temporary construction impacts from noise and vibration. Section 3.4.6.3 Noise and Vibration identifies sensitive uses within 700 feet of the proposed HSR Track as opposed to the direct and indirect population and community impacts used to assess population and community impacts. Four schools are within 700 feet of the proposed HSR track: Hollywood Piano Company, Glendale Fire Training Center, Los Feliz Charter School for the Arts, and Sonia M. Sotomayor Learning Academies. The Glendale Fire Training Center would experience no impact, and the other three schools would experience a moderate noise impact.

The construction of the HSR Build Alternative would involve transporting, using, and disposing of construction-related hazardous materials and wastes, which could potentially result in accidental spills or releases of hazardous materials and wastes, and temporary hazards to schools. Refer to Section 3.10.6.3, Hazardous Materials and Wastes, for information on temporary construction impacts from hazardous materials and wastes.

As discussed in Section 3.12.4.2, IAMFs would be incorporated as part of the HSR Build Alternative design to help avoid and minimize impacts. Compliance with SOCIO-IAMF#1, TR-IAMF#2,

SS-IAMF#2, AQ-IAMF#1, and AQ-IAMF#2 would avoid and minimize impacts related to temporary increases in noise and dust and impacts related visual changes from construction of the HSR Build Alternative. SOCIO-IAMF#1 would require the preparation of a construction management plan with measures to maintain access and minimize impacts on community residents and businesses, including actions addressing communications, visual protection, air quality, safety controls, noise controls, and traffic controls. TR-IAMF#2 would require the implementation of a transportation plan to maintain traffic flow during peak travel periods and a traffic control plan to implement elements such as providing for safe pedestrian and bicycle access or detours, advising school districts of construction activities, and reducing access disruptions to residents, businesses, customers, delivery vehicles, and buses. In addition, compliance with SS-IAMF#2 would implement a Safety and Security Management Plan including a Valley Fever Action Plan during construction of the HSR Build Alternative. AQ-IAMF#1 would require the preparation of a fugitive dust control plan identifying the minimum features to be implemented during ground-disturbing activities. AQ-IAMF#2 would limit the type of paint used during construction to those with low volatile organic compound content. N&V-IAMF#1 would require the documentation of Federal Transit Administration and FRA guidelines for minimizing noise and vibration impacts when construction occurs within 1,000 feet of sensitive receptors (i.e., schools). Implementation of HMW-IAMF#7 would require the preparation of a hazardous materials and waste plan for hazardous materials and wastes transport, containment, and storage.

Even with compliance with these IAMFs, the disruption of circulation patterns and access, and impacts related to air quality and noise and vibration would still have impacts on children's safety. Therefore, mitigation would be required to address impacts on children's health related to air quality, noise and vibration, and the routine transport and handling of hazardous or acutely hazardous materials during construction of the HSR Build Alternative. Mitigation measures N&V-MM#1, N&V-MM#2, HMW-MM#1, and AQ-MM#1, described in Section 3.12.7, would be implemented to address impacts on children's health and safety.

CEQA Conclusion

Implementation of SOCIO-IAMF#1, TR-IAMF#2, SS-IAMF#2, AQ-IAMF#1, AQ-IAMF#2, and N&V-IAMF#1 would avoid and minimize impacts related to temporary changes in access, increases in noise and dust, and visual changes. Implementation of HMW-IAMF#7 would require the preparation of a hazardous materials and waste plan for hazardous materials and waste transport, containment, and storage. Because temporary impacts on children's health and safety from construction of the HSR Build Alternative would not physically divide an established community, displace housing or people, or necessitate the provision of new or physically altered governmental facilities, they are not considered impacts to communities within the context of CEQA. Therefore, CEQA does not require any mitigation.

Operations Impacts

Operation of the HSR Build Alternative would include inspection and maintenance along the track and railroad right-of-way, as well as on the structures, fencing, power system, train control, electric interconnection facilities, and communications. Operations and maintenance are described in Chapter 2, Alternatives.

Impact SOCIO #15: Permanent Disruption to Community Cohesion or Division of Existing Communities from Operation

Impacts from operation of the HSR Build Alternative that could result in the permanent disruption or division of existing communities include parking loss, increases in noise and traffic, disruption of access, pedestrian or cyclist safety hazards, visual changes, altered function of communities or neighborhoods, and disruption of established patterns of interactions among community members. The types of permanent operations impacts and the extent of the impact for each are discussed below. Although residential and business acquisitions and displacements would be permanent, the acquisitions and displacements would occur during construction. Therefore, the potential for construction of the HSR Build Alternative to physically remove homes, businesses, or important community facilities and displace substantial numbers of residents or businesses is discussed under the construction impacts section above.

Creation of Physical Barriers or Isolation of Communities

Introduction of new transportation facilities can create barriers that isolate one part of a community from another and disrupt access to community facilities and services or other destinations within a community. The new facilities associated with the HSR Build Alternative would generally be constructed along the existing rail right-of-way. The portion of the HSR Build Alternative that deviates from the existing railroad corridor would be built underground (see Figure 3.12-4). The grade separations would improve the access and circulation of the local streets by removing the existing at-grade crossing and eliminating wait times at crossings. Because the HSR Build Alternative would not create a new physical barrier or bisect or isolate established communities, substantial disruptions to community character and cohesion are not anticipated.

Parking Loss

Permanent parking losses would occur in the cities of Burbank, Glendale, and Los Angeles. Although some of the parking loss would be attributed to construction of the Burbank Airport Station, other parking losses would be dispersed along the alignment. Parking spaces would be provided at the Burbank Airport Station and shared with other service providers and businesses; these changes would be made to accommodate transit options, including the HSR Build Alternative. Parking reconfiguration and the addition of new parking would be made at the Downtown Burbank Metrolink Station, an early action project. The Main Street Grade Separation is another early action project that would raise Main Street in elevation and reconfigure several roadways on the east side of the Los Angeles River. Because these portions of the HSR Build Alternative would be designed to accommodate parking, long-term changes in parking from construction of the Burbank Airport Station, the Main Street Grade Separation, and the Downtown Burbank Metrolink Station would not represent a long-term impact on community character and cohesion.

Increased Noise

Permanent operations impacts would occur from intermittent increases in noise and vibration during operation of the HSR Build Alternative. Permanent noise impacts would result from increased traffic noise in areas surrounding each stationary facility, including the train stations, and increases in noise and vibration from passing high-speed trains. The operation of the HSR Build Alternative would have noise impacts within 700 feet of the footprint. Moderate long-term noise impacts would occur at 718 sensitive receivers and severe long-term noise impacts would occur at 211 sensitive noise receivers without the implementation of mitigation measures. Implementation of N&V-MM#3 would reduce the most severe impacts at sensitive receptors that meet the minimum requirements for a noise barrier. Because the HSR Build Alternative would operate within an existing rail corridor that is already characterized by train noise, noise from operation of the HSR Build Alternative would not disrupt an established community or degrade the existing community character.

Increased Traffic

Increased traffic congestion can delay access to neighborhoods and businesses and disrupt communities. However, operation of the HSR Build Alternative would have a minimal effect on traffic. The HSR Build Alternative would be entirely grade-separated, meaning that crossings with roads, railroads, and there would be overcrossings or undercrossings of other transportation facilities, so that the HSR Build Alternative would neither interrupt nor interface with other modes of transport. As part of the overall California HSR System, the operation of the HSR Build Alternative would also provide permanent beneficial effects through improved regional accessibility, reduced vehicle trips on freeways, and roadway crossings featuring improvements to active transportation infrastructure. The grade-separation projects included as part of the HSR Build Alternative would reduce travel delays by removing the at-grade crossings at the existing railroad tracks. Therefore, changes in traffic from operation of the HSR Build Alternative would not disrupt existing communities.

Disruption of Access

The HSR Build Alternative would bring regional social benefits by improving access to Los Angeles County and beyond. This includes better access to jobs, community amenities, and facilities; reduced travel times and traffic congestion due to shifting trips from the roadway system to the HSR system; and new employment opportunities from operation of the HSR Build Alternative. Employment and revenue-associated effects would be regional, but it is anticipated that the neighborhoods and communities around the HSR stations would also experience benefits. These effects would occur primarily near HSR station sites rather than along the HSR alignment. Regionally, the HSR Build Alternative and the California HSR System overall could improve social conditions by facilitating new access to employment, recreation, and educational opportunities through reduced commute times and increased connectivity statewide.

Pedestrian and Cyclist Safety Hazards

The HSR alignment would share right-of-way with other trains (Union Pacific Railroad, Southern California Regional Rail Authority, and Amtrak) and would share the new electrified tracks built as part of the HSR Build Alternative with the Southern California Regional Rail Authority. The HSR Build Alternative would implement positive train control and would travel at speeds similar to other existing trains in the Burbank to Los Angeles Project Section; therefore, it would not create a new safety hazard related to travel speeds. Because the HSR alignment would be primarily located within the existing railroad corridor, it would not create a new barrier for pedestrians or cyclists. Barriers to entering the right-of-way exist at all of the current at-grade crossings except at Main Street and the private Los Angeles Department of Water and Power road. Implementation of the HSR Build Alternative and early action projects would improve the existing environment for motorist, pedestrian, and bicyclist safety in several ways, including by removing train and automobile/bicycle/pedestrian conflicts at the existing at-grade intersections. The HSR alignment would also be fenced to prohibit public or unauthorized vehicle access. The HSR Build Alternative would benefit the community by improving motorist, pedestrian, and bicyclist safety by eliminating existing at-grade crossings and implementing roadway improvements near the stations and along the HSR alignment.

Changes in Visual Quality or Aesthetics

Permanent operations impacts would occur from changes in visual quality related to elements of the HSR Build Alternative. For example, construction of grade separations would introduce prominent visual elements to the existing environment. Although the Main Street overcrossing and Chevy Chase Drive closure/Goodwin Avenue undercrossing would introduce a visual change, the overall impact on visual quality would be neutral because the grade separations would be designed to reduce intrusiveness to the viewer, the overall viewer sensitivity at these locations would be low, and the grade separations would not be out of character with the existing environment. However, the visual character of the Sonora Avenue, Grandview Avenue, and Flower Street grade separations would be out of scale with the surrounding uses and would contrast with the existing environment. Construction of these three grade separations would cause long-term visual changes that would represent a permanent impact on community character and cohesion.

Alteration of Physical Shape, Character, or Function of Communities or Neighborhoods

The HSR Build Alternative would generally be built along the existing rail right-of-way and would therefore not divide a community or alter the overall physical shape of the community. Because trains already operate along the existing rail line, the addition of HSR trains would not substantially disrupt community character and cohesion. Access to the existing communities and neighborhoods would be maintained or improved (particularly at locations where the existing at-grade rail crossings would be grade-separated), and the function of communities would not be affected.

Disruption of Established Patterns of Interactions among Community Members

The increased use of the existing rail corridor could affect established patterns of interactions among community residents or disrupt residents' access to community facilities and services. It may affect community residents' perception of community facilities and services and their decisions to use them. However, because the operation of the HSR Build Alternative would take place within an existing rail corridor, quality of life perceptions are not likely to change to a

perceptible extent. Additionally, the grade separations would not result in the permanent division of existing communities during operation of the HSR Build Alternative because these improvements would not permanently introduce a new barrier or disrupt access to or from neighborhoods. Grade separations would improve the circulation of local streets by eliminating wait times at crossings. Bicycle and pedestrian facilities, including sidewalks, would be preserved. The street configuration changes during operation would generally improve access and community circulation, possibly improving community cohesion as well, by eliminating the rail corridor as a barrier or impediment to travel. Therefore, operation of the HSR Build Alternative would not disrupt the established patterns of interaction among the community.

As discussed in Section 3.12.4.2, IAMFs would be incorporated as part of the HSR Build Alternative design to help avoid and minimize impacts. Operation of the HSR Build Alternative would occur primarily within an existing railroad corridor adjacent to residential, commercial, and industrial communities, and it would not create a new physical barrier that would bisect or isolate established communities. However, operation of the HSR Build Alternative could have impacts related to noise, long-term parking losses and associated altered function of communities, and visual changes. There are no IAMFs that would avoid or reduce permanent noise impacts on residences and other sensitive receptors from operation of the HSR Build Alternative. However, although increased noise from operation of the HSR Build Alternative would affect individual property owners and other individuals, it would not represent a long-term impact on community character and cohesion. AVQ-IAMF#1 and AVQ-IAMF#2 require design and construction of structures that are in visual harmony with and have aesthetic character matching the surrounding environment, and they define the process to follow when implementing the Authority's aesthetic review process. After compliance with these IAMFs, long-term parking losses and associated altered function of communities, and visual changes from operation of the HSR Build Alternative, would still represent a long-term impact on community character and cohesion. Mitigation measures AVQ-MM#3 and AVQ-MM#4, described in Section 3.12.7, would be implemented to address permanent visual changes.

CEQA Conclusion

Within the context of CEQA, this analysis addresses the potential for the HSR Build Alternative to result in the division of communities from permanent operations impacts on communities. AVQ-IAMF#1 and AVQ-IAMF#2 require design and construction of structures that are in visual harmony with and have aesthetic character matching the surrounding environment, and they define the process to follow when implementing the Authority's aesthetic review process. However, after compliance with these IAMFs, long-term parking losses, associated altered function of communities, and visual changes from operation of the HSR Build Alternative would still represent a long-term impact on community character and cohesion. Therefore, CEQA requires mitigation. Mitigation measures AVQ-MM#3 and AVQ-MM#4 would incorporate Authority-approved aesthetic preferences for nonstation structures into final design and would provide vegetation screening along at-grade and elevated guideways adjacent to residential areas. These measures would mitigate permanent visual changes by reducing the prominence of the HSR Build Alternative structure, thereby reducing visual impacts below a level that would cause an impact on community character and cohesion. Therefore, with implementation of mitigation measures AVQ-MM#3 and AVQ-MM#4, permanent operational impacts related to the division of communities would be less than significant after mitigation.

Impact SOCIO #16: Permanent Employment from Operation Resulting in the Need for Additional Community Facilities

Long-term employment impacts of the HSR Build Alternative would result from two distinct factors. First, the ongoing operation and maintenance of the HSR Build Alternative would result in the direct creation of jobs, as well as additional indirect and induced jobs. Second, areas surrounding HSR stations are expected to have increases in employment opportunities due to improved accessibility.

Similar to the short-term increases in employment due to construction, long-term employment is predicted to increase as a result of the ongoing operation and maintenance of the HSR Build Alternative. As discussed in Section 3.18.6.3, Regional Growth, assuming HSR operations begin in 2029, the operation and maintenance of the HSR Build Alternative would add 1,073 jobs to Los Angeles County by 2040. During the first year of operation in 2029, operation and maintenance of the HSR Build Alternative would create 881 jobs, with an estimated 643 of those jobs within Los Angeles County and 238 jobs occurring as spillover impacts within Orange County. Incremental increases in job creation would occur after the first year of operation. These estimated increases include both the direct jobs resulting from operation and maintenance of the HSR Build Alternative and the indirect and induced jobs.

Of the employment opportunities resulting from operation and maintenance of the HSR Build Alternative, approximately 73 percent of the created jobs would be located in Los Angeles County, with the remaining 27 percent located in Orange County. The number of jobs created by HSR Build Alternative operation and maintenance is expected to grow at an annual rate of about 2 percent between 2029 and 2040. Most jobs resulting from operation and maintenance would be in the economic sector of transit and ground passenger transportation, which includes jobs related to train operations, dispatching, maintenance of equipment, and maintenance of infrastructure. Table 3.12-57 identified the types of jobs that would be created in Orange and Los Angeles Counties as a result of operation and maintenance of the HSR Build Alternative in 2029 and 2040. The values reported for 2029 and 2040 are totals and not incremental or “additional” jobs created.

Table 3.12-57 Types of Jobs Created by the HSR Built Alternative Operation and Maintenance

Job Type	2029	2040
Los Angeles County		
Transit and Ground Passenger Transportation	512	615
Other Services	40	42
General Merchandise and Retail Stores	35	65
Administrative and Support Services	39	44
Finance and Insurance Services	17	17
Los Angeles County Subtotal	643	783
Orange County (Spillover Impacts)		
Transit and Ground Passenger Transportation	169	203
Other Services	24	25
General Merchandise and Retail Stores	16	30
Administrative and Support Services	19	21
Finance and Insurance Services	10	10
Orange County Subtotal	238	289
Overall Total	881	1,072

Source: California High-Speed Rail Authority, 2019a

Given the size of the local unemployed civilian labor force (212,600 in 2017) in Los Angeles County, it is anticipated that these jobs can be absorbed by local workers (State of California Employment Development Department 2017). Overall, operation of the HSR Build Alternative would generate 1,072 jobs by 2040, but given the size of the available labor force, it would not have impacts related to permanent population increases and the need for increased housing or services.

The HSR Build Alternative is also expected to result in long-term job creation due to improvements to accessibility in areas surrounding stations. For example, improvements in accessibility can result in long-term dynamic economic impacts, such as enhanced labor market accessibility, increased business travel and transactions, direct transport cost savings, improved business and worker productivity, and the support of tourism and other important service sectors requiring patron accessibility.

CEQA Conclusion

Within the context of CEQA, this analysis addresses the potential for the HSR Build Alternative to result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities in order to maintain public services. Permanent employment from operation of the HSR Build Alternative would not require the provision of new or physically altered governmental facilities. The impact under CEQA would be less than significant. Therefore, CEQA does not require any mitigation.

Impact SOCIO #17: Permanent Property and Sales Tax Revenue Losses from Operation

County and City Property Tax Losses

The permanent property tax losses discussed under Impact SOCIO #11 would continue into the operational phase of the HSR Build Alternative; however, no additional impact would be incurred during operation of the HSR Build Alternative.

Long-Term Impacts on Property Values

Although considerable research has been conducted on the property value impacts of rail transit, especially on residential property values near transit stations, it is not clear how these findings would apply to HSR projects. Some categories of impacts associated with commuter rail (e.g., noise, vibration, and visibility) might be similar to those associated with HSR, but it is unclear whether the property value impacts would be similar. For HSR projects, stations are much farther apart than for commuter rail projects, and most trips are intercity trips rather than trips between suburbs and city centers.

Studies of the impacts of HSR projects on property values are not as numerous as those conducted for transit projects because most HSR systems have not been in place as long and were built outside the United States. The studies related to HSR that have been conducted offer no clear consensus on findings but show that the potential exists for the values of residential and commercial properties to appreciate as a result of HSR projects. Property value increases can result from both new access to a HSR transportation system and the associated intensification of development that can occur around stations. However, given the potential for nuisance impacts (e.g., noise and visual impacts) resulting from HSR trains passing nearby, it is possible that some properties could experience a decrease in value. This potential for a decrease in property value may be particularly true for residences and businesses close enough to the alignment to be exposed to some nuisance impacts but not in proximity to HSR stations. These residences and businesses would enjoy few benefits (mainly those deriving from improved accessibility) and would not enjoy enough benefits to offset the nuisance impacts. As such, these residences and businesses are more likely to experience a decrease in value. This balance between the amount of project benefit compared to the nuisance factor would be unique for each property and would be only one of the many factors influencing the ultimate market value of any particular property.

CEQA Conclusion

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

Impact SOCIO#18: Permanent Impacts on Children’s Health and Safety from Operations

The HSR Build Alternative would be primarily within an existing railroad corridor in urban areas of Burbank, Glendale, and Los Angeles. Operations impacts related to children’s health and safety (e.g., traffic hazards, air emissions, noise and vibration, and use of hazardous materials near schools) are described below.

Roadway modifications may change some access and routing of school buses due to the permanent closure of Chevy Chase Drive. However, a new grade-separated HSR undercrossing would be built approximately 1,500 feet to the north at Goodwin Drive. Additionally, a pedestrian undercrossing would be provided at Chevy Chase Drive. Overall, alternative routes would be provided to minimize impacts from the permanent closure of Chevy Chase Drive. Refer to Section 3.2, Transportation, for information on the location and nature of permanent impacts on access and circulation. Out-of-direction travel distances required due to road closures would not result in long detours, and the Authority would work with the local jurisdictions to provide additional access as needed. The HSR Build Alternative would be grade-separated from the existing roads, so there would be no conflict between school buses and the HSR trains. The HSR Build Alternative would provide new grade-separated crossings, which would remove roadway conflicts with the railroad corridor and improve safety and access for buses, resulting in a beneficial effect related to children's health and safety.

The HSR Build Alternative would result in a beneficial effect on regional and statewide air quality from HSR operation because of a decrease in emissions. Refer to Section 3.3.6.3, Air Quality and Global Climate Change, for information on operational emissions. All residents, including children, in the cities of Burbank, Glendale, and Los Angeles would benefit from the decrease in air pollutants.

HSR operation would result in impacts from increased noise levels. Refer to Section 3.4.6.3, Noise and Vibration, for information on operations impacts from increased noise levels. Of the five schools within 700 feet of the HSR Build Alternative, three schools would experience a moderate impact and four schools would have no impact as a result of HSR Build Alternative operations. No schools would be affected by vibration.

During operation of the HSR system, only minor amounts of hazardous materials would be used, and all laws, regulations, and ordinances would be followed with respect to the transport, use, storage, and disposal of hazardous materials. Refer to Section 3.10.6.3, Hazardous Materials and Wastes, for information on operations impacts from hazardous materials.

Title 5 C.F.R. 14010c, calls for a separation between schools and power transmission lines of 100 feet for 50- to 133-kilovolt lines. The HSR Build Alternative would be powered by a 25-kilovolt system; therefore, the electrification of the trains itself would not be a safety hazard to schools. The HSR Build Alternative would not require the construction of new power transmission lines near existing or future planned schools during its operation. Refer to Section 3.11.6.3, Safety and Security, for information on operations impacts related to safety and security.

Derailment of a train during a seismic event or other natural disaster could be a safety hazard to schools along the HSR Build Alternative if the train were to leave the HSR right-of-way and collide with other structures or people on adjacent properties. This hazard is associated with the physical mass and speed of the train. Because the HSR system would carry passengers and be electric-powered, there would be no safety hazard associated with HSR cargo or fuel. The physical impact of a high-speed train leaving the right-of-way could only occur within roughly 100 feet of the right-of-way. If a derailment were to occur next to a school, the train would remain within the HSR right-of-way. In addition, a basic design feature of an HSR system is to contain trainsets within the operational corridor. Because the train would be contained in the HSR right-of-way in the event of derailment and would not contain cargo or fuel that could result in a fire or explosion, the HSR Build Alternative would not increase hazards to nearby schools.

As discussed in Section 3.12.4.2, IAMFs would be incorporated as part of the HSR Build Alternative design to help avoid and minimize impacts. Operation of the HSR Build Alternative would not cause indirect impacts on children's health from changes in air quality, hazardous impacts, and safety issues. There are no IAMFs that would avoid or minimize indirect impacts on children's health from increases in noise levels, and mitigation would be required. N&V-MM#3, N&V-MM#4, N&V-MM#5, and N&V-MM#6, described in Section 3.12.7, would be implemented to address operational noise impacts.

CEQA Conclusion

Because permanent impacts on children's health and safety from operation of the HSR Build Alternative would not physically divide an established community, displace housing or people, or necessitate the provision of new or physically altered governmental facilities, permanent impacts to children's health from operation are not considered impacts on communities within the context of CEQA. Therefore, CEQA does not require any mitigation.

3.12.7 Mitigation Measures

The Authority has identified the following mitigation measures for impacts under NEPA and significant impacts under CEQA that cannot be avoided or minimized adequately by IAMFs.

AQ-MM#1: Offset Project Construction Emissions through a SCAQMD Emission Offsets Program

The Authority would offset emissions that exceed General Conformity *de minimis* levels by obtaining, through purchase of emission offsets through an anticipated SCAQMD emission offset program or Air Quality Investment Program, emission reduction credits or another mechanism approved by SCAQMD, a sufficient quantity of nitrous oxide (NO_x) offsets to demonstrate General Conformity. The Authority is committing to the purchase of additional offsets to net all criteria pollutant emissions to levels that are below the SCAQMD daily emissions thresholds for each calendar year that exceedances occur; however, consultation with SCAQMD has suggested that a sufficient quantity of offsets may not be available to achieve this goal. Due to the limited quantity of construction emission offsets from SCAQMD's emission banking system, all construction-related emission offsets programs would be individually reviewed by SCAQMD.

The Authority will enter into a contractual agreement to mitigate (by offsetting) to net zero the project's actual emissions from construction equipment and vehicle exhaust emissions NO_x. The Authority would provide calculations to the satisfaction of SCAQMD of the amount of emissions from annual and daily construction activities. Emissions would be calculated annually using the methodology described in the Draft EIR/EIS or through an alternative methodology approved by SCAQMD at the time of analysis. The exact number of NO_x credits in the SCAQMD emission offsets program is unknown, but 810.5 tons of NO_x credits were traded in 2015 and 43.3 tons of NO_x credits were traded in 2012 (SCAQMD 2016). Therefore, there should be enough available NO_x credits in the program to offset approximately 40 tons of NO_x per year from the HSR Build Alternative in the SCAQMD. All construction contractors would be required to track hours of use for each piece of equipment, complete an equipment list, and submit the list to SCAQMD by the 10th of each month for each construction project. Use of rental equipment and subcontractor equipment must also be included in the monthly reporting. SCAQMD would then know the magnitude of the required emission reductions prior to issuing emission offsets to the Authority.

Emission offsets may be obtained by purchase of credits (e.g., Emission Reduction Credits) approved by SCAQMD, or through the funding of emission reduction projects. Purchase of offsets may be obtained through the anticipated emission offset program, SCAQMD's Air Quality Investment Program, Emission Reduction Credits, or another mechanism, subject to discussion with and approval by SCAQMD. To qualify under this mitigation measure, any specific emissions reduction project must result in emission reductions within the South Coast Air Basin that are real, surplus, quantifiable, and enforceable, and that would not otherwise be achieved through compliance with existing regulatory requirements or any other legal requirement.

Pursuant to 40 C.F.R. 93.163(a), the necessary reductions must be achieved (contracted and delivered) by the applicable year in question. Additional lead time may be necessary, depending on the level of off-site emission reductions required for a specific year. Prior to the approval of project plans or the issuance of grading permits, the Authority would submit proof to SCAQMD that the offsets have been purchased and any emission offsets projects have been funded and scheduled for implementation within the same year of construction.

The SCAQMD and the Authority participated in a coordination teleconference in September 2018 to discuss the challenges associated with quantifying available emission offsets. To participate in the anticipated emission offset program, the Authority would be required to develop the

necessary construction equipment activity level metrics to ensure that ongoing emission calculations are accurate, verifiable, and reproducible. Ultimately, it would be the responsibility of the Authority and its construction contractors to ensure the total tonnage of NOx offsets is tracked accurately and that equivalent offsets could be obtained through credits from SCAQMD's emission offsets program. Due to the uncertainty of available credits, the air quality impact would remain significant and unavoidable.

Impacts from Implementing Mitigation Measure AQ-MM#1

Mitigation Measure AQ-MM#1 would require the purchase of offset emissions during project construction through an agreement with the SCAQMD. It is anticipated that fuel and energy consumption, as well as the associated emissions resulting from the offset emission reduction projects, would decrease with implementation of Mitigation Measure AQ-MM#1. This mitigation measure would have no impacts.

AVQ-MM#1: Minimize Visual Disruption from Construction Activities

Prior to construction (any ground-disturbing activity), the contractor would prepare a technical memorandum identifying how the project would minimize construction-related visual/aesthetic disruption and include the following activities:

- Minimize pre-construction clearing to that necessary for construction.
- Limit the removal of buildings to those that would conflict with project components.
- When possible, preserve existing vegetation, particularly vegetation along the edge of construction areas that may help screen views.
- After construction, regrade areas disturbed by construction, staging, and storage to original contours and revegetate with plant material similar in numbers and types to that that was removed, based upon local jurisdictional requirements. If no local jurisdictional requirements exist, replace removed vegetation at a 1:1 replacement ratio for shrubs and small trees, and a 2:1 replacement ratio for mature trees. For example, if the contractor removes 10 mature trees in an area, replant 20 younger trees that within 5 to 15 years (depending upon the growth rates of the trees) would be of a height and spread to provide visual screening similar to the visual screening provided by the trees that were removed for construction. Replaced shrubs would be a minimum 5 gallons and replaced trees would be a minimum 24-inch box and minimum 8 feet in height.
- To the extent feasible, do not locate construction staging sites within the immediate foreground distance (0 to 500 feet) of existing residential neighborhoods, recreational areas, or other land uses that include highly sensitivity viewers. Where such siting is unavoidable, screen staging sites from viewers using appropriate solid screening materials such as temporary fencing and walls. Paint over or remove any graffiti or visual defacement of temporary fencing and walls within 5 business days of it occurring.

The technical memorandum would be submitted to the Authority for review and approval.

Impacts from Implementing Mitigation Measure AVQ-MM#1

This mitigation measure would have no impact under CEQA.

AVQ-MM#2: Minimize Light Disturbance during Construction

Prior to construction (any ground-disturbing activity requiring nighttime construction), the contractor would prepare a technical memorandum verifying how the contractor would shield nighttime construction lighting and direct it downward in such a manner to minimize the light that falls outside the construction site boundaries. The technical memorandum would be submitted to the Authority for review and approval.

Impacts from Implementing Mitigation Measure AVQ-MM#2

This mitigation measure would have no impact under CEQA.

AVQ-MM#3: Incorporate Design Aesthetic Preferences into Final Design and Construction of Nonstation Structures

Prior to construction (any ground-disturbing activity), the contractor would work with the Authority and local jurisdictions to incorporate the Authority-approved aesthetic preferences for nonstation structures into final design and construction. Refer to Aesthetic Options for Non-Stations Structures (Authority 2017). A technical memorandum would be submitted to the Authority to document compliance.

Impacts from Implementing Mitigation Measure AVQ-MM#3

This mitigation measure would have no impact under CEQA.

AVQ-MM#4: Provide Vegetation Screening along At-Grade and Elevated Guideways Adjacent to Residential Areas

Prior to operation and maintenance of the HSR Build Alternative, the contractor would plant trees (minimum 24-inch box and 8 feet in height) along the edges of the HSR rights-of-way in locations adjacent to residential areas to visually screen the elevated guideway and the residential area. The species of trees to be installed would be selected based on their mature size and shape, growth rate, hardiness, and drought tolerance. No species on the Invasive Species Council of California's list would be planted. Upon maturity, the crowns of trees used would be tall enough to partially, or fully, screen views of the elevated guideway from adjacent at-grade areas. Upon maturity, trees would allow ground-level views under the crowns (with pruning if necessary) and would not interfere with the 15-foot clearance requirement for the guideway. The trees would be maintained. Irrigation systems would be installed within the tree planting areas.

The contractor would prepare a technical memorandum within 90 days of completing any construction section or segment documenting the species of trees that were incorporated into the edges of the HSR right-of-way adjacent to residential uses. The technical memorandum would be submitted to the Authority to document compliance.

Impacts from Implementing Mitigation Measure AVQ-MM#4

This mitigation measure would have no impact under CEQA.

HMW-MM#1: Limit Use of Extremely Hazardous Materials near Schools during Construction

Prior to construction, the contractor would prepare a memorandum regarding hazardous materials best management practices related to construction activity for approval by the Authority. The memorandum would confirm that the contractor would not handle or store an extremely hazardous substance (as defined in California Public Resources Code Section 21151.4) or a mixture containing extremely hazardous substances in a quantity equal to or greater than the state threshold quantity specified pursuant to subdivision (j) of Section 25532 of the Health and Safety Code within 0.25 mile of a school. The memorandum would acknowledge that prior to construction activities, signage would be installed to delimit all work areas within 0.25 mile of a school, informing the contractor not to bring extremely hazardous substances into the area. The contractor would be required to monitor all use of extremely hazardous substances. This construction mitigation measure for hazardous materials and wastes is consistent with California Public Resources Code Section 21151.4 and would be effective in reducing the impact to a less than significant level under CEQA. The memorandum would be submitted to the Authority prior to any construction involving an extremely hazardous substance.

Impacts from Implementing Mitigation Measure HMW-MM#1

This mitigation measure would have no impact under CEQA.

N&V-MM#1: Construction Noise Mitigation Measures

Prior to construction (any ground-disturbing activity), the contractor would prepare a noise-monitoring program for Authority approval. The noise-monitoring program would describe how during construction the contractor would monitor construction noise to verify compliance with the noise limits (an 8-hour 24-hour equivalent sound level, A-weighted decibels of 80 during the day and 70 at night for residential land use, 85 for both day and night for commercial land use, and 90 for both day and night for industrial land use) where a noise-sensitive receptor is present. The contractor would be given the flexibility to meet the FRA construction noise limits in the most efficient and cost-effective manner. This can be done by either prohibiting certain noise-generating activities during nighttime hours or providing additional noise control measures to meet the noise limits. In addition, the noise-monitoring program would describe the actions required of the contractor to meet required noise limits. These actions would include the following nighttime and daytime noise control mitigation measures, as necessary:

- Install a temporary construction site sound barrier near a noise source.
- Avoid nighttime construction in residential neighborhoods.
- Locate stationary construction equipment as far as possible from noise-sensitive sites.
- Reroute construction truck traffic along roadways that would cause the least disturbance to residents.
- During nighttime work, use smart back-up alarms, which automatically adjust the alarm level based on the background noise level, or switch off back-up alarms and replace with spotters.
- Use low-noise emission equipment.
- Implement noise-deadening measures for truck loading and operations.
- Monitor and maintain equipment to meet noise limits.
- Line or cover storage bins, conveyors, and chutes with sound-deadening material.
- Use acoustic enclosures, shields, or shrouds for equipment and facilities.
- Use high-grade engine exhaust silencers and engine-casing sound insulation.
- Prohibit aboveground jackhammering and impact pile driving during nighttime hours.
- Minimize the use of generators to power equipment.
- Limit use of public address systems.
- Grade surface irregularities on construction sites.
- Use moveable sound barriers at the source of the construction activity.
- Limit or avoid certain noisy activities during nighttime hours.
- To mitigate noise related to pile driving, the use of an auger to install the piles instead of a pile driver would reduce noise levels substantially. If pile driving is necessary, limit the time of day that the activity can occur.

The Authority would establish and maintain in operation until completion of construction a toll-free “hotline” regarding the project section construction activities. The Authority would arrange for all incoming messages to be logged (with summaries of the contents of each message) and for a designated representative of the Authority to respond to hotline messages within 24 hours (excluding weekends and holidays). The Authority would make a reasonable good faith effort to address all concerns and answer all questions, and would include on the log its responses to all callers. The Authority would make a log of the incoming messages and the Authority’s responsive actions publicly available on its website.

The contractor would provide the Authority with an annual report by January 31 of the following year documenting how it implemented the noise-monitoring program.

Impacts from Implementing Mitigation Measure N&V-MM#1

Measures to reduce construction-related noise levels would not expand the construction area, and preparation of the noise monitoring program would not result in any impacts to the environment. Therefore, the impacts of mitigation would be less than significant under CEQA.

N&V-MM#2: Construction Vibration Mitigation Measures

Prior to construction involving impact pile driving within 50 feet of any building, the contractor would provide the Authority with a vibration technical memorandum documenting how project pile driving criteria would be met. Upon approval of the technical memorandum by the Authority, and where a noise-sensitive receptor is present, the contractor would comply with the vibration reduction methods described in that memorandum. Potential construction vibration building damage is only anticipated from impact pile driving at very close distances to buildings. If pile driving occurs more than 25 to 50 feet from buildings, or if alternative methods such as push piling or auger piling are used, damage from construction vibration is not expected to occur. When a construction scenario has been established, pre-construction surveys would be conducted by the contractor at locations within 50 feet of pile driving to document the existing condition of buildings in case damage is reported during or after construction. The contractor would arrange for the repair of damaged buildings or would pay compensation to the property owner.

Impacts from Implementing Mitigation Measure N&V-MM#2

Although pre-construction surveys and repair of damaged buildings would likely be conducted outside of the HSR Build Alternative footprint, these activities would not result in environmental impacts. Therefore, the impacts of mitigation would be less than significant under CEQA.

N&V-MM#3: Implement Proposed California High-Speed Rail Project Noise Mitigation Guidelines

Prior to operation and maintenance of the HSR, the Authority would prepare an HSR operation noise impact report. Based on the recommendations in the approved noise impact report the Authority would install sound barriers where they can achieve between 5 and 15 decibels (dB) of noise reduction, depending on their height and location relative to the tracks. The primary requirements for an effective sound barrier are that the barrier must (1) be high enough and long enough to break the line of sight between the sound source and the receiver, (2) be of an impervious material with a minimum surface density of 4 pounds per square foot, and (3) not have any gaps or holes between the panels or at the bottom. Because many materials meet these requirements, aesthetics, durability, cost, and maintenance considerations usually determine the selection of materials for sound barriers. Depending on the situation, sound barriers can become visually intrusive. Typically, the sound barriers style is selected with input from the local jurisdiction to reduce the visual impact of barriers on adjacent lands uses (refer to Aesthetic Options for Non-Station Structures (Authority 2017)). For example, sound barriers could be solid or transparent, and made of various colors, materials, and surface treatments. The minimum number of affected sites should be at least 10, and the length should be at least 800 feet. The maximum sound barrier height would be 14 feet for at-grade sections; however, all sound barriers would be designed to be as low as possible to achieve a substantial noise reduction. Berm and berm/wall combinations are the preferred types of sound barriers where space and other environmental constraints permit. On aerial structures, the maximum sound barrier height would also be 14 feet, but barrier material would be limited by engineering weight restrictions for barriers on the structure. Sound barriers on the aerial structure would still be designed to be as low as possible to achieve a substantial noise reduction. Sound barriers on both aerial structures and at-grade structures could consist of solid, semitransparent, or transparent materials as defined in the Aesthetic Options for Non-Station Structures (Authority 2017).

The Authority would work with the communities to identify how the use and height of sound barriers would be determined. Options may include reducing the height of sound barriers and combining barriers with sound insulation.

If sound barriers are not proposed or do not reduce sound levels to below a severe impact level, building sound insulation would be installed where approved by the property owner. Sound insulation of residences and institutional buildings to improve the outdoor-to-indoor noise reduction is a mitigation measure that can be provided when the use of sound barriers is not feasible in providing a reasonable level (5 to 7 dB) of noise reduction. Although this approach has no impact on noise in exterior areas, it may be the best choice for sites where sound barriers are not feasible or desirable and for buildings where indoor sensitivity is of most concern. Substantial improvements in building sound insulation (on the order of 5 to 10 dB) can often be achieved by adding an extra layer of glazing to windows, by sealing holes in exterior surfaces that act as sound leaks, and by providing forced ventilation and air conditioning so that windows do not need to be opened.

If sound barriers or sound installation is not effective, the Authority would acquire easements on properties severely affected by noise. This approach is usually taken only in isolated cases where other mitigation options are infeasible, impractical, or too costly.

Impacts from Implementing Mitigation Measure N&V-MM#3

The installation of sound barriers would remain within the HSR Build Alternative footprint and would not be additional obstacles to wildlife movement because they would be installed within the HSR right-of-way. Section 3.7.6.3, Biological Resources and Wetlands, addresses impacts specific to wildlife. However, installation of a sound barrier has the potential to affect visual and aesthetic qualities. Section 3.16.6.3, Aesthetics and Visual Resources, addresses potential impacts on visual and aesthetic resources in the visual RSA. Although providing property insulation would occur beyond the construction boundary, increases in noise would be minimal to negligible in comparison to the scope of the HSR Build Alternative. Therefore, the impacts of mitigation would be less than significant under CEQA.

N&V-MM#4: Vehicle Noise Specification

During HSR vehicle technology procurement, the Authority would require bidders to meet the federal regulations (40 C.F.R. 201.12/13) at the time of procurement for locomotives (currently a 90-dB-level standard) operating at speeds of greater than 45 miles per hour.

Impacts from Implementing Mitigation Measure N&V-MM#4

Implementation of the recommendations above would require the construction of HSR locomotives to meet federal regulations (40 C.F.R. 201.12/13). This measure would not increase noise and vibration levels within the noise and vibration RSA. Therefore, the impacts of mitigation would be less than significant under CEQA.

N&V-MM#5: Special Trackwork

Prior to construction, the contractor would provide the Authority with an HSR operation noise technical report for review and approval. The report would address the minimization/elimination of rail gaps at turnouts. Because the impacts of HSR wheels over rail gaps at turnouts increases HSR noise by approximately 6 dB over typical operations, turnouts can be a major source of noise impact. If the turnouts cannot be moved from sensitive areas, the noise technical report would recommend the use special types of trackwork that eliminate the gap. The Authority would require the project design to follow the recommendations in the approved noise impact report.

Impacts from Implementing Mitigation Measure N&V-MM#5

Implementation of the recommendations above would require special types of trackwork to eliminate gaps that would reduce noise levels generated from rail turnouts. This measure would be conducted within the HSR Build Alternative right-of-way and staging areas. The increase in noise and vibration would be minimal to negligible in comparison to the scope of the HSR Build Alternative. Therefore, the impacts of mitigation would be less than significant under CEQA.

N&V-MM#6: Additional Noise and Vibration Analysis Following Final Design

Prior to construction, the contractor would provide the Authority with an HSR operation noise technical report for review and approval. If final design or final vehicle specifications result in changes to the assumptions underlying the noise technical report, the Authority would prepare necessary environmental documentation, as required by CEQA and NEPA, to reassess noise impacts and mitigation.

Impacts from Implementing Mitigation Measure N&V-MM#6

Implementation of the recommendations above would require a reassessment of noise and vibration impacts and recommendations for mitigation if there are changes in assumptions during final design of the HSR train sets. Additional mitigation measures that may result from changes to the assumptions for the HSR Build Alternative would be minimal in comparison to the scope of the HSR Build Alternative. Therefore, the impacts of mitigation would be less than significant under CEQA.

3.12.7.1 Early Action Projects

As described in Chapter 2, Section 2.5.2.9, early action projects would be completed in collaboration with local and regional agencies. They include grade separations and improvements at regional passenger rail stations. These early action projects are analyzed in further detail to allow the agencies to adopt the findings and mitigation measures as needed to construct the projects.

The mitigation measures listed in Table 3.12-58 would be required for the early action projects.

Table 3.12-58 Mitigation Measures Required for Early Action Projects

Early Action Project	Impact	Mitigation Measures
Downtown Burbank Metrolink Station Modifications	Impact SOCIO #15	N&V-MM#1, N&V-MM#2, HMW-MM#1, AQ-MM#1
	Impact SOCIO #18	N&V-MM#3, N&V-MM#4, N&V-MM#5, N&V-MM#6
Flower Street Grade Separation	Impact SOCIO #15	N&V-MM#1, N&V-MM#2, HMW-MM#1, AQ-MM#1
	Impact SOCIO #18	N&V-MM#3, N&V-MM#4, N&V-MM#5, N&V-MM#6
Grandview Avenue Grade Separation	Impact SOCIO #15	N&V-MM#1, N&V-MM#2, HMW-MM#1, AQ-MM#1
	Impact SOCIO #18	N&V-MM#3, N&V-MM#4, N&V-MM#5, N&V-MM#6
Goodwin Avenue/Chevy Chase Drive Grade Separation	Impact SOCIO #15	N&V-MM#1, N&V-MM#2, HMW-MM#1, AQ-MM#1
Main Street Grade Separation	Impact SOCIO #15	N&V-MM#1, N&V-MM#2, HMW-MM#1, AQ-MM#1
	Impact SOCIO #18	N&V-MM#3, N&V-MM#4, N&V-MM#5, N&V-MM#6

3.12.8 NEPA Impact Summary

This section summarizes the impacts of the HSR Build Alternative and compares them to the impacts of the No Project Alternative under build year conditions. Effects are assessed after implementation of the project IAMFs identified in Section 3.12.4.2, Impact Avoidance and Minimization Features. With implementation of these IAMFs and the mitigation measures described in Section 3.12.7, the HSR Build Alternative has been designed to avoid or minimize impacts related to socioeconomics and communities to the maximum extent practicable.

The No Project Alternative could result in other transportation improvement projects (e.g., road widening or construction of new roadways) that may be implemented in the future to meet growing regional transportation needs. These projects could result in impacts on communities and neighborhoods (including displacements and relocations), environmental justice populations (i.e., minority and low-income populations) and on local and regional economies (e.g., school district funding and county and city property and sales tax revenues). All projects requiring discretionary action under the No Project Alternative would be subject to environmental review through which impacts associated with these projects would be addressed.

Under the No Project Alternative, recent development trends within the Burbank to Los Angeles Project Section would continue, leading to ongoing socioeconomics and community impacts. The job creation, other beneficial economic activity, and improvements to community connectivity in new grade-separated areas that would occur under the HSR Build Alternative would likely not occur under the No Project Alternative.

Under the No Project Alternative, the *2016–2040 Regional Transportation Plan/Sustainable Communities Strategy* adopted by the Southern California Association of Governments (2016a) would encourage both compact development and greater investment in local transit modes as a means of reducing greenhouse gas emissions. The No Project Alternative includes many planned transportation and development projects that would likely be implemented by the year 2040. These projects could result in other transportation improvement projects that may be implemented in the future to meet growing regional transportation needs. These projects could also result in impacts on communities and neighborhoods, environmental justice populations, and local and regional economies. The effects associated with such projects are unknown at this time and would be addressed through separate environmental analyses conducted in the future. All projects requiring discretionary action under the No Project Alternative would be subject to environmental review through which effects associated with these projects would be addressed.

As described in Impact SOCIO #1 in Section 3.12.6.3, construction of the HSR Build Alternative would cause temporary parking loss, increased noise and traffic, increased emergency response times, disruption of access, pedestrian and cyclist safety hazards, visual changes, disruption of established patterns of interaction among community members, the introduction of a new physical barrier, and altered function of communities or neighborhoods and. After implementation of TR-IAMF#2, TR-IAMF#3, TR-IAMF#4, TR-IAMF#5, TR-IAMF#6, TR-IAMF#7, TR-IAMF#8, TR-IAMF#11, TR-IAMF#12, NV-IAMF#1, and SS-IAMF#1, impacts from temporary parking losses, increased noise and traffic, changes in visual quality, and alteration of function of communities and neighborhoods would continue to disrupt community character and cohesion. After implementation of mitigation measures N&V-MM#1, AVQ-MM#1, and AVQ#2, impacts on community character and cohesion from temporary increases in noise and visual changes would be fully minimized. However, no feasible mitigation is available to fully minimize or avoid the temporary disruption of community character and cohesion from temporary parking losses and the associated altered function of communities and neighborhoods or the introduction of a new physical barrier south of the Burbank Airport Station. Therefore, there would be an impact under NEPA related to the temporary disruption to community cohesion.

Construction of the HSR Build Alternative would disrupt community cohesion in the Lincoln Heights NCA within the city of Los Angeles. Implementation of SOCIO-IAMF#2 and SOCIO-IAMF#3 would minimize the potential for construction of the HSR Build Alternative to permanently disrupt community cohesion. However, construction of the HSR Build Alternative would still permanently disrupt community cohesion.

The HSR Build Alternative would displace approximately 19 residents in the city of Burbank and approximately 15 residents in the city of Los Angeles, and there is sufficient replacement housing available that is comparable to the displaced residential units. As discussed under Impact SO #4 in Section 3.12.6.3, the HSR Build Alternative's potential impacts related to residential displacements would be minimized by implementation of IAMFs.

Construction of the HSR Build Alternative would result in substantial number of business displacements in Burbank, Glendale, and Los Angeles. As discussed under Impact SO #5 in

Section 3.12.6.3, the implementation of SOCIO-IAMF#2 and SOCIO-IAMF#3 would minimize the potential for construction of the HSR Build Alternative to displace and relocate local businesses outside their existing communities. However, there would be an impact under NEPA related to the displacement of businesses from construction of the HSR Build Alternative.

The HSR Build Alternative would displace 12 residences, which could affect households with sensitive populations. However, there is sufficient replacement housing available that is comparable to the displaced residential units. As discussed under Impact SO #5 in Section 3.12.6.3, the HSR Build Alternative's potential impacts related to residential displacements would be minimized by the implementation of SOCIO-IAMF#2 and SOCIO-IAMF#3.

Construction of the HSR Build Alternative would not permanently displace and relocate any community facilities. Therefore, there would be no impact under NEPA related to the permanent displacement and relocation of community facilities from construction.

Construction impacts related to the disruption of community facilities would be fully minimized by the implementation of LU-IAMF#3, NV-IAMF#1, AQ-IAMF#1, AQ-IAMF#2, TR-IAMF#2, and SS-IAMF#2. Therefore, there would be no impact under NEPA related to the temporary disruption of community facilities from construction of the HSR Build Alternative.

A small percentage of temporary increases in employment associated with construction of the HSR Build Alternative relative to the existing employment rate in Los Angeles County would not attract a substantial number of workers from outside the county. The existing unemployed workforce is expected to fill most of these jobs. Therefore, the construction of the HSR Build Alternative would not result in the need to expand or construct new community facilities.

Potential impacts related to the permanent disruption of community facilities from construction of the HSR Build Alternative would not affect the use and function of community facilities. Therefore, there would be no impact under NEPA related to the permanent disruption of community facilities from construction of the HSR Build Alternative.

Construction of the HSR Build Alternative would generate temporary sales tax revenues for Los Angeles County. The expected annual gain in sales tax revenue during construction of the HSR Build Alternative is greater than the expected loss of sales tax from business relocations. Therefore, the overall net impact on sales tax revenue would be beneficial for Los Angeles County during construction of the HSR Build Alternative.

Parcel acquisitions and business displacements associated with the HSR Build Alternative would result in property and sales tax revenue losses for the cities of Burbank, Glendale, and Los Angeles, and for Los Angeles County. Given the small percentage of the total revenue that could be lost by those jurisdictions, construction of the HSR Build Alternative is not anticipated to result in a broad long-term impact on the regional tax base. Nevertheless, construction of the HSR Build Alternative would result in permanent property and sales tax losses.

Construction of the HSR Build Alternative would result in the displacement of seven residential units in Burbank and five residential units in Los Angeles. The potential small losses in student enrollment from these displacements would affect Burbank Unified School District and Los Angeles Unified School District. In addition, property acquisitions associated with the HSR Build Alternative would result in the loss of property tax revenue for Burbank Unified School District, Glendale Unified School District, and Los Angeles Unified School District. Given the small percentage of the total revenue that could be lost at each affected school district, construction of the HSR Build Alternative is not anticipated to result in a broad long-term impact on the regional revenue base. However, localized impacts could occur at Burbank Unified School District, which would experience the highest revenue loss. Overall, construction of the HSR Build Alternative would result in some permanent changes in school district funding.

Construction of the HSR Build Alternative would have the potential to displace businesses and residents, disrupt existing communities, and change local tax revenues. However, the HSR Build Alternative would not result in considerable residential migration, closures in key "anchor"

businesses, or large reductions in property and sales tax revenues. Construction of the HSR Build Alternative is not anticipated to result in physical deterioration of area communities.

Construction of the HSR Build Alternative would result in temporary impacts on children's health and safety during construction. Mitigation measures N&V-MM#1, N&V-MM#2, HMW-MM#1, and AQ-MM#1, described in Section 3.12.7, would be implemented to address impacts on children's health and safety.

Operation of the HSR Build Alternative would result in a net benefit to regional and statewide air quality because of a decrease in emissions. All residents, including children, in the cities of Burbank, Glendale, and Los Angeles would benefit from the decrease in air pollutants associated with the projected shift in transportation modes. In addition, operation of the HSR Build Alternative would bring social benefits to Los Angeles County by improving access to jobs and community amenities, reducing travel times, reducing traffic congestion, and providing new employment opportunities during operation. Although employment impacts would be regional, the additional benefits would be likely to occur in the neighborhoods where the new HSR stations would be built. The people who live or work in the general vicinity of the proposed stations would be likely to benefit the most from the improved access provided by the new HSR facilities. Those who live along the portions of the alignment without station access would not enjoy the same level of mobility and access benefits. The HSR Build Alternative could also enhance social conditions on a regional scale by facilitating new access to employment and educational opportunities through reduced commute times.

Operation of the HSR Build Alternative would cause permanent parking loss and associated altered function of communities or neighborhoods, increased noise, and changes in visual quality, which could affect community character and cohesion. After implementation of AVQ-IAMF#1 and AVQ-IAMF#2, visual changes from operation of the HSR Build Alternative would still represent a long-term impact on community character and cohesion. After implementation of mitigation measures AVQ-MM#3 and AVQ-MM#4, impacts on community character and cohesion from visual changes would remain.

The existing unemployed workforce is expected to fill most of the jobs that would be generated from operation of the HSR Build Alternative. Therefore, operation of the HSR Build Alternative would not result in the need to build new or expand existing community facilities. The temporary increase in employment associated with construction of the HSR Build Alternative would not result in a noticeable economic change within Los Angeles County.

Operation of the HSR Build Alternative would require a road access easement at a public high school. This impact would not affect structures or access to the properties, and would not permanently disrupt community facilities.

Permanent changes in municipal funding from property and sales tax losses would occur during the construction phase of the HSR Build Alternative. Although some of the impacts on municipal funding from construction of the HSR Build Alternative would continue during operation of the HSR Build Alternative, operation would not result in property and sales tax revenue losses.

Operation of the HSR Build Alternative would result in permanent impacts on children's health and safety. Operation of the HSR Build Alternative would not cause indirect impacts on children's health from changes in air quality, hazardous impacts, and safety issues, but it would result in impacts from increased noise levels. There are no IAMFs that would avoid or minimize indirect impacts on children's health from increases in noise levels. Mitigation measures N&V-MM#3, N&V-MM#4, N&V-MM#5, and N&V-MM#6 would be implemented to address operational noise impacts. However, localized noise impacts would remain, which could affect children.

3.12.9 CEQA Significance Conclusions

Table 3.12-59 summarizes the CEQA determination of significance for all construction and operations impacts discussed in Section 3.12.6.3, High-Speed Rail Build Alternative.

Table 3.12-59 CEQA Significance Conclusions and Mitigation Measures for Socioeconomics and Communities

Impact	Level of Significance before Mitigation	Mitigation Measures	Level of Significance after Mitigation
Construction			
Impact SOCIO #1: Temporary Disruption to Community Cohesion or Division of Existing Communities from Project Construction	Significant	N&V-MM#1 AVQ-MM#1	Less than Significant
Impact SOCIO #2: Permanent Disruption to Community Cohesion or Division of Existing Communities from Project Construction	Less than Significant	No mitigation measures are required	Not Applicable
Impact SOCIO #3: Permanent Displacement and Relocation of Local Residents from Construction	Less than Significant	No mitigation measures are required	Not Applicable
Impact SOCIO #4: Permanent Displacement and Relocation of Local Businesses from Construction	Less than Significant	No mitigation measures are required	Not Applicable
Impact SOCIO #5: Permanent Displacement and Relocation of Sensitive Populations from Construction	Less than Significant	No mitigation measures are required	Not Applicable
Impact SOCIO #6: Permanent Displacement and Relocation of Community Facilities from Construction	No Impact	No mitigation measures are required	Not Applicable
Impact SOCIO #7: Temporary Construction Employment Resulting in the Need for Additional Community Facilities	Less than Significant	No mitigation measures are required	Not Applicable
Impact SOCIO #8: Temporary Disruption to Community Facilities from Construction	Less than Significant	No mitigation measures are required	Not Applicable
Impact SOCIO #9: Permanent Disruption to Community Facilities from Construction	No Impact	No mitigation measures are required	Not Applicable
Impact SOCIO #10: Temporary Sales Tax Revenue Gains from Construction	No Impact	No mitigation measures are required	Not Applicable
Impact SOCIO #11: Permanent Property and Sales Tax Revenue Losses from Construction	No Impact	No mitigation measures are required	Not Applicable
Impact SOCIO #12: Permanent Changes in School District Funding from Construction	No Impact	No mitigation measures are required	Not Applicable
Impact SOCIO #13: Potential for Permanent Physical Deterioration from Construction	Less than Significant	No mitigation measures are required	Not Applicable

Impact	Level of Significance before Mitigation	Mitigation Measures	Level of Significance after Mitigation
Impact SOCIO #14: Temporary Impacts on Children's Health and Safety from Construction	No Impact	No mitigation measures are required	Not Applicable
Operations			
Impact SOCIO #15: Permanent Disruption to Community Cohesion or Division of Existing Communities from Project Operation	Significant	AVQ-MM#3 AVQ-MM#4	Less than Significant
Impact SOCIO #16: Permanent Employment Resulting in the Need for Additional Community Facilities	Less than Significant	No mitigation measures are required	Not Applicable
Impact SOCIO #17: Permanent Property and Sales Tax Revenue Losses from Operation	No Impact	No mitigation measures are required	Not Applicable
Impact SOCIO #18: Permanent Impacts on Children's Health and Safety from Operation	No Impact	No mitigation measures are required	Not Applicable

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