ERRATA: CHAPTER 5, COMMUNITY ANALYSIS

Errata No.	Draft EIR/EIS Reference		Errata Final EIR/EIS	
	Section	Page	Correction and Rationale	Errata Page Reference
1	Section 5.1	5-1	Removed the word “preliminary” from the conclusions	16-176
2	Section 5.2.2.3	5-8	Corrected a typographical error in the senate bill’s title	16-176
3	Section 5.2.3	5-10	Revised Table 5-1 to update the City of Los Angeles General Plan title	16-176
4	Section 5.6.3.3	5-133	Clarified the number of benefited receivers for noise mitigation	16-177
5	Section 5.6.3.3	5-133	Revised Table 5-21 to clarify the number of remaining residences with a severe noise impact	16-177
6	Section 5.6.3.4	5-135	Added DNB Engineering as an EMF/EMI sensitive receptor	16-177
7	Section 5.6.3.4	5-136	Added DNB Engineering as an EMF/EMI sensitive receptor	16-177
8	Section 5.6.3.5	5-138	Clarified the extent of the Orange County North Basin Superfund site	16-178
9	Section 5.6.3.5	5-141	Added HMW-MM#2 to construction impacts, consistent with Section 3.10	16-178
10	Section 5.6.3.5	5-142	Revised consideration of the increased demolition area of Shared Passenger Track Alternative B compared to Shared Passenger Track Alternative A	16-179
11	Section 5.6.3.5	5-143	Added HMW-MM#2 to construction impacts, consistent with Section 3.10	16-179
12	Section 5.6.3.5	5-143	Revised consideration of the increased demolition area of Shared Passenger Track Alternative B and the Fullerton HSR Station Option	16-179
13	Section 5.6.3.7	5-150, 5-151	Updated discussion of jobs to reflect the 2026 Business Plan	16-180
14	Section 5.6.3.7	5-154	Updated discussion of jobs to reflect the 2026 Business Plan	16-180
15	Section 5.6.3.8	5-155	Corrected a typographical error in an impact abbreviation, revising from “TR” to “PR”	16-180
16	Section 5.6.3.8	5-157	Updated discussion of access impacts on parks and recreation resources resulting from construction activities	16-180
17	Section 5.6.3.11	5-168	Added clarification on the cumulative context	16-181
18	Section 5.6.3.11	5-170	Clarified the number of benefited receivers and remaining residences with a severe noise impact	16-181
19	Section 5.7.1	5-175	Revised to reflect updates to AQ-MM#4	16-181
20	Section 5.7.2	5-175	Clarified the number of benefited receivers and remaining residences with a severe noise impact	16-181
21	Section 5.7.3	5-175, 5-176	Clarified the extent of the Orange County North Basin Superfund site	16-182

Errata No.	Draft EIR/EIS Reference		Errata Final EIR/EIS	
	Section	Page	Correction and Rationale	Errata Page Reference
22	Section 5.7.4	5-177	Revised Table 5-35 to remove “preliminary” from the table title, to remove a duplicative row, and to reflect updates to the noise analysis	16-182
23	Section 5.7.5	5-178	Updated discussion of jobs to reflect the 2026 Business Plan	16-182
24	Section 5.9	5-181	Revised with finalized conclusions	16-182

EIR/EIS = environmental impact report/environmental impact statement; EMF/EMI = electromagnetic fields/electromagnetic interference; HSR = high-speed rail; No. = number

5 COMMUNITY ANALYSIS

5.1 Introduction

This chapter describes existing conditions related to community analysis for populations in the reference community and the resource study area (RSA). It summarizes engagement with minority populations and low-income populations and key issues and concerns raised by these populations. The chapter discusses the potential effects of the No Project Alternative and the Los Angeles to Anaheim Project Section (project section) build alternatives, Shared Passenger Track Alternatives A and B, on community populations; identifies whether the project alternatives would have a disproportionately high and adverse effect (DHAE) on communities.

This community analysis is being released for comment by the Authority pursuant to 23 U.S. Code 327 and the terms of the National Environmental Policy Act (NEPA) Assignment Memorandum of Understanding (FRA and State of California 2024) assigning the Authority responsibility for complying with NEPA and other federal environmental laws, including U.S. Department of Transportation (U.S. DOT) orders and guidance.

Community Analysis

Community analysis assesses the potential for actions to have disproportionately high and adverse environmental and health impacts on minority/nonminority and low-income/non-low-income populations or communities. Authority policy also allows opportunities for substantive input for minority and low-income populations in the project planning process.

This chapter describes the project's potential impacts and the mitigation measures that would reduce those impacts and determines whether the project would have disproportionately high and adverse environmental and health impacts on populations. This evaluation is based on the totality of impacts and includes consideration of construction and operational impacts identified in environmental impact report (EIR)/ environmental impact statement (EIS) resource sections (Section 3.2 through Section 3.18). This chapter provides a summary of the methods used to promote inclusive public involvement and provide meaningful access to persons with limited English proficiency (LEP) and summarizes the issues and concerns raised in communities that would be most directly affected by the project.

Demographic data used in the analysis to identify minority/nonminority populations and low-income populations within the RSAs were obtained from various sources, including the U.S. Census Bureau American Community Survey (ACS) 2017–2021 5-Year Estimates, and the California Department of Finance. In all cases, the most reliable data were used to document the demographic and economic characteristics of the reference community and RSAs. In addition to demographic data, the analysis considered community facilities that serve as ethnic or cultural resources (i.e., cultural centers, neighborhood services, places of worship, and shopping districts) in the identification of community populations, as were maps of predominant languages spoken in the project section (U.S. Census Bureau 2021).

Community analysis is an assessment of impacts across the project corridor. The analysis of communities must address, to the extent practicable and permitted by law, the potential disproportionately high and adverse human health or environmental effects on minority populations and low-income populations. Communities are an important consideration for transportation projects because of the potential effects on the quality of life of individuals and groups living and working within the RSAs.

Section 5.4, Affected Environment, describes the affected environment for communities in the project corridor. Section 5.5, Inclusive Public Engagement, summarizes public outreach activities done to date. Section 5.6, Assessment of Impacts, discusses the environmental and health impacts on communities. Section 5.7, Summary of Disproportionately High and Adverse Effects Prior to Consideration of Measures to Minimize Harm, summarizes disproportionately high and adverse environmental and health impacts on communities. Section 5.8, Community Analysis–Specific Measures to Minimize Harm, describes measures that the Authority would implement to minimize or avoid impacts on minority communities and low-income populations. Finally, Section 5.9, Preliminary Conclusion, presents the final community analysis finding. The following

technical reports serve as the basis for the information in this section and are available upon request:

- *Los Angeles to Anaheim Project Section Community Impact Assessment* (Authority 2025a)
- *Los Angeles to Anaheim Project Section Draft Relocation Impact Report* (Authority 2025b)
- *Los Angeles to Anaheim Project Section Transportation Technical Report* (Authority 2025c)
- *Los Angeles to Anaheim Project Section Air Quality and Global Climate Change Technical Report* (Authority 2025d)
- *Los Angeles to Anaheim Project Section Noise and Vibration Technical Report* (Authority 2025e)
- *Los Angeles to Anaheim Project Section Aesthetics and Visual Quality Technical Report* (Authority 2025f)

Additional details related to communities are provided in the following appendices in Volume 2 of this Draft EIR/EIS:

- Appendix 2-A, Impact Avoidance and Minimization Features
- Appendix 2-B, Applicable Design Standards
- Appendix 3.1-A, Regional and Local Policy Inventory and Consistency Analysis
- Appendix 9-A, Comprehensive List of Public and Agency Meetings
- Appendix 9-B, Inclusive Public Engagement Plan

This section includes detailed analysis of environmental resources, affected environment, environmental consequences, and mitigation measures based on the guidance provided in *Project Environmental Impact Report/Environmental Impact Statement Environmental Methodology Guidelines,* Versions 5.9 and 5.11 as amended (Authority 2017, 2022). One chapter and nine resource sections in this Draft EIR/EIS provide additional information related to effects on communities, including additional information related to assessing beneficial and adverse impacts on resources that could also affect community populations:

- **Section 3.2, Transportation:** Construction and operational impacts from the Shared Passenger Track Alternatives on transit, roadway, freight, bicycle, and pedestrian facilities.
- **Section 3.3, Air Quality and Global Climate Change:** Construction and operational impacts of the Shared Passenger Track Alternatives on regional and local air quality from generated air emissions.
- **Section 3.4, Noise and Vibration:** Construction and operational impacts from the Shared Passenger Track Alternatives on noise and vibration that would affect nearby uses.
- **Section 3.10, Hazardous Materials and Wastes:** Construction and operational impacts from the Shared Passenger Track Alternatives on or from hazardous materials and wastes.
- **Section 3.12, Socioeconomics and Communities:** Construction and operational impacts from the Shared Passenger Track Alternatives on community cohesion, residential and business displacements, potential losses of local government revenue sources, potential physical deterioration of communities, and job creation.
- **Section 3.16, Aesthetics and Visual Quality:** Construction and operational impacts from the Shared Passenger Track Alternatives on visual changes in areas adjacent to or within viewing range of the project section.
- **Section 3.17, Cultural Resources:** Construction and operational impacts from the Shared Passenger Track Alternatives on archaeological and historic resources.
- **Section 3.18, Regional Growth:** Construction and operational impacts from the Shared Passenger Track Alternatives on regional trends in population and employment growth, project-related induced growth, and employment.

- **Section 3.19, Cumulative Impacts:** Construction and operational impacts on minority and low-income communities from the Shared Passenger Track Alternatives and other past, present, and reasonably foreseeable future projects.
- **Chapter 9, Public and Agency Involvement:** Documentation of public involvement efforts for the project.

5.1.1 Definition of Resources

The following are definitions for minority and low-income communities analyzed in this EIR/EIS:

- **Minority:** *Minority* includes persons who self-identify as American Indian and Alaskan Native, Asian, Black or African American, Hispanic or Latino, and Native Hawaiian and other Pacific Islander when completing their 2017–2021 ACS. A minority population means a readily identifiable group or groups of minority persons who live in geographic proximity and, if circumstances warrant, geographically dispersed or transient persons (such as migrant workers, students, or Native Americans) who could be affected by a proposed program, policy, or activity.
- **Nonminority:** *Nonminority* includes persons who self-identify as White, "two or more races," or "some other race" (not inclusive of the minority races listed above) when completing their 2017–2021 ACS.
- **Low-Income:** *Low-income* means a person whose median household income is at or below the Department of Health and Human Services poverty guidelines, or a locally developed threshold that is at least as inclusive as the poverty guidelines. A low-income population means any readily identifiable group of low-income persons who live in geographic proximity and, if circumstances warrant, geographically transient persons (such as migrant workers, students, or Native Americans) who could be affected by a proposed program, policy, or activity.

5.2 Laws, Regulations, and Orders

This section describes the federal and state laws, regulations, and orders relevant to the analysis of communities in this Draft EIR/EIS. The Authority will implement the California High-Speed Rail (HSR) System, including the project, in compliance with all federal and state regulations. Regional and local plans and policies relevant to community analysis considered in the preparation of this analysis are provided in the Socioeconomics and Communities section of Appendix 3.1-A in Volume 2.

The analysis performed for this chapter was completed prior to the issuance of recent federal U.S. Presidential Executive Orders (USEO) and regulatory directions. This section summarizes guidance, but some of it may not apply to this project.

5.2.1 Federal

5.2.1.1 Title VI of the Civil Rights Act (42 U.S. Code 2000(d) et seq.)

Title VI of the Civil Rights Act prohibits discrimination on the basis of race, color, national origin, age, sex, or disability in programs and activities receiving federal financial assistance. Under Title VI, each federal agency is required to ensure that no person, on the grounds of race, color, or national origin, is excluded from participation in, denied the benefits of, or subjected to discrimination under a program or activity receiving federal financial assistance.

5.2.1.2 Federal Transit Administration Circular C 4702.1B, Title VI Requirements and Guidelines for Federal Transit Administration Recipients

Federal Transit Administration Circular C 4702.1B provides guidance on the development and implementation of a Title VI plan, including inclusive public participation requirements and LEP assistance. The guidelines provide instructions for a Four Factor Analysis to determine language services that should be provided and how to develop a Language Assistance Plan.

5.2.1.3 Initial Rescissions of Harmful Executive Orders and Actions (U.S. Presidential Executive Order 14148)

USEO 14148 was signed by President Donald J. Trump on January 20, 2025. USEO 14148 revoked 78 executive orders with the purpose to "restore common sense to the Federal Government and unleash the potential of the American citizen." USEO 14148 ordered agencies to end Federal implementation of "unlawful and radical Diversity, Equity, and Inclusion ideology."

5.2.1.4 Ending Illegal Discrimination and Restoring Merit-Based Opportunity (U.S. Presidential Executive Order 14173)

USEO 14173 was signed by President Donald J. Trump on January 21, 2025, and aims to terminate federal programs and policies that promote Diversity, Equity, Inclusion, and Accessibility. USEO 14173 orders all executive departments and agencies to terminate all mandates, policies, programs, activities, guidance, regulations, enforcement actions, consent orders, and requirements. USEO 14173 orders all agencies to enforce longstanding civil-rights laws and push back against private-sector diversity, equity, and inclusion preferences, mandates, policies, programs, and activities. USEO 14173 revoked USEO 12898, Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations.

5.2.1.5 Designating English as the Official Language of the United States (U.S. Presidential Executive Order 14224)

USEO 14224 was signed by President Donald J. Trump on March 1, 2025. USEO 14224 formally designates English as the official language of the United States and revokes USEO 13166, which had aimed to improve access to services for LEP individuals.

5.2.1.6 Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations (U.S. Presidential Executive Order 12898)

USEO 12898 outlines the federal government's environmental justice (EJ) policy. The USEO requires federal agencies to identify and address to the greatest extent practicable and permitted by law the disproportionately high adverse human health and environmental effects of their programs, policies, and activities on minority and low-income populations in the United States.

On January 21, 2025, USEO 14173, Ending Illegal Discrimination and Restoring Merit-Based Opportunity, rescinded USEO 12898, Federal Actions To Address Environmental Justice in Minority Populations and Low-Income Populations.

5.2.1.7 Presidential Memorandum Accompanying U.S. Presidential Executive Order 12898

The Presidential Memorandum accompanying USEO 12898 emphasizes the importance of existing laws, such as Title VI of the Civil Rights Act of 1964 and NEPA, that can assist with implementation of the principles of the order. The memorandum provides that, in accordance with Title VI, "each Federal agency shall ensure that all programs or activities receiving Federal assistance that affect human health or the environment do not directly, or through contractual or other arrangements, use criteria, methods, or practices that discriminate on the basis of race, color, or national origin." The Presidential Memorandum accompanying USEO 12898 calls for specific actions to be directed in NEPA-related activities. They include:

- Analyzing environmental effects, including human health, economic, and social effects on minority populations and low-income populations when such analysis is required by NEPA
- Ensuring that mitigation measures outlined or analyzed in environmental assessments, EISs, and records of decision, whenever feasible, address disproportionately high and adverse environmental effects or proposed actions on minority populations and low-income populations

- Providing opportunities for community input in the NEPA process, including identifying potential effects and mitigation measures in consultation with affected communities and improving accessibility to public meetings, official documents, and notices to affected communities

On January 21, 2025, USEO 14173 rescinded USEO 12898 and the associated Presidential Memorandum.

5.2.1.8 Actions to Address Environmental Justice in Minority Populations and Low-Income Populations (U.S. Department of Transportation Order 5610.2(c))

In 1997, U.S. DOT issued the Order to Address Environmental Justice in Minority Populations and Low-Income Populations (U.S. DOT Order 5610.2(a)), which sets guidelines to ensure that all federally funded transportation-related programs, policies, or activities that have the potential to adversely affect human health or the environment involve a planning and programming process that explicitly considers effects on minority and low-income populations.

U.S. DOT Order 5610.2(a) defines *low-income* as a person whose median household income is at or below the Department of Health and Human Services poverty guidelines. *Minority* is defined as a person who is Black; Hispanic or Latino, regardless of race; Asian American; American Indian and Alaska Native; or Native Hawaiian and Other Pacific Islander.

On May 16, 2021, U.S. DOT issued U.S. DOT Order 5610.2(c), which is an update to the 1997 order and subsequent U.S. DOT Order 5610.2(b), which had removed many requirements from the 1997 order. U.S. DOT Order 5610(c) rescinded the changes in U.S. DOT Order 5610.2(b) in full. U.S. DOT Order 5610.2(c) (2021) defines *low-income population* as any readily identifiable group of low-income persons who live in geographic proximity, and, if circumstances warrant, geographically dispersed/transient persons (such as migrant workers or Native Americans) who will be similarly affected by a proposed U.S. DOT program, policy, or activity. The order defines *minority population* as any readily identifiable groups of minority persons who live in geographic proximity, and, if circumstances warrant, geographically dispersed/transient persons (such as migrant workers or Native Americans) who will be similarly affected by a proposed U.S. DOT program, policy, or activity. The order defines *a disproportionately high and adverse effect* as an adverse impact that is predominantly borne by a minority population or a low-income population, or that would be suffered by the minority population or low-income population, and that is appreciably more severe or greater in magnitude than would be suffered by the nonminority population or non-low-income population.

On January 29, 2025, the Secretary of Transportation issued a memo canceling Actions to Address Environmental Justice in Minority Populations and Low-Income Populations (U.S. DOT Order 5610.2(c)) in response to the January 2025 USEOs.

5.2.1.9 Federal Transit Administration Circular C 4703.1B, Environmental Justice Policy Guidance for Federal Transit Administration Recipients

Federal Transit Administration Circular C 4703.1 was issued to provide federal grant recipients with guidance for incorporating environmental justice principles into projects and activities that receive funding from the Federal Transit Administration. Circular 4703.1 defines *low-income* as person whose household is at or below the Department of Health and Human Services poverty guidelines. The circular further encourages recipients to use a locally developed threshold, such as that used for the Federal Transit Administration grant program, which is 150 percent of the poverty line.

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

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

On March 1, 2025, USEO, 14224 Designating English as the Official Language of the United States, rescinded USEO 13166, Improving Access to Services for Persons with Limited English Proficiency.

5.2.1.11 Uniform Relocation Assistance and Real Property Acquisition Policies Act (42 U.S. Code 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. The objectives of the act are to:

- Provide uniform, fair, and equitable treatment of persons whose real property is acquired or who are displaced in connection with federally funded projects.
- Make certain relocation assistance is provided to displaced persons to lessen the emotional and financial effects of displacement.
- Make certain that no individual or family is displaced unless decent, safe, and sanitary housing is available within the displaced person's financial means.
- Help improve the housing conditions of displaced persons living in substandard housing.
- Encourage and expedite acquisition by agreement and without coercion.

5.2.1.12 Executive Order 14008, Tackling the Climate Crisis at Home and Abroad

USEO 14008, Tackling the Climate Crisis at Home and Abroad, was signed into law by President Joseph R. Biden on January 27, 2021, and published in the *Federal Register* on February 1, 2021 (86 *Federal Register* 7619). USEO 14008 launched the Justice40 Initiative, which directed federal agencies to ensure that at least 40 percent of the overall benefits from key infrastructure investments would benefit disadvantaged communities.

On January 20, 2025, USEO 14148 rescinded USEO 14008.

5.2.1.13 Executive Order 14096, Revitalizing Our Nation's Commitment to Environmental Justice for All

USEO 14096, Revitalizing Our Nation's Commitment to Environmental Justice for All, was signed into law by President Joseph R. Biden on April 21, 2023, and published in the *Federal Register* on April 26, 2023 (88 *Federal Register* 25251). The order seeks to address environmental disparities, promote equitable access to environmental benefits, and ensure that all communities have a voice in environmental decision making. This order emphasizes that federal agencies are directed to consider EJ in their decision-making processes. In addition, agencies must identify and address any disproportionately high and adverse environmental effects on vulnerable communities, improve data collection and transparency related to EJ issues, and report on their progress in implementing EJ policies. This order established an Environmental Justice Interagency Council to coordinate efforts across agencies and an Environmental Justice Advisory Council to provide recommendations on these directions.

On January 20, 2025, USEO 14148 rescinded 14096.

5.2.1.14 Executive Order 13985, Advancing Racial Equity and Support for Underserved Communities Through the Federal Government

USEO 13985, Advancing Racial Equity and Support for Underserved Communities Through the Federal Government, was signed into law by President Joseph R. Biden on January 20, 2021, and published in the *Federal Register* on January 25, 2021 (86 *Federal Register* 7009). The order emphasizes the importance of addressing systemic racism and persistent poverty, with the aim to ensure that federal programs serve all Americans in an equitable and just manner. The order

requires agencies to evaluate their policies for racially inequitable outcomes and make necessary changes to support underserved communities.

On January 20, 2025, USEO 14148 rescinded USEO 13985.

5.2.1.15 Executive Order 13990, Protecting Public Health and the Environment and Restoring Science To Tackle the Climate Crisis

USEO 13990, Protecting Public Health and the Environment and Restoring Science to Tackle the Climate Crisis, was signed by President Joseph R. Biden on January 20, 2021, and published in the *Federal Register* on January 25, 2021 (86 *Federal Register* 7037). This order aims to improve public health and protect the environment by ensuring access to clean air and water, limit exposure to dangerous chemicals and pesticides, and hold polluters accountable, especially those harming communities of color and low-income communities. In addition, this order aims to reduce greenhouse gas emissions and bolster resilience to climate change impacts, restore and expand national treasures and monuments, prioritize EJ, and create well-paying union jobs.

On January 20, 2025, USEO 14148 rescinded USEO 13990.

5.2.1.16 Protection of Children from Environmental Health Risks and Safety Risks (U.S. Presidential Executive Order 13045)

USEO 13045 requires federal agencies to make it a high priority to identify and assess environmental health risks and safety risks that may disproportionately affect children and ensure that their regulatory actions address disproportionate risks to children that result from environmental health risks or safety risks.

5.2.1.17 Unleashing American Energy (U.S. Presidential Executive Order 14154)

USEO 14154 recognized that the United States is blessed with an abundance of energy and natural resources that have historically powered our Nation's economic prosperity. It aimed to guarantee that all executive departments and agencies provide opportunity for public comment and rigorous, peer-reviewed scientific analysis while expediting and simplifying the permitting process. It revoked a list of executive orders, and it directed federal agencies to undertake all available efforts to eliminate all delays within their respective permitting processes.

5.2.2 State

The California Environmental Quality Act (CEQA) focuses on whether a project would have a significant impact on the physical environment and whether the environmental impacts of a project would cause substantial adverse impacts on human beings. Although specific provisions of CEQA require consideration of how the environmental and public health burdens of a project would affect certain communities (e.g., through consideration of the environmental setting and the assessment of cumulative impacts of a project), CEQA does not directly address the fair treatment of individuals and communities and, as a result, CEQA determinations are not included in this chapter.

5.2.2.1 California Government Code Section 11135(a), 11136

Section 11135(a) of the California Government Code prohibits discrimination or the denial of full and equal access to benefits of any program or activity operated or funded by the state or a state agency on the basis of race, national origin, ethnic group identification, religion, age, sexual orientation, color, or disability. This provision requires public agencies to consider fairness in the distribution of environmental benefits and burdens.

5.2.2.2 California Government Code Section 65040.12(e)

Section 65040.12(e) defines *environmental justice* as "the fair treatment of people of all races, cultures, and incomes with respect to the development, adoption, implementation, and enforcement of environmental laws, regulations, and policies." It does not, however, require an analysis of impacts on these populations as part of the CEQA process.

5.2.2.3 California Global Warming Solutions Act of 2006: Greenhouse Gas Reduction Fund (State Bill 535, De León)

This bill requires the California Environmental Protection Agency to identify disadvantaged communities for investment opportunities, as specified. The bill requires the California Department of Finance, when developing a specified 3-year investment plan, to allocate 25 percent of the available moneys in the Greenhouse Gas Reduction Fund to projects that provide benefits to disadvantaged communities, as specified, and to allocate a minimum of 10 percent of the available moneys in the Greenhouse Gas Reduction Fund to projects in disadvantaged communities, as specified. The bill requires the California Department of Finance, when developing funding guidelines, to include guidelines for how administering agencies should maximize benefits for disadvantaged communities. The bill requires administering agencies to report to the California Department of Finance, and the California Department of Finance to include in a specified report to the Legislature, a description of how administering agencies have fulfilled specified requirements relating to projects providing benefits to, or located in, disadvantaged communities.

5.2.2.4 California High-Speed Rail Authority Environmental Justice Policy

In August 2021, the Authority updated the *Environmental Justice Policy* (Authority 2021a). The policy states:

- The Authority will promote EJ in its programs, policies, and activities. As part of existing planning and project delivery processes, the Authority effectuates EJ through conducting NEPA EJ analysis and identifying and addressing, as appropriate and when practicable, disproportionately high human health and environmental effects on minority or low-income populations.
- The Authority is committed to the fair and meaningful involvement of all affected populations, regardless of race, color, national origin, or income, with respect to the planning and development of the HSR project. Through outreach and engagement activities, the Authority gathers information and input from affected minority and low-income populations to inform key agency-wide environmental decisions.
- Consistent with applicable California Air Resources Board Greenhouse Gas Reporting Fund requirements, the Authority identifies disadvantaged communities that are affected by the HSR system and determines ways to maximize benefits to such communities through its delivery activities. The Authority uses the California Environmental Protection Agency's CalEnviroScreen Program to identify disadvantaged communities as directed by California Senate Bill 535.

5.2.2.5 California High-Speed Rail Authority Title VI Plan

In August 2021, the Authority updated a policy and plan to ensure that the California HSR System complies with Title VI. The policy states:

- It is the policy of the Authority to ensure that no person shall, on the grounds of race, color, or national origin, be excluded from participation in, be denied the benefits of, or be otherwise subjected to discrimination under any program or activity of the HSR system, as afforded by Title VI of the Civil Rights Act of 1964 (42 U.S. Code 2000d et seq.) and related regulations. 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 their programs, activities, and services.

The Title VI Plan includes a commitment to inclusive public involvement of persons affected by the HSR project (Authority 2021b).

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

In August 2021, the Authority updated a policy and plan to ensure the California HSR Program complies with the requirements of then-operative USEO 13166. The policy states:

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

The LEP Policy and Plan supplements the Title VI Plan (Limited English Proficiency Plan), Resolution 12-15 (Authority 2021c).

5.2.3 Regional and Local

This section discusses relevant regional and local programs, policies, regulations, and permitting requirements. The project section would be within Los Angeles and Orange Counties and the cities of Los Angeles, Vernon, Commerce, Bell, Montebello, Pico Rivera, Santa Fe Springs, Norwalk, La Mirada, Buena Park, Fullerton, and Anaheim. The city of Orange is also within the RSAs. Table 5-1 lists local plans and policies that were identified and relevant to the Shared Passenger Track Alternatives. Plans and policies related to other resources, on which effects may be related to minority and low-income populations, as described in this chapter, are found in the nine resource sections upon which this analysis relies.

Table 5-1 Regional and Local Plans and Policies

Policy Title	Summary
Southern California	
SCAG 2024–2050 Connect SoCal Regional Transportation Plan/Sustainable Communities Strategy (2024)	The 2024–2050 SCAG RTP/SCS, or Connect SoCal 2024, includes goals, strategies, programs, and projects that will help the SCAG region in reducing its socioeconomic impacts. Policies in the plan include: 4. Ensure the implementation of Complete Streets that are sensitive to urban, suburban or rural contexts and improve transportation safety for all, but especially for vulnerable road users (e.g., people, especially older adults and children, walking and biking) 17. Support the implementation of technology designed to provide equal access to mobility, employment, economic opportunity, education, health and other quality-of-life opportunities for all residents within the SCAG region 27. Establish a user fee–based system that better reflects the true cost of transportation, provides firewall protection for new and existing transportation funds, and represents equitable distribution of costs and benefits 43. Support communities across the region to realize 15-minute communities through incremental changes that improve equity, quality of life, public health, mobility, sustainability, resilience and economic vitality 44. Encourage efforts that elevate innovative approaches to increasing access to neighborhood destinations and amenities through an array of people-centered mobility options 55. Promote equitable use of and access to clean transportation technologies so that all may benefit from them

Policy Title	Summary
Los Angeles County	
Los Angeles County 2035 General Plan (2025)	▪ Economic Development Element, Policy ED 2.3: Ensure environmental justice in economic development activities. ▪ Economic Development Element, Policy ED 2.8: Incentivize as much as feasible, environmentally sustainable practices and high standards of development in the communities that bear disproportionate pollution and health impacts. ▪ Mobility Element Goal 4: An efficient multimodal transportation system that serves the needs of all residents. ▪ Mobility Element Policy M 4.4: Ensure expanded mobility and increase transit access for underserved transit users, such as seniors, students, low income households, and persons with disabilities. ▪ Mobility Element, Policy M 4.9: Ensure the participation of all potentially affected communities in the transportation planning and decision-making process. ▪ Mobility Element, Goal M 7: Transportation networks that minimize negative impacts to the environment and communities. ▪ Land Use Element, Goal LU 2: Community-based planning efforts that implement the General Plan and incorporate public input, and regional and community level collaboration. ▪ Land Use Element, Policy LU 2.2: Ensure broad outreach, public participation, and opportunities for community input in community-based planning efforts. ▪ Land Use Element, Policy LU 2.3: Consult with and ensure that applicable County departments, adjacent cities and other stakeholders are involved in community-based planning efforts. ▪ Land Use Element, Goal LU 5: Vibrant, livable and healthy communities with a mix of land uses, services and amenities. ▪ Land Use Element, Policy LU 5.7: Direct resources to areas that lack amenities, such as transit, clean air, grocery stores, bikeways, parks, and other components of a healthy community. ▪ Land Use Element, Policy LU 7.8: Promote environmental justice in the areas bearing disproportionate impacts from stationary pollution sources. ▪ Land Use Element, Goal LU 9: Land use patterns and community infrastructure that promote health and wellness. ▪ Land Use Element, Policy LU 10.1: Encourage community outreach and stakeholder agency input early and often in the design of projects.
City of Los Angeles General Plan (2024), Mobility Element	▪ Mobility Plan Policy 4.3: Ensure the fair and equal treatment of people of all races, cultures, incomes and education levels with respect to the development and implementation of citywide transportation policies and programs. ▪ Mobility Plan Policy 5.1: Encourage the development of a sustainable transportation system that promotes environmental and public health.

Policy Title	Summary
Downtown Community Plan (2024)	▪ LU Goal 1: A safe, secure, and high quality residential environment for all economic, age, and ethnic segments of the community. – LU 1.2: Create zoning tools to provide for a racially, socially, and economically inclusive Downtown through a range of housing and employment options. ▪ LU Goal 2: Housing production and preservation through public and private action that results in a housing supply to meet projected growth in a manner that is safe, livable, and affordable to a full range of income levels; reinforces the character of neighborhoods; and adds to the vitality of downtown. – LU 2.1: Foster an equitable and inclusive Downtown, with housing options that can accommodate the fullest range of economic and social needs. ▪ LU Goal 7: A center of world-class innovation, entrepreneurship, and new markets that reflect and strengthen the cultural diversity of downtown. ▪ LU Goal 9: An environment characterized by equity and economic opportunity.
Boyle Heights Community Plan (2024)	▪ Public Transportation Element, Objective 1: To maximize the effectiveness of public transportation to meet the travel needs of transit-dependent residents.
City of Commerce 2020 General Plan (2008)[1]	▪ Community Development Policy 7.2: The City of Commerce will oppose the over-concentration of public facilities and improvements that provide benefits to the region at large while adversely impacting the local community. The region at large must share both the benefits and the disadvantages of such uses and facilities. ▪ Air Quality Policy 1.1: The city of Commerce will consider environmental justice issues as they are related to potential health impacts associated with air pollution and ensure that all land use decisions, including enforcement actions, are made in an equitable fashion to protect residents, regardless of age, culture, ethnicity, gender, race, socioeconomic status, or geographic location from the health effects of air pollution. ▪ Transportation Element, Policy 6.1: The City of Commerce will ensure that all future transportation facilities that will provide a regional benefit do not have a significant adverse impact on the community and that any such impacts must be mitigated to the fullest extent possible. ▪ Transportation Element, Policy 6.2: The city of Commerce will oppose any regional public transportation improvement that does not first consider the potential impacts of such facilities on the local community in which the facility will be located. ▪ Transportation Element, Policy 6.3: The city of Commerce will take a proactive role in meeting with regional planning agencies to ensure that the local community's voice is heard in the planning for future regional transportation facilities. ▪ Air Quality Policy 1.1. The City of Commerce will consider environmental justice issues as they are related to potential health impacts associated with air pollution and ensure that all land use decisions, including enforcement actions, are made in an equitable fashion to protect residents, regardless of age, culture, ethnicity, gender, race, socioeconomic status, or geographic location from the health effects of air pollution.
City of Montebello General Plan (2024)	▪ Element 3: Our Well Planned Community: This chapter will feature the preferred land use plan that directs new growth by reinvesting in key opportunity areas like the Downtown, Corridors and large parcels along the highway, while protecting natural resources, respecting stable residential neighborhoods, and making great places by insisting on the highest standard in architecture, landscaping and urban design. ▪ Element 4: Our Accessible Community: Addresses transportation choices advocated by SB 375 and AB 1358 by strengthening and balancing pedestrian, bike, and transit connections in the City and surrounding region.

Policy Title	Summary
City of Pico Rivera General Plan (2014)	▪ Community Facilities Element. Policy 6.1-1 Involved Citizenry. Provide for the full inclusion of people of diverse backgrounds, ages, genders, interests, lifestyles, and socioeconomic status in governmental decision-making through a variety of community outreach and information programs. ▪ Circulation Element. Policy 5.1-2 Serve All Users. Provide a safe, efficient, and accessible transportation network that meets the needs of all users in the community, including seniors, youth, and the disabled, and contributes to the community's quality of life.
Vision Norwalk – The City of Norwalk General Plan (2023)	▪ Circulation Element, Goal 4: An efficient public transportation system that provides mobility to all City residents, employees and visitors.
City of La Mirada General Plan (2003)	▪ Circulation Element. Policy 3.3: Continue to provide special transit services for seniors, disabled persons, and other special needs groups residing in La Mirada.
Orange County	
County of Orange General Plan, Housing Element (2025)	▪ Goal 1: An adequate supply of housing that varies sufficiently in cost, style, tenure, and neighborhood type to meet the economic and social needs of every existing and future resident of the county; and which provides sufficient housing opportunities to achieve a better jobs-housing balance for employees of businesses located in the unincorporated area. ▪ Goal 2a: To conserve and improve the condition of the existing housing stock, especially affordable housing. ▪ Goal 3: To promote equal housing opportunities for all persons without discrimination on the basis of race, religion, ethnicity, sex, age, marital status, disability, or household composition.

Policy Title	Summary
City of Buena Park General Plan, Environmental Justice Element (2022)	▪ Goal EJ-1: Reduce pollution exposure and improve air quality. ▪ Policy EJ-1.3: Mitigate the impacts of pollution on existing sensitive land uses and prevent the development of new pollution generating sources by requiring adequate mitigation of air contaminant exposure in any new sensitive land-use developments that are close to mobile or stationary sources of pollution. ▪ Policy EJ-1.4: Minimize potential impacts from air pollution among sensitive land use through feasible and effective measures, such as setbacks, vegetative barriers, ventilation systems, and/or air filters. ▪ Policy EJ-3.1: Prioritize and allocate city resources to provide public facilities and services to communities in need. ▪ Policy EJ-3.2: Support public and private investments in vulnerable communities that increase economic opportunity and environmental quality. ▪ Policy EJ-3.4: Support projects, programs and policies which support equal access to public facilities and infrastructure for all community residents. ▪ Policy EJ-3.5: Plan and design projects, including City Capital Improvement Program (CIP) projects, to consider current and planned adjacent land uses, local transportation needs, and climate change vulnerabilities, while incorporating the latest and best practice design guidance. ▪ Policy EJ-3.6: Coordinate with regional planning and transportation agencies to provide high quality public transit services. ▪ Policy EJ-4.3: Support policies, projects and programs which encourage transit-oriented development that provides access to local and regional opportunities and strengthens community development. ▪ Policy EJ-6.1: Proactively and meaningfully engage community residents in the planning and development process by using culturally appropriate and accessible channels, including: providing appropriate language services; providing child care; holding meetings, focus groups, or listening sessions at a variety of venues throughout the community; and using participatory facilitation techniques. ▪ Policy EJ-6.2: Consult with California Native American tribes to provide them with an opportunity to participate in local land use decisions at an early planning stage, for the purpose of protecting, or mitigating impacts to cultural places. ▪ Policy EJ-6.3: Facilitate the meaningful participation of community residents, businesses, and organizations in the development, adoption, and implementation of planning, public facilities and built environment initiatives, and consider their input throughout the decision-making process. ▪ Policy EJ-6.4: Foster collaborative partnerships, including with public health professionals and other public and private sector stakeholders, to develop and implement Environmental Justice-related initiatives. ▪ Implementation Strategy EJ-3: Ensure that development projects are reviewed for conformance with environmental policies as a part of the discretionary review process. ▪ Implementation Strategy EJ-5: At public meetings and outreach events provide appropriate language services, childcare, and options for live or delayed online participation. ▪ Implementation Strategy EJ-8: Include the results of public outreach with decision-makers to help inform their decision making process.
Orange General Plan (2025)	▪ Policy 8.3: Foster meaningful involvement and interaction among diverse groups within the City regarding land use planning efforts and decision making.

Sources: City of Buena Park 2022; City of Commerce 2008; City of La Mirada 2003; City of Los Angeles 2024a, 2024b, 2024c; City of Montebello 2024; City of Norwalk 2023; City of Orange 2025; City of Pico Rivera 2014; County of Los Angeles 2025; County of Orange 2025; SCAG 2024

[1] This plan is currently undergoing an update as of September 2024. Once the final version is publicly available, the date and relevant policies to the Shared Passenger Track Alternatives will be updated accordingly.
AB = Assembly Bill; RTP/SCS = Regional Transportation Plan/Sustainable Communities Strategy; SB = Senate Bill; SCAG = Southern California Association of Governments

5.2.3.1 Consistency with Plans and Laws

As indicated in Section 3.1.5.3, Consistency with Plans and Laws, CEQA and NEPA regulations require a discussion of inconsistencies or conflicts between a proposed undertaking and federal, state, or local plans and laws. CEQA, Council on Environmental Quality, and FRA regulations require the discussion of any inconsistency or conflict between a proposed action and federal, state, regional, or local plans and laws. Where inconsistencies or conflicts exist, the Authority must provide a description of the extent of reconciliation and the reason for proceeding if full reconciliation is not feasible (64 *Federal Register* 28545, 14(n)(15)) and must discuss the inconsistencies between the proposed project and applicable general plans, specific plans, and regional plans under CEQA (State CEQA Guidelines Section 15125(d)).

Several federal and state laws, listed in Section 5.2.1, Federal, and Section 5.2.2, State, pertain to the community analysis. The following summarizes the federal and state requirements considered in this analysis:

- Federal laws that require upholding the rights of each member of the community and protecting them from undue harm, including the Uniform Relocation Assistance and Real Property Acquisition Policies Act, Farmland Protection Policy Act, FRA procedures such as those for considering environmental impacts, U.S. Environmental Protection Agency policies such as school siting guidelines, and USEOs such as USEO 13166, Improving Access to Services for Persons with Limited English Proficiency, and USEO 13045, Protection of Children from Environmental Health Risks and Safety Risks.
- State laws that require upholding the rights of each member of the community and protecting them from undue harm, including the California Relocation Act and the California Land Conservation Act of 1965, and Authority plans such as the Title VI Plan and the LEP Policy and Plan.

The Authority, as the lead state agency proposing to build and operate the HSR system, is required to comply with all federal and state laws and regulations and to secure applicable federal and state permits prior to initiating construction of the project. Similarly, the Authority, as the federal lead agency (pursuant to 23 U.S. Code 327, under the NEPA Memorandum of Understanding between the FRA and the State of California, effective July 22, 2024, the Authority is the federal lead agency for review of the project section), is required to comply with federal laws and regulations.

The Authority, as a state agency, is not required to comply with local land use and zoning regulations; however, it has endeavored to design and build the project so that it is compatible with land use and zoning regulations. The Authority reviewed local plans detailed in Table 5-1 and determined that the project alternatives would be inconsistent with the following plans:

- **City of Vernon General Plan Land Use Element:** “Goal LU-3 (Maintain Vernon as a highly desirable location for industry, and continue to attract the types of industry the City is well positioned to serve) Policy LU-3.4: Invest in activities and programs that advertise and promote Vernon as a quality and desirable location for industry.”
    - Shared Passenger Track Alternatives A and B would displace 37 businesses in Vernon. There is a deficit of suitable replacement properties in Vernon to accommodate the relocation of displaced businesses in the city. Displacements could potentially deter future industrial investment by reducing the amount of available industrial sites, which would be inconsistent with the policy established by the City of Vernon.
- **The City of Commerce General Plan, Community Development Policy 7.2:** “The City of Commerce will oppose the over-concentration of public facilities and improvements that provide benefits to the region at large while adversely impacting the local community. The

region at large must share both the benefits and the disadvantages of such uses and facilities" (City of Commerce 2008).

- Shared Passenger Track Alternatives A and B would displace 115 businesses in Commerce, which represents the majority of business displacements for the project. There is a deficit of replacement properties in Commerce to accommodate the relocation of displaced businesses in the city. The project would introduce benefits of improved accessibility and employment growth along the project corridor that could serve as an economic stimulant to surrounding communities, including Commerce. However, the project would disproportionately affect Commerce through business displacements. Therefore, the Shared Passenger Track Alternatives are inconsistent with the policy established by the City of Commerce.

Despite the inconsistency of the project with two local plans and policies, the project is consistent with the majority of the regional and local policies and plans. As a state agency, the Authority is not required to be consistent with these local government policies. Inconsistencies would be minimized, but they would not be entirely reconciled. The Authority would provide relocation assistance to minimize effects from business displacements. The project would also provide benefits, such as improved regional access, improved air quality resulting from vehicle trip reduction, and sales tax revenues from construction spending. Although it would not be possible to meet all regional and local general plan goals and policies relevant to minority and low-income populations as outlined in Table 5-1, impact avoidance and minimization features (IAMF) and mitigation measures will generally minimize impacts and would ultimately meet the overall objectives of the local policies.

5.3 Methods for Evaluating Effects

The following sections define the RSAs and summarize the methods the Authority used to analyze potential effects of the Shared Passenger Track Alternatives on communities. As summarized in Section 5.1, Introduction, several other resource sections presented in Chapter 3, Affected Environment, Environmental Consequences, and Mitigation Measures, and public involvement information presented in Chapter 9 provide additional information related to effects on communities.

5.3.1 Definition of Reference Community and Resource Study Area

There are three factors that were considered when conducting this analysis: (1) the area comprising the general population that will be affected by the project (reference community), (2) the areas that would be most directly affected by the project (RSAs), and (3) the presence of low-income and minority communities in the project area.

5.3.1.1 Identifying the Reference Community

To establish a context for the RSAs and conduct community analysis, it is necessary to identify what is called a "reference community." The reference community represents the general population that could be affected positively or negatively by the project. For the community analysis, the reference community is Los Angeles County or Orange County, depending on the location of the population. Demographics for the reference community are used as a point of comparison with demographics of the community analysis. Because the percentage of Los Angeles and Orange Counties' population that is low income or minority is different than that of California, using Los Angeles and Orange Counties as the reference community provides the appropriate regional context. Similarly, because the federal poverty level is not representative of Southern California's cost of living, persons living under 200 percent of the federal poverty level were counted as low-income to provide the appropriate regional context. Table 5-2 provides an overview of characteristics relevant to the community analysis, including demographic information for the reference communities. Section 3.12 provides additional information on the demographic characteristics of the reference community.

In Los Angeles County, 32.2 percent of the population is below the poverty level and 74.5 percent are considered minorities. In Orange County, 23.3 percent of the population is below the poverty level and 60.9 percent are considered minorities.

Table 5-2 Reference Community Characteristics

Characteristic	California	Los Angeles County	Orange County
Total population	39,455,353	10,019,635	3,182,923
Percentage minority[1] population	64.5	74.5	60.9
Percentage of population below 200% of poverty level	28.5	32.2	23.3
Percentage 65 and over years of age	14.4	13.7	14.8
Percentage Limited English Proficiency households	6.8	13.7	9.3
Total households	13,217,586	3,342,811	1,057,592
Median household income	$84,097	$76,367	$100,485
Percentage of population unemployed	7.3	4.9	3.2

Sources: U.S. Census Bureau 2021, Table DP05, S1701; EDD 2023
[1] Calculated as the sum of census respondents that identified as Asian, Black or African American, American Indian or Alaska Native, Hawaiian or other Pacific Islander (not Hispanic), or Hispanic (all races).

As presented in Table 5-3, the minority populations in the reference communities of Los Angeles County and Orange County represent 74.5 percent and 60.9 percent of the total population, respectively. The predominant racial/ethnic group in the reference community is Hispanic, and individuals that identify as Hispanic compose 48.7 percent of the total population in Los Angeles County and 34.0 percent of the total population in Orange County. Figure 5-1 depicts the community analysis reference community.

Table 5-3 Reference Community Race and Ethnicity Characteristics by Percentage

Location	White	Hispanic	Asian	Black/ African American	American Indian/ Alaska Native	Hawaiian/ Other Pacific Islander	Other Race(s)	Minority[1]
Los Angeles County	25.5	48.7	14.6	7.6	0.2	0.2	3.2	74.5
Orange County	39.0	34.0	21.1	1.6	0.1	0.3	3.8	60.9

Source: U.S. Census Bureau 2021
[1] Calculated as the sum of census respondents that identified as Asian, Black or African American, American Indian or Alaska Native, Hawaiian or other Pacific Islander (not Hispanic), or Hispanic (all races).



Source: ESRI 2024; U.S. Census Bureau 2021

Figure 5-1 Community Analysis Reference Community

5.3.1.2 Identifying the Resource Study Areas

The RSA is the geographic boundary in which the Authority conducted environmental investigations specific to each resource topic. To ensure the proper consideration of impacts on communities, this analysis uses distinct RSAs for resources (Table 5-6). For community analysis, RSAs must consider census block groups (BG) as the smallest units in which demographic information is available. For the purpose of this analysis, the RSAs are composed of any BG that has 10 percent or more of its total area in the resource topic RSA. Where the population density is low, BGs may be larger. In some cases, only small portions of a BG fell within the resource topic RSA. The RSAs exclude these BGs if less than 10 percent of the BG area fell within the resource topic RSA. Community analysis populations were identified at the BG level. Table 5-5 presents the BGs included in each RSA. Figure 5-2, sheets 1 and 2, depict the BGs used for the analysis.

Table 5-4 Definition of Community Analysis Resource Study Areas

Resource	Resource Study Area Boundary
Transportation	Direct impacts: BGs that overlap footprint Indirect impacts: BGs that overlap major state routes, critical intersections between stations/ LMF and adjacent highways
Air quality	Local: BGs that overlap a 1,000-foot buffer from footprint Regional and State RSA: South Coast Air Basin and entire state
Noise and vibration	Construction: *Daytime*: BGs that overlap a 645-foot buffer from footprint *Nighttime*: BGs that overlap a 2,038-foot buffer from footprint Operation: *Alignment*: BGs that overlap a 700-foot buffer from footprint *Station*: BGs that overlap a 250-foot buffer from station boundary *LMF*: BGs that overlap a 1,000-foot buffer from facility boundary
EMF/EMI	BGs that overlap a 500-foot buffer from the track centerline and a 500-foot buffer from the perimeter of the LMF and traction power facilities
Hazardous materials and wastes	BGs that overlap a 0.25-mile buffer from footprint
Socioeconomics and communities	Direct: BGs that overlap the project footprint and the area within a 0.5-mile radius of the project centerline Indirect: The direct RSA, plus the entirety of the census tracts at least partially included in the direct impact RSA Displacements and Relocations: The displacement RSA is the BG where displacements occur, whereas the relocation RSA for indirect impacts encompasses surrounding communities and cities
Parks, recreation, and open space	Track: BGs that overlap a 1,000-foot buffer from footprint Stations and LMF: BGs that overlap a 0.5-mile buffer from station/LMF footprint
Aesthetics and visual quality	BGs that overlap a 0.25-mile buffer from footprint
Cultural resources	BGs that overlap the area of ground proposed to be disturbed before, during, and after construction as well as during operation, plus areas where nonground-disturbing activities have the potential to affect historic properties

BG = block group; EMF/EMI = electromagnetic fields/electromagnetic interference; LMF = light maintenance facility

Table 5-5 Census Block Groups in Community Analysis Resource Study Areas

Map Label	Neighborhood/Community	Block Group ID	Low Income?	Minority?	In Transportation RSA?	In Air Quality RSA?	In Noise and Vibration (Construction) RSA?	In Noise and Vibration (Operation) RSA?	In EMF/EMI RSA?	In Socioeconomics and Communities RSA?	In Parks, Recreation, and Open Space RSA?	In Hazardous Materials and Wastes RSA?	In Aesthetics and Visual Quality RSA?	In Cultural Resources RSA?
1	Aliso Village in Los Angeles	60372035001	Yes	Yes	No	No	No	No	No	Yes	No	No	No	No
2	Downtown Los Angeles	60372035002	Yes	Yes	No	Yes	Yes	Yes	No	Yes	Yes	Yes	Yes	No
3	Aliso Village in Los Angeles	60372035003	Yes	Yes	No	No	No	No	No	Yes	No	No	No	No
4	Boyle Heights in Los Angeles	60372046001	Yes	Yes	No	No	Yes	No	No	Yes	Yes	No	No	No
5	Boyle Heights in Los Angeles	60372046002	No	Yes	No	No	No	No	No	Yes	No	No	No	No
6	Soto Street Junction in Los Angeles	60372048201	Yes	Yes	No	No	No	No	No	Yes	No	No	No	No
7	Soto Street Junction in Los Angeles	60372048202	Yes	Yes	No	No	Yes	No	No	Yes	No	No	No	No
8	Hobart in Commerce	60372049201	Yes	Yes	No	No	Yes	No	No	Yes	No	No	No	No
9	Hobart in Commerce	60372049202	Yes	Yes	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
10	Hobart in Commerce	60372051101	Yes	Yes	No	No	Yes	No	No	Yes	Yes	No	No	No
11	Soto Street Junction in Los Angeles	60372051102	Yes	Yes	No	No	Yes	No	No	Yes	Yes	No	No	No
12	Hobart in Commerce	60372051201	Yes	Yes	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No
13	Hobart in Commerce	60372051202	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
14	Chinatown in Los Angeles	60372060201	No	Yes	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
15	Downtown Los Angeles	60372060501	Yes	Yes	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
16	Redondo Junction in Los Angeles	60372060511	No	No	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
17	Redondo Junction in Los Angeles	60372060512	No	No	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
18	Downtown Los Angeles	60372060521	No	No	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
19	Downtown Los Angeles	60372060531	Yes	Yes	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
20	Aliso Village in Los Angeles	60372060532	Yes	Yes	No	No	Yes	No	No	Yes	Yes	No	No	No
21	Downtown Los Angeles	60372060541	Yes	Yes	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
22	Skid Row in Los Angeles	60372062021	Yes	Yes	No	No	Yes	No	No	Yes	No	No	No	No
23	Downtown Los Angeles	60372071021	Yes	Yes	No	Yes	Yes	No	No	Yes	Yes	Yes	Yes	No
24	Downtown Los Angeles	60372074001	Yes	Yes	No	Yes	Yes	No	No	Yes	Yes	Yes	Yes	No
25	Central Pico Rivera	60375007001	No	Yes	No	No	No	No	No	Yes	No	No	No	No
26	Central Pico Rivera	60375007002	Yes	Yes	No	No	No	No	No	Yes	No	No	No	No
27	Central Pico Rivera	60375007003	No	Yes	No	No	No	No	No	Yes	No	No	No	No
28	Central Pico Rivera	60375007004	Yes	Yes	Yes	No	No	No	No	Yes	No	No	No	No
29	Central Pico Rivera	60375007005	Yes	Yes	No	No	Yes	No	No	Yes	No	No	No	No
30	McCampbell in Pico Rivera	60375007006	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No
31	Central Pico Rivera	60375008002	No	Yes	Yes	No	No	No	No	Yes	No	No	No	No

Map Label	Neighborhood/Community	Block Group ID	Low Income?	Minority?	In Transportation RSA?	In Air Quality RSA?	In Noise and Vibration (Construction) RSA?	In Noise and Vibration (Operation) RSA?	In EMF/EMI RSA?	In Socioeconomics and Communities RSA?	In Parks, Recreation, and Open Space RSA?	In Hazardous Materials and Wastes RSA?	In Aesthetics and Visual Quality RSA?	In Cultural Resources RSA?
32	Los Nietos of Whittier	60375020042	Yes	Yes	Yes	No	No	No	No	No	No	No	No	No
33	Southwest West Whittier–Los Nietos CDP	60375022004	No	Yes	Yes	No	No	No	No	Yes	No	No	No	No
34	Southwest West Whittier–Los Nietos CDP	60375023031	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
35	Southwest West Whittier–Los Nietos CDP	60375023032	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
36	Southwest West Whittier–Los Nietos CDP	60375023033	No	Yes	No	Yes	Yes	No	No	Yes	Yes	Yes	Yes	No
37	Los Nietos in Whittier	60375023034	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
38	Southwest West Whittier–Los Nietos CDP	60375023035	Yes	Yes	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
39	Central Pico Rivera	60375024011	No	Yes	No	No	Yes	No	No	Yes	No	Yes	Yes	No
40	Central Pico Rivera	60375024012	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No
41	Central Pico Rivera	60375024013	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
42	South Pico Rivera	60375024021	No	Yes	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
43	South Pico Rivera	60375024022	No	Yes	No	No	Yes	No	No	Yes	No	No	No	No
44	McCampbell in Pico Rivera	60375025001	Yes	Yes	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No
45	McCampbell in Pico Rivera	60375025002	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
46	Downey in Pico Rivera	60375026021	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
47	Downey in Pico Rivera	60375026022	No	Yes	No	No	Yes	No	No	Yes	No	Yes	Yes	No
48	Downey in Pico Rivera	60375026023	No	Yes	No	No	No	No	No	Yes	No	No	No	No
49	South Pico Rivera	60375026031	No	Yes	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
50	South Pico Rivera	60375026032	No	Yes	No	No	Yes	No	No	Yes	No	No	No	No
51	South Pico Rivera	60375026042	No	Yes	No	Yes	Yes	No	No	Yes	Yes	Yes	Yes	No
52	Southwest West Whittier–Los Nietos CDP	60375027001	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
53	Southwest West Whittier–Los Nietos CDP	60375027002	No	Yes	No	No	No	No	No	Yes	No	No	No	No
54	Southwest West Whittier–Los Nietos CDP	60375027003	No	Yes	No	No	Yes	No	No	Yes	No	No	No	No
55	Los Nietos in Whittier, northern Santa Fe Springs	60375027004	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
56	Fulton Wells in Santa Fe Springs	60375028013	No	Yes	Yes	No	No	No	No	No	No	No	No	No
57	South Whittier	60375030001	No	Yes	Yes	No	Yes	No	No	Yes	No	No	No	No
58	South Whittier	60375030002	No	Yes	Yes	Yes	Yes	Yes	No	Yes	Yes	Yes	Yes	No
59	South Whittier	60375030003	Yes	Yes	No	No	Yes	No	No	Yes	No	No	No	No
60	South Whittier	60375030004	No	Yes	No	Yes	Yes	No	No	Yes	Yes	Yes	Yes	No
61	South Whittier	60375031031	Yes	Yes	Yes	No	No	No	No	No	No	No	No	No
62	South Whittier	60375031041	No	Yes	Yes	No	No	No	No	Yes	Yes	No	No	No

Map Label	Neighborhood/Community	Block Group ID	Low Income?	Minority?	In Transportation RSA?	In Air Quality RSA?	In Noise and Vibration (Construction) RSA?	In Noise and Vibration (Operation) RSA?	In EMF/EMI RSA?	In Socioeconomics and Communities RSA?	In Parks, Recreation, and Open Space RSA?	In Hazardous Materials and Wastes RSA?	In Aesthetics and Visual Quality RSA?	In Cultural Resources RSA?
63	South Whittier	60375031051	No	Yes	Yes	No	No	No	No	No	No	No	No	No
64	Southeast La Mirada	60375038012	Yes	No	No	No	Yes	No	No	Yes	Yes	No	No	No
65	Southwest La Mirada	60375039011	No	No	No	Yes	Yes	No	No	Yes	Yes	Yes	Yes	No
66	Southwest La Mirada	60375039012	No	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
67	South La Mirada	60375039021	No	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
68	Southwest La Mirada	60375039022	No	Yes	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
69	Southwest La Mirada	60375039023	No	No	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
70	South La Mirada	60375039024	No	No	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
71	Central La Mirada	60375040013	No	No	Yes	No	No	No	No	Yes	No	No	No	No
72	West La Mirada	60375040023	No	No	No	No	Yes	No	No	Yes	No	No	No	No
73	West La Mirada	60375041011	Yes	Yes	Yes	No	No	No	No	Yes	No	No	No	No
74	West La Mirada	60375041012	No	Yes	No	No	Yes	No	No	Yes	No	Yes	Yes	No
75	West La Mirada	60375041013	Yes	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
76	Fulton Wells in Santa Fe Springs	60375042001	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No
77	Southeast Santa Fe Springs	60375042002	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
78	South Whittier	60375042003	Yes	Yes	Yes	No	No	No	No	Yes	No	No	No	No
79	Hobart in Commerce	60375313021	Yes	Yes	No	No	Yes	No	No	Yes	No	No	No	No
80	Hobart in Commerce	60375313022	Yes	Yes	No	No	No	No	No	Yes	No	No	No	No
81	Hobart in Commerce	60375313023	Yes	Yes	No	No	No	No	No	Yes	No	No	No	No
82	Hobart in Commerce	60375313024	Yes	Yes	No	No	Yes	No	No	Yes	No	No	No	No
83	Bandini in Montebello	60375321021	No	Yes	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No
84	Bandini in Montebello	60375321022	Yes	Yes	No	No	Yes	No	No	Yes	No	No	No	No
85	South Montebello	60375322001	No	Yes	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No
86	Bandini in Montebello	60375322002	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
87	Bandini in Montebello	60375322003	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
88	Hobart/west Commerce	60375323021	Yes	Yes	No	No	Yes	No	No	Yes	No	No	No	No
89	Hobart/west Commerce	60375323022	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
90	Hobart/west Commerce	60375323023	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
91	Hobart/west Commerce	60375323031	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
92	East Commerce	60375323032	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
93	East Commerce	60375323033	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
94	McCampbell in Pico Rivera	60375323041	Yes	Yes	No	No	No	No	No	Yes	No	No	No	No

Map Label	Neighborhood/Community	Block Group ID	Low Income?	Minority?	In Transportation RSA?	In Air Quality RSA?	In Noise and Vibration (Construction) RSA?	In Noise and Vibration (Operation) RSA?	In EMF/EMI RSA?	In Socioeconomics and Communities RSA?	In Parks, Recreation, and Open Space RSA?	In Hazardous Materials and Wastes RSA?	In Aesthetics and Visual Quality RSA?	In Cultural Resources RSA?
95	Hobart/west Commerce	60375323042	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
96	Northwest Norwalk	60375501012	No	Yes	Yes	No	No	No	No	Yes	No	No	No	No
97	Northwest Norwalk	60375502011	No	Yes	Yes	No	No	No	No	No	No	No	No	No
98	Northwest Norwalk	60375502021	No	Yes	Yes	No	No	No	No	No	No	No	No	No
99	Studebaker in Norwalk	60375502023	No	Yes	Yes	No	No	No	No	No	No	No	No	No
100	Studebaker in Norwalk	60375502024	No	Yes	Yes	No	No	No	No	No	No	No	No	No
101	Studebaker in Norwalk	60375503012	Yes	Yes	Yes	No	No	No	No	No	No	No	No	No
102	Northwest Norwalk	60375503013	No	Yes	Yes	No	No	No	No	No	No	No	No	No
103	Northwest Norwalk	60375519002	No	Yes	Yes	No	No	No	No	No	No	No	No	No
104	West Norwalk	60375519003	No	Yes	Yes	No	No	No	No	No	No	No	No	No
105	Studebaker in Norwalk	60375519004	No	Yes	Yes	No	No	No	No	No	No	No	No	No
106	Studebaker in Norwalk	60375520011	No	Yes	Yes	No	No	No	No	No	No	No	No	No
107	Central Norwalk	60375521002	Yes	Yes	Yes	No	No	No	No	No	No	No	No	No
108	Studebaker in Norwalk	60375521003	No	Yes	Yes	No	No	No	No	No	No	No	No	No
109	Studebaker in Norwalk	60375521004	No	Yes	Yes	No	No	No	No	No	No	No	No	No
110	Studebaker in Norwalk	60375521005	Yes	Yes	Yes	No	No	No	No	No	No	No	No	No
111	East Norwalk	60375522001	Yes	Yes	Yes	No	No	No	No	No	No	No	No	No
112	East Norwalk	60375522002	No	Yes	Yes	No	No	No	No	No	No	No	No	No
113	East Norwalk	60375522004	Yes	Yes	Yes	No	No	No	No	No	No	No	No	No
114	East Norwalk	60375523011	No	Yes	Yes	Yes	Yes	No	No	Yes	Yes	Yes	Yes	No
115	East Norwalk	60375523012	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
116	East Norwalk	60375523013	Yes	Yes	Yes	No	Yes	No	No	Yes	Yes	Yes	Yes	No
117	East Norwalk	60375523021	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
118	East Norwalk	60375523022	No	Yes	Yes	No	Yes	No	No	Yes	Yes	No	No	No
119	East Norwalk	60375523023	No	No	Yes	No	Yes	No	No	Yes	Yes	No	No	No
120	East Norwalk	60375524001	Yes	Yes	Yes	No	Yes	No	No	Yes	No	Yes	Yes	No
121	East Norwalk	60375524002	Yes	Yes	Yes	No	No	No	No	Yes	No	No	No	No
122	West Norwalk	60375528001	No	Yes	Yes	No	No	No	No	No	No	No	No	No
123	West Norwalk	60375528004	No	Yes	Yes	No	No	No	No	No	No	No	No	No
124	West Norwalk	60375530003	No	Yes	Yes	No	No	No	No	No	No	No	No	No
125	Northeast Norwalk	60375553001	Yes	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
126	Northeast Norwalk	60375553002	No	Yes	No	No	No	No	No	Yes	No	No	No	No

Map Label	Neighborhood/Community	Block Group ID	Low Income?	Minority?	In Transportation RSA?	In Air Quality RSA?	In Noise and Vibration (Construction) RSA?	In Noise and Vibration (Operation) RSA?	In EMF/EMI RSA?	In Socioeconomics and Communities RSA?	In Parks, Recreation, and Open Space RSA?	In Hazardous Materials and Wastes RSA?	In Aesthetics and Visual Quality RSA?	In Cultural Resources RSA?
127	Northeast Norwalk	60375553003	Yes	Yes	Yes	No	No	No	No	Yes	No	No	No	No
128	Northeast Norwalk	60375553004	No	Yes	Yes	No	Yes	No	No	Yes	Yes	No	No	No
129	West Santa Fe Springs	60375778001	No	Yes	Yes	No	No	No	No	No	No	No	No	No
130	Hobart in Vernon	60379800161	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
131	South Santa Fe Springs	60379800341	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
132	Central Brea	60590015042	No	No	Yes	No	No	No	No	No	No	No	No	No
133	Northeast Fullerton	60590015053	No	No	Yes	No	No	No	No	No	No	No	No	No
134	Northeast Fullerton	60590016021	No	Yes	Yes	No	No	No	No	No	No	No	No	No
135	Northeast Fullerton	60590016024	No	No	Yes	No	No	No	No	No	No	No	No	No
136	North Fullerton	60590016031	No	No	Yes	No	No	No	No	No	No	No	No	No
137	North Fullerton	60590016032	Yes	No	Yes	No	No	No	No	No	No	No	No	No
138	North Fullerton	60590016042	No	No	Yes	No	No	No	No	No	No	No	No	No
139	North Fullerton	60590016044	No	No	Yes	No	No	No	No	No	No	No	No	No
140	Central Fullerton	60590017041	No	Yes	Yes	No	No	No	No	No	No	No	No	No
141	West Fullerton	60590017044	No	Yes	No	No	Yes	No	No	Yes	No	No	No	No
142	North Fullerton	60590017051	Yes	Yes	Yes	No	No	No	No	No	No	No	No	No
143	North Fullerton	60590017053	No	Yes	Yes	No	No	No	No	No	No	No	No	No
144	North Fullerton	60590017061	No	Yes	Yes	No	No	No	No	No	No	No	No	No
145	Central Fullerton	60590017062	No	No	Yes	No	No	No	No	No	No	No	No	No
146	Central Fullerton	60590017063	No	No	Yes	No	No	No	No	No	No	No	No	No
147	North Fullerton	60590017064	No	No	Yes	No	No	No	No	No	No	No	No	No
148	Almond in southwest Fullerton	60590018011	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
149	Southwest Fullerton	60590018012	Yes	Yes	No	No	No	No	No	Yes	No	No	No	No
150	Southwest Fullerton	60590018013	No	No	No	No	No	No	No	Yes	No	No	No	No
151	Southwest Fullerton	60590018014	Yes	Yes	No	No	No	No	No	Yes	No	No	No	No
152	Southwest Fullerton	60590018021	Yes	Yes	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No
153	Southwest Fullerton	60590018022	No	Yes	No	No	Yes	No	No	Yes	No	No	No	No
154	Southwest Fullerton	60590018023	Yes	Yes	No	No	No	No	No	Yes	No	No	No	No
155	Southwest Fullerton	60590018024	No	Yes	No	No	No	No	No	Yes	No	No	No	No
156	Southwest Fullerton	60590018025	Yes	Yes	No	No	No	No	No	Yes	No	No	No	No
157	South-central Fullerton	60590019011	No	Yes	Yes	Yes	Yes	Yes	No	Yes	Yes	Yes	Yes	No
158	South-central Fullerton	60590019012	No	Yes	No	No	Yes	No	No	Yes	No	No	No	No

Map Label	Neighborhood/Community	Block Group ID	Low Income?	Minority?	In Transportation RSA?	In Air Quality RSA?	In Noise and Vibration (Construction) RSA?	In Noise and Vibration (Operation) RSA?	In EMF/EMI RSA?	In Socioeconomics and Communities RSA?	In Parks, Recreation, and Open Space RSA?	In Hazardous Materials and Wastes RSA?	In Aesthetics and Visual Quality RSA?	In Cultural Resources RSA?
159	South-central Fullerton	60590019021	Yes	Yes	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
160	South-central Fullerton	60590019022	No	Yes	No	No	Yes	No	No	Yes	No	No	No	No
161	South-central Fullerton	60590110001	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
162	Central Fullerton	60590110002	No	No	Yes	No	Yes	No	No	Yes	No	No	No	No
163	Central Fullerton	60590110003	Yes	Yes	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
164	Central Fullerton	60590110004	Yes	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
165	Central Fullerton	60590110005	Yes	No	No	No	Yes	No	No	Yes	No	No	No	No
166	Central Fullerton	60590110006	No	No	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
167	South-central Fullerton	60590111011	No	Yes	No	Yes	Yes	Yes	No	Yes	Yes	Yes	Yes	No
168	South-central Fullerton	60590111012	No	Yes	Yes	No	No	No	No	Yes	No	No	No	No
169	South-central Fullerton	60590111021	No	No	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No
170	South-central Fullerton	60590111022	Yes	Yes	Yes	Yes	Yes	Yes	No	Yes	Yes	Yes	Yes	No
171	South-central Fullerton	60590111023	Yes	Yes	No	No	No	No	No	Yes	No	No	No	No
172	Downtown Fullerton	60590112001	Yes	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
173	Central Fullerton	60590112002	No	Yes	No	No	Yes	No	No	Yes	Yes	No	No	No
174	Central Fullerton	60590112003	Yes	Yes	Yes	No	No	No	No	Yes	Yes	No	No	No
175	South-central Fullerton	60590112004	No	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
176	Downtown Fullerton	60590113001	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
177	Central Fullerton	60590113002	No	No	Yes	No	Yes	No	No	Yes	Yes	No	No	No
178	Downtown Fullerton	60590113003	Yes	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
179	Central Fullerton	60590114011	Yes	No	Yes	No	Yes	No	No	Yes	Yes	No	No	No
180	Central Fullerton	60590114012	No	No	Yes	No	Yes	No	No	Yes	Yes	No	No	No
181	Central Fullerton	60590114022	No	No	Yes	No	No	No	No	Yes	No	No	No	No
182	East Fullerton	60590114031	No	No	Yes	No	No	No	No	Yes	No	No	No	No
183	East Fullerton	60590114032	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No
184	East Fullerton	60590114033	Yes	Yes	Yes	No	Yes	No	No	Yes	No	Yes	Yes	No
185	East Fullerton	60590114034	No	Yes	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
186	East Fullerton	60590114035	Yes	Yes	Yes	Yes	Yes	Yes	No	Yes	Yes	Yes	Yes	No
187	East Fullerton	60590115021	Yes	Yes	Yes	No	No	No	No	No	No	No	No	No
188	East Fullerton	60590115022	Yes	Yes	Yes	No	No	No	No	No	No	No	No	No
189	East Fullerton	60590115023	Yes	Yes	Yes	No	No	No	No	No	No	No	No	No
190	East Fullerton	60590115032	No	No	Yes	No	No	No	No	No	No	No	No	No

Map Label	Neighborhood/Community	Block Group ID	Low Income?	Minority?	In Transportation RSA?	In Air Quality RSA?	In Noise and Vibration (Construction) RSA?	In Noise and Vibration (Operation) RSA?	In EMF/EMI RSA?	In Socioeconomics and Communities RSA?	In Parks, Recreation, and Open Space RSA?	In Hazardous Materials and Wastes RSA?	In Aesthetics and Visual Quality RSA?	In Cultural Resources RSA?
191	East Fullerton	60590115041	Yes	No	Yes	No	No	No	No	No	No	No	No	No
192	East Fullerton	60590115042	Yes	Yes	Yes	No	No	No	No	No	No	No	No	No
193	East Fullerton	60590115044	No	Yes	Yes	No	No	No	No	No	No	No	No	No
194	North Anaheim	60590116011	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No
195	North Anaheim	60590116012	Yes	Yes	Yes	No	Yes	No	No	Yes	Yes	No	No	No
196	North Anaheim	60590116013	No	No	Yes	No	No	No	No	Yes	No	No	No	No
197	North Anaheim	60590116014	Yes	Yes	No	No	No	No	No	Yes	No	No	No	No
198	South-central Fullerton	60590116015	Yes	Yes	Yes	No	No	No	No	Yes	No	No	No	No
199	South-central Fullerton	60590116016	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
200	North Anaheim/southeast Fullerton	60590116021	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
201	North Anaheim/southeast Fullerton	60590116022	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
202	South-central Fullerton	60590116023	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No
203	South-central Fullerton	60590116024	No	Yes	Yes	No	No	No	No	Yes	No	No	No	No
204	Southwest Placentia	60590117202	Yes	Yes	Yes	No	No	No	No	No	No	No	No	No
205	Platinum Triangle in Anaheim	60590760013	Yes	Yes	Yes	No	No	No	No	No	No	No	No	No
206	Platinum Triangle in Anaheim	60590760014	Yes	Yes	Yes	No	No	No	No	No	No	No	No	No
207	West Anaheim Junction	60590761021	No	No	Yes	No	No	No	No	No	No	No	No	No
208	West Anaheim Junction	60590761022	No	Yes	Yes	No	No	No	No	No	No	No	No	No
209	West Anaheim Junction	60590761024	Yes	No	Yes	No	No	No	No	No	No	No	No	No
210	West Anaheim Junction	60590761034	Yes	Yes	Yes	No	No	No	No	No	No	No	No	No
211	Southeast Anaheim/Platinum Triangle	60590761041	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No
212	Southeast Anaheim/Platinum Triangle	60590761042	No	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
213	Southeast Anaheim/Platinum Triangle	60590761043	No	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
214	Southeast Anaheim/Platinum Triangle	60590761044	No	No	No	No	No	No	No	Yes	No	No	No	No
215	Southeast Anaheim/Platinum Triangle	60590761051	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
216	Southeast Anaheim/Platinum Triangle	60590761052	Yes	Yes	No	No	No	No	No	Yes	No	No	No	No
217	Southeast Anaheim/Platinum Triangle	60590761053	Yes	Yes	Yes	No	No	No	No	Yes	No	No	No	No
218	Southeast Anaheim/Platinum Triangle	60590762041	No	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
219	Southeast Anaheim/Platinum Triangle	60590762042	Yes	Yes	Yes	Yes	Yes	No	No	Yes	Yes	Yes	Yes	No
220	Central Anaheim	60590863011	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
221	Central Anaheim	60590863012	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
222	Central Anaheim	60590863013	No	Yes	No	No	No	No	No	Yes	No	No	No	No

Map Label	Neighborhood/Community	Block Group ID	Low Income?	Minority?	In Transportation RSA?	In Air Quality RSA?	In Noise and Vibration (Construction) RSA?	In Noise and Vibration (Operation) RSA?	In EMF/EMI RSA?	In Socioeconomics and Communities RSA?	In Parks, Recreation, and Open Space RSA?	In Hazardous Materials and Wastes RSA?	In Aesthetics and Visual Quality RSA?	In Cultural Resources RSA?
223	Central Anaheim	60590863014	Yes	Yes	Yes	No	Yes	No	No	Yes	No	Yes	Yes	No
224	Central Anaheim	60590863015	No	Yes	No	No	Yes	No	No	Yes	No	Yes	Yes	No
225	Southeast Anaheim	60590863031	No	Yes	Yes	No	Yes	No	No	Yes	No	No	No	No
226	Central Anaheim	60590863032	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
227	Central Anaheim	60590863033	No	Yes	No	Yes	Yes	No	No	Yes	Yes	Yes	Yes	No
228	Platinum Triangle in Anaheim	60590863034	No	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
229	Southeast Anaheim	60590863035	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
230	Southeast Anaheim/Platinum Triangle	60590863036	No	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
231	Central Anaheim	60590863037	No	Yes	No	No	Yes	No	No	Yes	No	Yes	Yes	No
232	North-central Anaheim	60590864041	Yes	Yes	No	No	Yes	No	No	Yes	No	Yes	Yes	No
233	North-central Anaheim	60590864042	Yes	Yes	No	No	No	No	No	Yes	No	No	No	No
234	North-central Anaheim	60590864043	No	Yes	No	No	Yes	No	No	Yes	No	Yes	Yes	No
235	North-central Anaheim	60590864044	No	Yes	Yes	No	No	No	No	Yes	No	No	No	No
236	North-central Anaheim	60590864051	No	Yes	No	No	Yes	No	No	Yes	No	Yes	Yes	No
237	North-central Anaheim	60590864052	Yes	Yes	Yes	No	Yes	No	No	Yes	No	No	No	No
238	North-central Anaheim	60590864053	No	Yes	No	No	No	No	No	Yes	No	No	No	No
239	North-central Anaheim	60590864054	Yes	Yes	No	No	Yes	No	No	Yes	No	Yes	Yes	No
240	North-central Anaheim	60590864055	Yes	Yes	No	No	No	No	No	Yes	No	No	No	No
241	North-central Anaheim	60590865011	Yes	Yes	Yes	No	Yes	No	No	Yes	No	Yes	Yes	No
242	North-central Anaheim	60590865012	Yes	Yes	Yes	Yes	Yes	No	No	Yes	Yes	Yes	Yes	No
243	North-central Anaheim	60590865013	Yes	Yes	Yes	No	No	No	No	Yes	No	No	No	No
244	Central Anaheim	60590865021	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
245	Central Anaheim	60590865022	Yes	Yes	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
246	Central Anaheim	60590865023	Yes	Yes	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
247	Central Anaheim	60590865024	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
248	South-central Fullerton	60590866013	No	Yes	Yes	No	No	No	No	No	No	No	No	No
249	South Fullerton	60590866014	Yes	Yes	Yes	No	No	No	No	No	No	No	No	No
250	Central Anaheim	60590866021	Yes	Yes	Yes	No	No	No	No	No	No	No	No	No
251	Downtown Disney District in Anaheim	60590871064	No	Yes	Yes	No	No	No	No	No	No	No	No	No
252	Central Anaheim	60590872001	Yes	Yes	Yes	No	No	No	No	No	No	No	No	No
253	Central Anaheim	60590872002	No	Yes	Yes	No	No	No	No	No	No	No	No	No
254	Central Anaheim	60590872007	Yes	Yes	Yes	No	No	No	No	No	No	No	No	No

Map Label	Neighborhood/Community	Block Group ID	Low Income?	Minority?	In Transportation RSA?	In Air Quality RSA?	In Noise and Vibration (Construction) RSA?	In Noise and Vibration (Operation) RSA?	In EMF/EMI RSA?	In Socioeconomics and Communities RSA?	In Parks, Recreation, and Open Space RSA?	In Hazardous Materials and Wastes RSA?	In Aesthetics and Visual Quality RSA?	In Cultural Resources RSA?
255	Central Anaheim	60590873011	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
256	The Colony/central Anaheim	60590873012	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
257	Central Anaheim	60590873013	Yes	Yes	Yes	Yes	Yes	No	No	Yes	Yes	Yes	Yes	No
258	Central Anaheim	60590873021	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
259	Central Anaheim	60590873022	Yes	No	Yes	No	No	No	No	Yes	No	No	No	No
260	The Colony/central Anaheim	60590873023	Yes	Yes	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
261	Central Anaheim	60590873024	Yes	Yes	Yes	No	Yes	No	No	Yes	No	Yes	Yes	No
262	Central Anaheim	60590873025	Yes	Yes	Yes	No	No	No	No	Yes	No	No	No	No
263	Central Anaheim	60590873026	Yes	Yes	Yes	No	Yes	No	No	Yes	No	Yes	Yes	No
264	The Colony/central Anaheim	60590874011	No	Yes	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
265	Central Anaheim	60590874012	Yes	No	Yes	No	No	No	No	Yes	No	No	No	No
266	Central Anaheim	60590874013	No	Yes	Yes	No	No	No	No	Yes	No	No	No	No
267	Central Anaheim	60590874014	Yes	Yes	Yes	No	Yes	No	No	Yes	No	Yes	Yes	No
268	Central Anaheim	60590874031	Yes	Yes	Yes	No	No	No	No	Yes	No	No	No	No
269	Central Anaheim	60590874032	Yes	Yes	Yes	No	Yes	No	No	Yes	No	No	No	No
270	Platinum Triangle in Anaheim	60590874033	Yes	Yes	Yes	No	Yes	No	No	Yes	No	No	No	No
271	Central Anaheim	60590874041	Yes	Yes	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
272	Central Anaheim	60590874042	No	Yes	Yes	No	No	No	No	Yes	No	No	No	No
273	Central Anaheim	60590874051	Yes	Yes	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
274	Central Anaheim	60590874052	Yes	Yes	Yes	No	No	No	No	Yes	No	No	No	No
275	Central Anaheim	60590874053	Yes	Yes	Yes	No	No	No	No	Yes	No	No	No	No
276	Central Anaheim	60590874054	No	Yes	Yes	No	No	No	No	Yes	No	No	No	No
277	Convention Center in Anaheim	60590875031	Yes	Yes	Yes	No	No	No	No	No	No	No	No	No
278	Convention Center in Anaheim	60590875032	No	Yes	Yes	No	No	No	No	No	No	No	No	No
279	Convention Center in Anaheim	60590875033	Yes	Yes	Yes	No	No	No	No	No	No	No	No	No
280	West Anaheim Junction	60590875041	Yes	Yes	Yes	No	Yes	No	No	Yes	No	No	No	No
281	West Anaheim Junction	60590875044	Yes	Yes	Yes	No	No	No	No	No	No	No	No	No
282	Convention Center in Anaheim	60590884021	Yes	Yes	Yes	No	No	No	No	No	No	No	No	No
283	Garden Grove in Anaheim	60590884022	No	Yes	Yes	No	No	No	No	No	No	No	No	No
284	Convention Center in Anaheim	60590884031	Yes	Yes	Yes	No	No	No	No	No	No	No	No	No
285	Garden Grove in Anaheim	60590884032	Yes	Yes	Yes	No	No	No	No	No	No	No	No	No
286	Garden Grove in Anaheim	60590885021	Yes	Yes	Yes	No	No	No	No	No	No	No	No	No

Map Label	Neighborhood/Community	Block Group ID	Low Income?	Minority?	In Transportation RSA?	In Air Quality RSA?	In Noise and Vibration (Construction) RSA?	In Noise and Vibration (Operation) RSA?	In EMF/EMI RSA?	In Socioeconomics and Communities RSA?	In Parks, Recreation, and Open Space RSA?	In Hazardous Materials and Wastes RSA?	In Aesthetics and Visual Quality RSA?	In Cultural Resources RSA?
287	Garden Grove in Anaheim	60590891023	Yes	Yes	Yes	No	No	No	No	No	No	No	No	No
288	Garden Grove in Anaheim	60590891041	Yes	Yes	Yes	No	No	No	No	No	No	No	No	No
289	Garden Grove in Anaheim	60590891061	Yes	Yes	Yes	No	No	No	No	No	No	No	No	No
290	Garden Grove in Anaheim	60590891062	Yes	Yes	Yes	No	No	No	No	No	No	No	No	No
291	North Buena Park	60591106031	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No
292	North Buena Park	60591106032	Yes	Yes	Yes	No	Yes	No	No	Yes	Yes	No	No	No
293	North Buena Park	60591106033	Yes	Yes	No	No	Yes	No	No	Yes	No	No	No	No
294	North Buena Park	60591106034	No	Yes	No	No	Yes	No	No	Yes	Yes	Yes	Yes	No
295	North Buena Park	60591106035	Yes	Yes	No	No	No	No	No	Yes	No	No	No	No
296	Northeast Buena Park	60591106041	No	Yes	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
297	Northeast Buena Park	60591106042	Yes	Yes	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No
298	Northeast Buena Park	60591106043	Yes	Yes	No	No	Yes	No	No	Yes	Yes	Yes	Yes	No
299	Northeast Buena Park	60591106044	No	Yes	No	No	No	No	No	Yes	No	No	No	No
300	Northwest Fullerton	60591106051	No	Yes	No	No	No	No	No	Yes	No	No	No	No
301	West Fullerton	60591106052	No	Yes	No	No	No	No	No	Yes	No	No	No	No
302	West Fullerton	60591106053	No	Yes	No	No	Yes	No	No	Yes	No	No	No	No
303	West Fullerton	60591106054	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
304	Northwest Fullerton	60591106055	No	Yes	No	No	No	No	No	Yes	No	No	No	No
305	North Buena Park	60591106061	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
306	North Buena Park	60591106062	No	Yes	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
307	Northeast Buena Park	60591106071	Yes	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
308	Northeast Buena Park	60591106072	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
309	Northeast Buena Park	60591106073	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
310	Downtown Disney District in Anaheim	60599800001	No	Yes	Yes	No	Yes	No	No	Yes	No	No	No	No

CDP = Census-Designated Place; EMF/EMI = electromagnetic fields/electromagnetic interference; ID = identification; RSA = resource study area

Table 5-6 presents characteristics and demographic information for each RSA. As presented in Table 5-6, the RSAs range in size from 42.1 square miles to 65.5 square miles. The population of the RSAs ranges from approximately 126,000 to 345,000. Low-income populations represent over 30 percent of the population and minority populations represent over 79 percent of the population for every RSA. This indicates that, compared to the reference communities, the RSAs have greater concentrations of low-income and minority communities.

Potentially affected communities within the RSAs include the following neighborhoods and communities:

- Los Angeles:
  - downtown Los Angeles
  - Chinatown
  - Aliso Village
  - Boyle Heights
  - Redondo Junction
  - Skid Row
  - Soto Street Junction
- Commerce:
  - west Commerce
  - east Commerce
  - Hobart
- West Whittier–Los Nietos Census-Designated Place (CDP):
  - southwest West Whittier–Los Nietos CDP
  - south West Whittier–Los Nietos CDP
  - Los Nietos
- Montebello:
  - south Montebello
  - Bandini
- Pico Rivera:
  - central Pico Rivera
  - south Pico Rivera
  - McCampbell
  - Downey
- Norwalk:
  - northeast Norwalk
  - northwest Norwalk
  - west Norwalk
  - central Norwalk
  - Studebaker
- Santa Fe Springs:

  - southwest Santa Fe Springs
  - west Santa Fe Springs
  - south Santa Fe Springs
  - Fulton Wells
- La Mirada:
  - southwest La Mirada
  - south La Mirada
  - west La Mirada
  - central La Mirada
- Buena Park:
  - NORTHEAST Buena Park
  - NORTH Buena Park
- Fullerton:
  - northeast Fullerton
  - north Fullerton
  - central Fullerton
  - WEST Fullerton
  - southwest Fullerton
  - south-central Fullerton
  - SOUTHEAST Fullerton
  - east Fullerton
  - downtown Fullerton
- Anaheim:
  - north and north-central Anaheim
  - central Anaheim
  - southeast Anaheim
  - west Anaheim Junction
  - Garden Grove
  - The Colony
  - Platinum Triangle

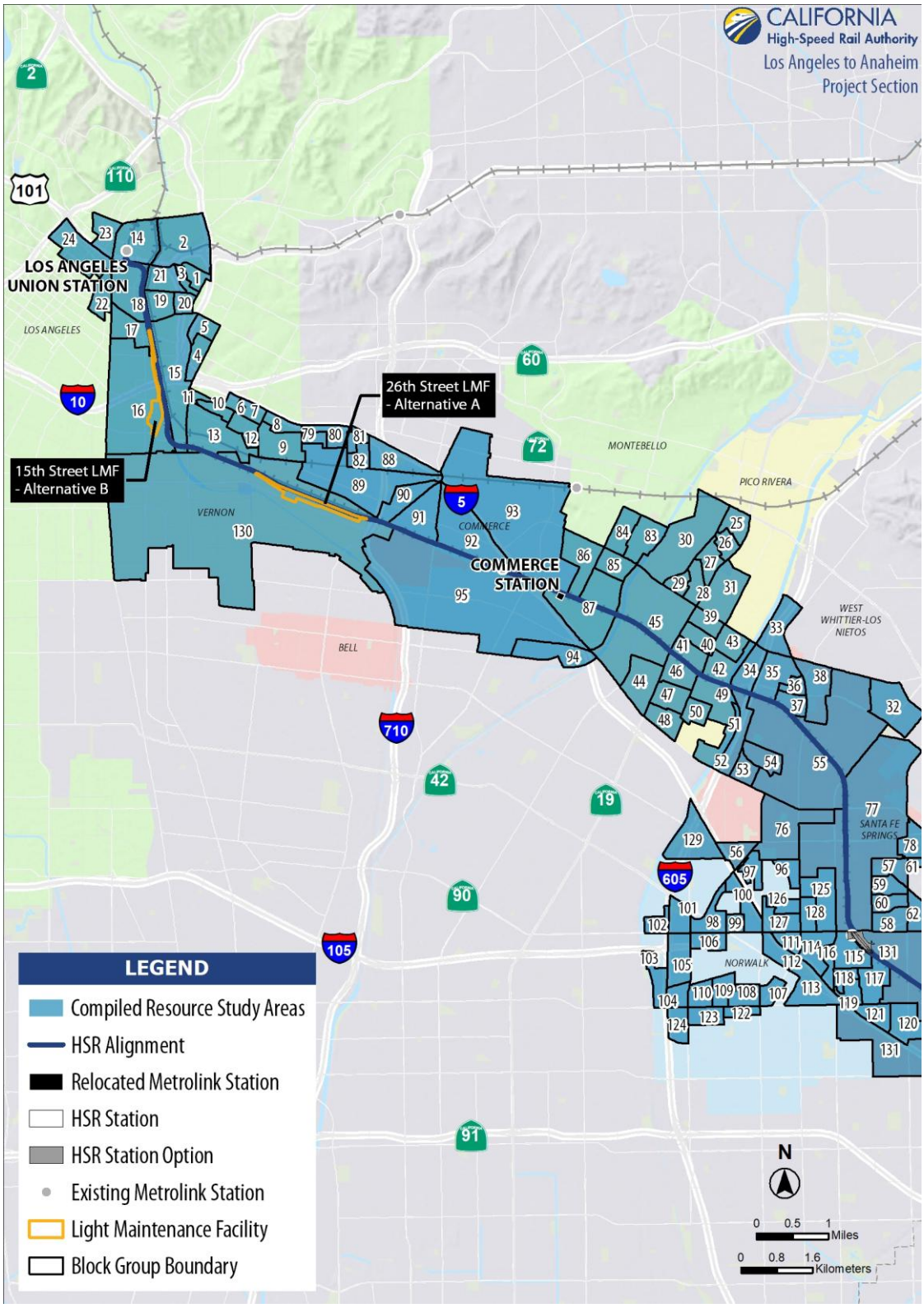
Table 5-6 Community Analysis Resource Study Area Demographics

Resource Study Area	Size in Square Miles	Total Population	Total Households	Percentage of Population Living Below 200% Poverty Level	Median Household Income	Percentage Minority[1] Population	Percentage Limited English Proficiency Households	Percentage 65 and Over Years of Age	Percentage Unemployed
Transportation	61.2	286,542	85,751	32.0	86,508	79.9	11.5	12.6	6.1
Air quality	48.6	175,512	53,625	33.4	82,213	81.1	13.5	12.2	6.3
Noise and vibration	57.6	263,989	79,174	33.7	82,256	82.1	14.1	12.1	6.3
EMF/EMI	45.4	151,206	45,464	34.1	82,201	80.5	13.2	12.4	6.2
Hazardous materials and wastes	49.6	183,458	55,835	33.4	82,666	81.2	13.4	12.3	6.3
Socioeconomics and communities	65.5	345,669	103,010	33.5	82,809	82.6	13.5	13.1	6.3
Parks, recreation, and open space	51.4	206,089	62,647	33.7	83,531	80.2	14.2	12.3	6.4
Aesthetics and visual quality	49.6	183,458	55,835	33.4	82,666	81.2	13.4	12.3	6.3
Cultural resources	42.1	126,685	37,820	33.5	82,074	79.4	13.0	12.2	5.9

Source: U.S. Census Bureau 2021, Table DP05, S1701

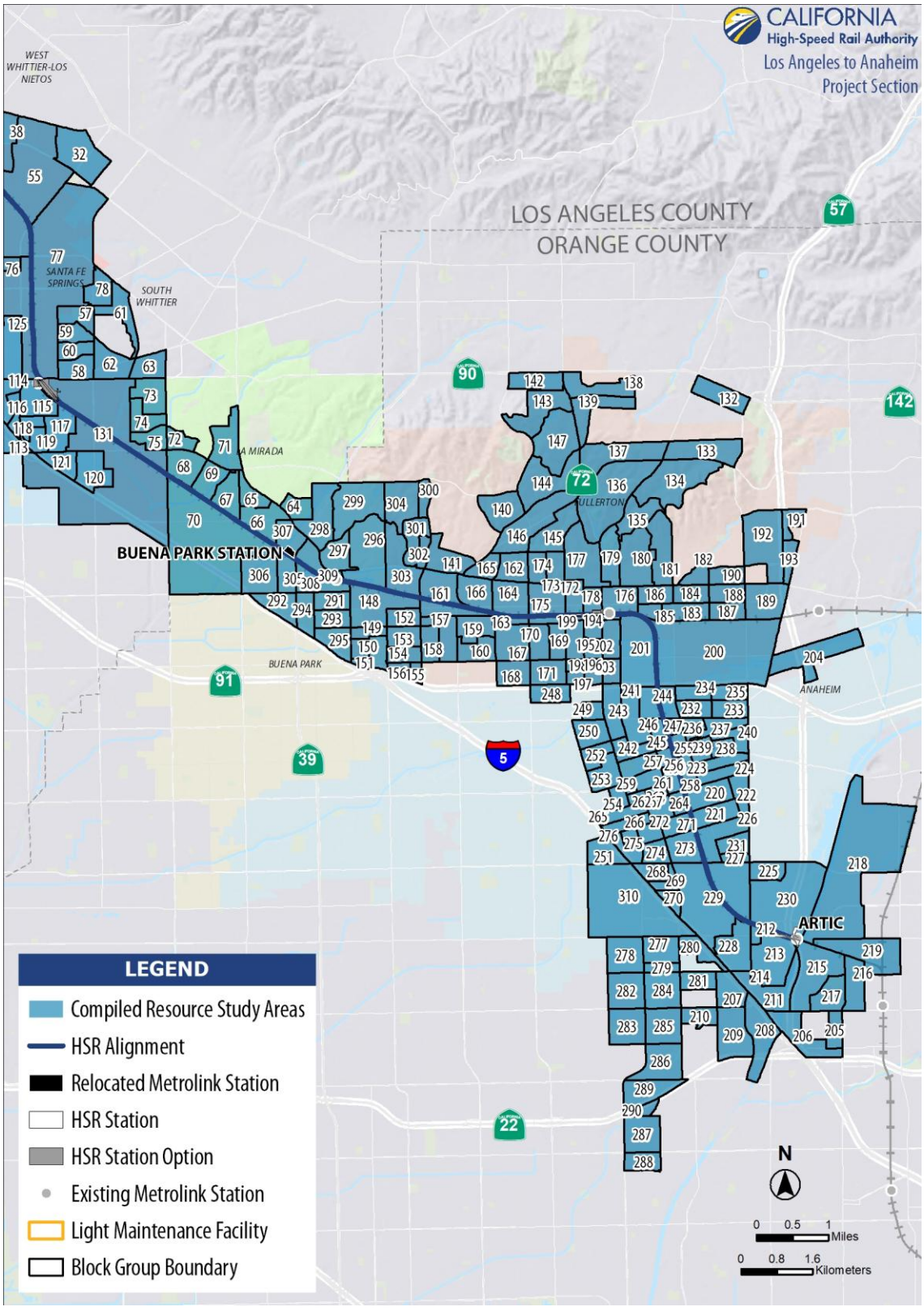
[1] Calculated as the sum of census respondents that identified as Asian, Black or African American, American Indian or Alaska Native, Hawaiian or other Pacific Islander (not Hispanic), or Hispanic (all races).

EMF/EMI = electromagnetic fields/electromagnetic interference



Source: U.S. Census Bureau 2021; ESRI 2024
Block group identification numbers and associated neighborhoods can be found in Table 5-5.

Figure 5-2 Community Analysis Resource Study Area, Sheet 1 of 2



Sources: U.S. Census Bureau 2021; ESRI 2024
Block group identification numbers and associated neighborhoods can be found in Table 5-5.

Figure 5-2 Community Analysis Resource Study Area, Sheet 2 of 2

5.3.2 Impact Avoidance and Minimization Features

The Shared Passenger Track Alternatives incorporate standardized HSR features to avoid and minimize impacts. These features are referred to as IAMFs and are considered to be part of the project. The Authority will incorporate IAMFs during project design and construction; therefore, the analysis of impacts of the project in this section factors in applicable IAMFs. Appendix 2-A provides a detailed description of IAMFs that are included as part of the project design. The IAMFs differ from mitigation measures in that they are part of the project regardless of whether an impact is identified in this document. IAMFs specific to community analysis are discussed in Section 5.8.

IAMFs applicable to community analysis for the project include:

- **AQ-IAMF#1, Fugitive Dust Emissions**
- **AQ-IAMF#2, Selection of Coatings**
- **AQ-IAMF#3, Renewable Diesel**
- **AQ-IAMF#4, Reduce Criteria Exhaust Emissions from Construction Equipment**
- **AQ-IAMF#5, Reduce Criteria Exhaust Emissions from On-Road Construction Equipment**
- **CUL-IAMF#1, Geospatial Data Layer and Archaeological Sensitivity Map**
- **CUL-IAMF#2, Worker Environmental Awareness Program Training Session**
- **CUL-IAMF#3, Preconstruction Cultural Resource Surveys**
- **CUL-IAMF#4, Relocation of Project Features When Possible**
- **CUL-IAMF#5, Archaeological Monitoring Plan and Implementation**
- **CUL-IAMF#6, Preconstruction Conditions Assessment, Plan for Protection of Historic Architectural Resources, and Repair of Inadvertent Damage**
- **CUL-IAMF#7, Built Environment Monitoring Plan**
- **CUL-IAMF#8, Implement Protection and/or Stabilization Measures**
- **EMF/EMI-IAMF#2, Controlling Electromagnetic Fields/Electromagnetic Interference**
- **HMW-IAMF#1, Property Acquisition Phase I and Phase II Environmental Site Assessments, Additional Preconstruction Investigations, and Associated Actions to Control Site Contamination**
- **HMW-IAMF#3, Work and Vapor Barriers**
- **HMW-IAMF#4, Known, Suspected, and Unanticipated Environmental Contamination**
- **HMW-IAMF#5, Demolition Plans**
- **HMW-IAMF#6, Spill Prevention**
- **HMW-IAMF#7, Storage and Transport of Materials**
- **HMW-IAMF#8, Permit Conditions**
- **HMW-IAMF#9, Environmental Management System**
- **NV-IAMF#1, Noise and Vibration**
- **SOCIO-IAMF#1, Construction Management Plan**
- **SOCIO-IAMF#2, Compliance with Uniform Relocation Assistance and Real Property Acquisition Policies Act**

- **SOCIO-IAMF#3, Relocation Implementation Plan**
- **SS-IAMF#1, Construction Safety Transportation Management Plan**
- **SS-IAMF#2, Safety and Security Management Plan**
- **SS-IAMF#4, Oil and Gas Wells**
- **SS-IAMF#5, Aviation Safety**
- **TR-IAMF#1, Protection of Public Roadways During Construction**
- **TR-IAMF#2, Construction Transportation Plan**
- **TR-IAMF#3, Off-Street Parking for Construction-Related Vehicles**
- **TR-IAMF#4, Maintenance of Pedestrian Access**
- **TR-IAMF#5, Maintenance of Bicycle Access**
- **TR-IAMF#6, Restriction on Construction Hours**
- **TR-IAMF#7, Construction Truck Routes**
- **TR-IAMF#8, Construction During Special Events**
- **TR-IAMF#9, Protection of Freight and Passenger Rail During Construction**
- **TR-IAMF#11, Maintenance of Transit Access**
- **TR-IAMF#12, Pedestrian and Bicycle Safety**
- **TR-IAMF#13, Stakeholder Coordination with Transportation Agencies**
- **AVQ-IAMF#1, Aesthetic Options**
- **AVQ-IAMF#2, Aesthetic Review Process**
- **GEO-IAMF#3, Gas Monitoring**
- **PK-IAMF#1, Parks, Recreation, and Open Space**

5.3.3 Mitigation Measures

The mitigation measures outlined below would be applied to communities, based on the extent of the project effects.

- **AQ-MM#1, Offset Project Construction Emissions in the South Coast Air Basin (SCAB) through South Coast Air Quality Management District (SCAQMD) Emissions Offsets Program**
- **AQ-MM#2, Requirements for Use of Zero-Emission or Near-Zero-Emission Vehicles and Off-Road Equipment to Reduce Construction Emissions**
- **AQ-MM#3, Reduce the Potential Impact of Stationary Sources**
- **AQ-MM#4, Requirement of a Future Operational Health Risk Assessment**
- **EMF/EMI-MM#1, Protect Sensitive Equipment**
- **HMW-MM#1, Limit Use of Extremely Hazardous Materials Near Schools During Construction**
- **HMW-MM#2, Coordination of High-Speed Rail Design and Construction with Remediation of Exide Site and Orange County North Basin Superfund Site**
- **N&V-MM#1, Construction Noise Mitigation Measures**
- **N&V-MM#2, Construction Vibration Mitigation Measures**

- **N&V-MM#3, Implement California High-Speed Rail Project Noise Mitigation Guidelines**
- **N&V-MM#4, Implement Operational Vibration Mitigation Measures**
- **AVQ-MM#1, Minimize Visual Disruption from Construction Activities**
- **AVQ-MM#2, Minimize Light Disturbance During Construction**
- **AVQ-MM#3, Incorporate Design Aesthetic Preferences into Final Design and Construction of Nonstation Structures**
- **AVQ-MM#4, Provide Vegetation Screening Along At-Grade and Elevated Guideways Adjacent to Residential Areas**
- **AVQ-MM#5, Replant Unused Portions of Land Acquired for the Los Angeles to Anaheim Project Section**
- **AVQ-MM#6, Screen Traction Power Distribution Stations and Radio Communication Towers**
- **AVQ-MM#7, Incorporate Design Criteria for Elevated Guideways and Station Elements that Can Adapt to Local Context**
- **CUL-MM#1, Mitigate Adverse Effects on Archaeological and Built Environment Resources Identified During Phased Identification and Comply with the Stipulations Regarding the Treatment of Archaeological and Historic Built Resources in the Programmatic Agreement and Memorandum of Agreement**
- **CUL-MM#2, Halt Work in the Event of an Archaeological Discovery and Comply with the Programmatic Agreement, Memorandum of Agreement, Archaeological Treatment Plan, and All State and Federal Laws, as Applicable**
- **CUL-MM#3, Other Mitigation for Effects on Precontact Archaeological Sites**
- **CUL-MM#8, Repair of Inadvertent Damage**
- **CUL-MM#12, Design Review for Protective Barriers**
- **PR-MM#1, Temporary Restricted Access to Park Facilities During Construction**
- **PR-MM#2, Providing Park Access**
- **PR-MM#4, Replacement of Property Acquired from Existing or Planned Multiuse Trails and Paths**
- **SO-MM#1, Implement Measures to Reduce Impacts Associated with the Division of Residential Neighborhoods**
- **SO-MM#2, Implement Measures to Reduce Impacts Associated with the Division of Communities**
- **SS-MM#1, Implement Emergency Response Time Mitigation Strategies**
- **TRAN-MM#1, Modify Traffic Control Signals**
- **TRAN-MM#2, Restripe Intersections**
- **TRAN-MM#3, Add Signal to Intersection to Improve Level of Service/Operation**
- **TRAN-MM#4, Add Exclusive Turn Lanes to Intersections**
- **TRAN-MM#5, Add New Lanes to Roadway**
- **TRAN-MM#7, Add Lane to State Route 57/Westbound Katella Avenue Southbound On-Ramp**

5.3.4 Methods for Impact Analysis

This section describes the sources and methods the Authority used to analyze potential effects of implementing the Shared Passenger Track Alternatives on communities. Refer to Section 3.1.5.4, Methods for Evaluating Impacts, for a description of the general framework for evaluating effects under NEPA. Laws, regulations, and orders (refer to Section 5.2, Laws, Regulations, and Orders).

Low-income and minority populations are distinguished for transparency. The Authority gathered demographic data from the U.S. Census Bureau ACS 2017–2021 5-Year Estimates for the reference communities of Los Angeles and Orange Counties and census BGs in those counties. Because of the substantially greater population in Los Angeles County compared to Orange County, a weighted average of the demographics in the two-county region was not used to represent a single reference community. Instead, demographics for Los Angeles County are used as a point of comparison for census BGs in Los Angeles County, and demographics for Orange County are used as a point of comparison for census BGs in Orange County. Therefore, these two counties represent the reference communities for this analysis.

Evaluating impacts on community populations involves both procedural and technical considerations. Procedural considerations include reaching out to communities to ensure they are effectively engaged in public involvement processes, and to understand their perceptions of impacts on their communities. Technical considerations involve the choice of appropriate data sets and assumptions for the identification of local populations and the methods for identifying adverse effects and determining whether the project would have DHAEs on these populations.

The Authority used the following methods to evaluate potential direct and indirect effects from construction and operation on communities.

5.3.4.1 Identification of Resource Study Area Populations

For this community analysis, the following methods were used to identify population characteristics in the RSAs:

- **Minority Population:** Defined as individuals who do not self-identify as White only when completing their 2017–2021 ACS survey; it includes those who identified as Black or African American, American Indian or Alaska Native, Native Hawaiian or other Pacific Islander, Asian, or Hispanic or Latino, regardless of race. For this analysis, minority populations of am RSA census BG, according to 2017–2021 ACS Table B03002, were compared to the minority population percentage of Los Angeles or Orange County, respectively. This analysis uses the minority percentage of Los Angeles and Orange Counties rather than a 50 percent threshold to better account for the diverse nature of the local populations. Census BGs that exceeded the Los Angeles or Orange County averages (74.5 and 60.9 percent, respectively) were identified as minority communities.
- **Elderly:** Defined as individuals over the age of 65.
- **Limited English Proficiency (LEP):** Populations represent readily identifiable groups of persons over 14 years of age who self-identify that they do not speak English very well or at all. U.S. Census respondents who reported speaking a language other than English were asked to indicate their English-speaking ability based on one of the following categories: “very well,” “well,” “not well,” or “not at all.” Those who answered “well,” “not well,” or “not at all” are reported as “Speaking English less than ‘very well.’” A “limited English speaking household” is one in which no member of the household aged 14 years old or over (1) speaks only English at home or (2) speaks a language other than English at home and speaks English “very well.” After census data are collected for each person in the household, this variable is calculated by checking if all people 14 years old and older speak a language other than English. If so, the calculation checks the English-speaking ability responses to determine if all people 14 years old and older speak English “less than ‘very well.’” If all household members 14 years and over speak a language other than English and speak English “less than ‘very well,’” the household is considered a “limited English speaking household” that may be in need of English language assistance. Populations are

characterized as having a higher degree of linguistic isolation when a higher percentage of households are LEP households.

- **Low-Income Population:** Defined as individuals whose income is less than twice the U.S. Census poverty threshold. For this analysis, the threshold is an income less than $28,194 for those under 65, or less than $25,992 for those 65 and over (U.S. Census Bureau 2021). A higher threshold is used in this analysis to reflect the elevated cost of living in Los Angeles and Orange Counties. By applying a standard that is twice the national poverty level, the definition of *low-income* becomes more inclusive and captures a broader segment of low-income residents in these counties. A census BG was identified as having a low-income population if, according to ACS 2017–2021 5-year estimates, the low-income population percentage in that census BG was higher than its corresponding countywide average for Los Angeles County (32.2 percent) or Orange County (23.3 percent). In the event that a change to the existing environment would occur close to the county line, where, for example, populations from both counties may use the same resource (i.e., the proposed relocation of the Metrolink Station, just southeast of the county line), demographics from both counties are considered as points of comparison for census BGs to determine the presence of and potential effects on low-income populations. This allows a comparison on the different treatment of populations between counties.

In addition to demographic data, the following were considered in the community analysis (refer to Section 3.12 for community facilities and Chapter 9 for additional information on public outreach) (U.S. Census Bureau 2021):

- Community facilities that serve as ethnic resources (i.e., cultural centers, neighborhood services, places of worship, and shopping districts)
- Populations within the RSAs with LEP of predominant languages spoken within the RSAs (maps were created to identify for outreach)

The identification of community analysis populations informed the Authority of the areas in need of special consideration (e.g., populations requiring interpreters or consuming different types of media). The Authority used this information to tailor outreach activities for more effective public participation and distribution of information, as discussed in Section 5.5. The identification of these populations was also used to evaluate construction and operational effects.

5.3.4.2 Methods for Identifying Potential Adverse Effects

To identify adverse effects, the Authority reviewed the resource sections in Chapter 3 and identified impacts on environmental or community resources with the potential to affect community populations. Potential adverse effects on populations included, but were not limited to:

- Bodily impairment, infirmity, illness, or death
- Air, noise, water pollution, and soil contamination
- Destruction or disruption of built natural resources
- Destruction or disruption of community cohesion or a community's economic vitality
- Destruction or disruption of the availability of public and private facilities and services
- Vibration
- Adverse employment effects
- Displacement of persons, businesses, or nonprofit organizations
- Increased traffic congestion, isolation, exclusion, or separation of minority or low-income individuals in a given community from a broader community
- The denial of, reduction in, or significant delay in the receipt of benefits of programs, policies, or activities

This assessment was accomplished by reviewing the construction and operational impacts identified in each resource section, including details regarding the RSAs, the nature of the impact (e.g., impact type, context, intensity, and duration), and the geographic location of the project impacts relative to the RSAs. Project effects for each resource area are summarized in the NEPA effects summary tables provided at the end of each resource section in Chapter 3. Where the project would result in no effect on community populations or would result in an effect that does not warrant mitigation, the effect was considered to be not adverse and no further analysis was conducted. The analysis of the following resource topics did not identify any adverse effects before mitigation:

- Section 3.6, Public Utilities and Energy
- Section 3.7, Biological Resources and Wetlands
- Section 3.8, Hydrology and Water Resources
- Section 3.9, Geology, Soils, Seismicity, and Paleontological Resources
- Section 3.11, Safety and Security
- Section 3.13, Station Planning, Land Use, and Development
- Section 3.14, Agricultural Farmland and Forest Land
- Section 3.18, Regional Growth

The following resource sections were identified to have some potentially adverse effects on communities before mitigation and are therefore discussed in this chapter:

- Section 3.2, Transportation
- Section 3.3, Air Quality and Global Climate Change
- Section 3.4, Noise and Vibration
- Section 3.5, Electromagnetic Fields and Electromagnetic Interference
- Section 3.10, Hazardous Materials and Wastes
- Section 3.12, Socioeconomics and Communities[1]
- Section 3.15, Parks, Recreation, and Open Space
- Section 3.16, Aesthetics and Visual Quality
- Section 3.17, Cultural Resources

The Authority evaluated adverse effects based on the following considerations:

- Effects that were minimized through mitigation or offset by project benefits were evaluated to determine whether the mitigation measures or benefits (1) were equally applied to minority, nonminority populations and low-income populations and (2) if they addressed the concerns of the communities. If the mitigation measures or benefits were not successful in addressing (1) and (2) above, effects were considered adverse.
- Effects that were not substantially reduced through mitigation or offset by project benefits were considered adverse.

5.3.4.3 Methods for Determining Disproportionately High and Adverse Effects

Once adverse effects on populations were identified, the Authority then evaluated whether effects that would adversely affect community populations.

A *disproportionately high and adverse* effect is generally defined as an effect that:

- Would be predominantly borne by a specific community or population, or
- Would be suffered by a community or population and would be appreciably more severe or greater in magnitude than the adverse effect suffered by another community or population in the affected area relative to the reference community

[1] Although no potential adverse effects were identified for business displacements at a regional level in Section 3.12, business displacements are evaluated at a community level in this chapter.

When a project's adverse impacts affect a greater proportion of minority or low-income communities in the identified community than is found in the reference communities, those effects are determined to be potentially disproportionately high and adverse. Federal Transportation Administration Circular 4702.1B states that an acceptable measure of disproportionate burden or disparate impact is whether the minority or low-income community is affected more than their representative share in the overall population/reference community, which in this analysis is Los Angeles and Orange Counties. Table 5-2 indicates that Los Angeles and Orange Counties have 74.5 percent and 60.9 percent minority populations and 32.2 percent and 23.3 percent low-income populations, respectively. Therefore, if an adverse impact affects minority or low-income populations at a greater percentage than the reference community, the effects are determined to be potentially disproportionately high and adverse.

Determinations of DHAEs also take into account mitigation and enhancement measures that would be implemented as part of the project as well as offsetting benefits of the project to the affected communities, along with the design and comparative impacts. Whether adverse effects would be disproportionately high and adverse includes consideration of the totality of the circumstances, including the following:

- The location of an adverse effect
- The percentage of minority and low-income populations in the areas of effect compared to the population in the reference community, which provides context for the effect
- The perceptions of the community regarding the severity of the adverse effect and the success of the proposed mitigation measures in reducing the adverse effect
- Whether mitigation measures applied to avoid, minimize, repair or restore, reduce over time, or compensate for adverse effects would do so equally for affected communities as well as non-affected communities
- The project benefits that would be received by communities (also discussed in Section 5.6.3, Project Impacts, and Section 5.9.
- Social, religious, or cultural resources or public services such as police, fire, and emergency services that are particularly important to or dependent upon the community that would be affected

This analysis identified disproportionately high and adverse impacts on communities through the following steps:

- Identify social, economic, and environmental impacts, based on the analyses presented in Section 3.2 through Section 3.19 of this EIR/EIS, that would have reasonably foreseeable high and adverse impacts on communities.
- If the Chapter 3 resource analyses identify mitigation measures that would reduce these impacts, consider whether the mitigation would be equally applied to communities and if it addresses the concerns of the communities.
- Confirm if practicable mitigation has been applied or, if needed, consider whether additional mitigation is available to further reduce or minimize adverse effects on communities.
- If impacts on communities remain high and adverse, even after applicable mitigation, consider whether they are borne disproportionately by any specific communities based on the criteria above.

5.3.4.4 Methods for Inclusive Public Engagement

Minority and low-income populations were engaged through specific outreach efforts to existing programs and established minority organizations. The Inclusive Public Engagement Plan for the Los Angeles to Anaheim Project Section serves to support the environmental study for the project section with the intention to guide the Authority in engaging LEP, minority, and low-income populations in the RSAs to communicate project information, listen to and respond to community

thoughts and concerns, and identify potential actions to mitigate disproportionately high and adverse human health and environmental effects, including social and economic effects, on LEP, minority, and low-income populations. Appendix 9-B provides additional detail on the focused outreach effort. Throughout the EIR/EIS process, the Authority used inclusive public involvement strategies to engage a wide range of participants and provide meaningful access to communities. Specific outreach efforts targeting these populations for the project are summarized in Table 5-7.

Table 5-7 Specific Outreach Efforts

Effort	Strategy
Community Outreach Tools	Meeting notices and social media notice tool kits to interest groups and local public schools.
	Advertisements in Spanish, Korean, Vietnamese, Tagalog, Japanese, and Chinese-language newspapers. Advertisements were translated in Spanish, Korean, and Tagalog.
	Meeting notices in English, Spanish, and Korean at community and education facilities that serve those communities.
	Meeting materials provided contact information for those with special needs to allow them to make necessary arrangements.
Language Interpretation Services	Materials for public meetings hosted by the Authority were translated into languages spoken by more than 5 percent of the population, and language interpreters were available at public information meetings.
	Per HSR Title VI protocol, pursuant to the regulatory mandates set forth by the Collective Laws (Title VI of the Civil Rights Act of 1964, 42 U.S. Code 2000d et seq., Executive Order 13166,[1] and the Dymally Alatorre Bilingual Services Act of 1973 [Government Code Sections 7290 et seq.]), the Authority is required to comply with the following: ▪ Interpretation and translation services are to be automatically provided in the identified languages that meet, or exceed, the 5 percent population threshold. ▪ Wording detailing information about reasonable accommodation, interpretation, and translation services (i.e., "If you need reasonable accommodation...") is to be provided in the identified languages that fall between 3 percent and 5 percent of the population threshold. Based on these regulations, Spanish and Korean met the 5 percent threshold for interpretation and translations services at meeting locations along the corridor (virtual and in-person). Wording detailing information about reasonable accommodation, interpretation, and translation services (i.e., "If you need reasonable accommodation...") was stated in all notification materials for language that met the 3 percent and 5 percent thresholds. These languages included Spanish, Korean, Vietnamese, and Chinese/Mandarin. In addition, American Sign Language was offered at in-person meetings and closed captioning was featured at virtual meetings. In the past, joint community meetings held with the Burbank to Los Angeles Project Section included Chinese/Mandarin and Japanese interpretation services.
	The Authority posted translated materials to its website and used them to notify the public of meetings.

[1] On March 1, 2025, U.S. Presidential Executive Order 14224, Designating English as the Official Language of the United States, rescinded U.S. Presidential Executive Order 13166, Improving Access to Services for Persons with Limited English Proficiency.
Authority = California High-Speed Rail Authority; HSR = high-speed rail

The Authority also contacted groups with interest in environmental, economic and community issues and established minority organizations, as well as other civic leaders and elected officials. Other opportunities to gain a better understanding of potential community impacts included city

council meetings, stakeholder working groups, public information meetings, community pop-ups,[2] coffees,[3] correspondence emails, phone calls, and group briefings.

Table 4-1, Corridor Advocacy and Community Groups, in the Inclusive Public Engagement Plan (Appendix 9-B) lists advocacy and community groups serving minority and low-income communities in the RSAs. Table 9-1 in Chapter 9 lists key meetings held as part of the Authority's outreach effort. Appendix 9-A lists meetings. Therefore, issues and concerns raised at public outreach events are considered representative of minority and low-income populations. Additional discussion about concerns raised by minority and low-income populations during public engagement is presented in Section 5.5.

5.4 Affected Environment

Table 5-8 provides a summary of the low-income and minority characteristics for each resource-specific RSA. As presented in Table 5-8, every RSA has a higher percentage of minority and low-income populations than the reference communities.

Table 5-8 Project Section Characteristics

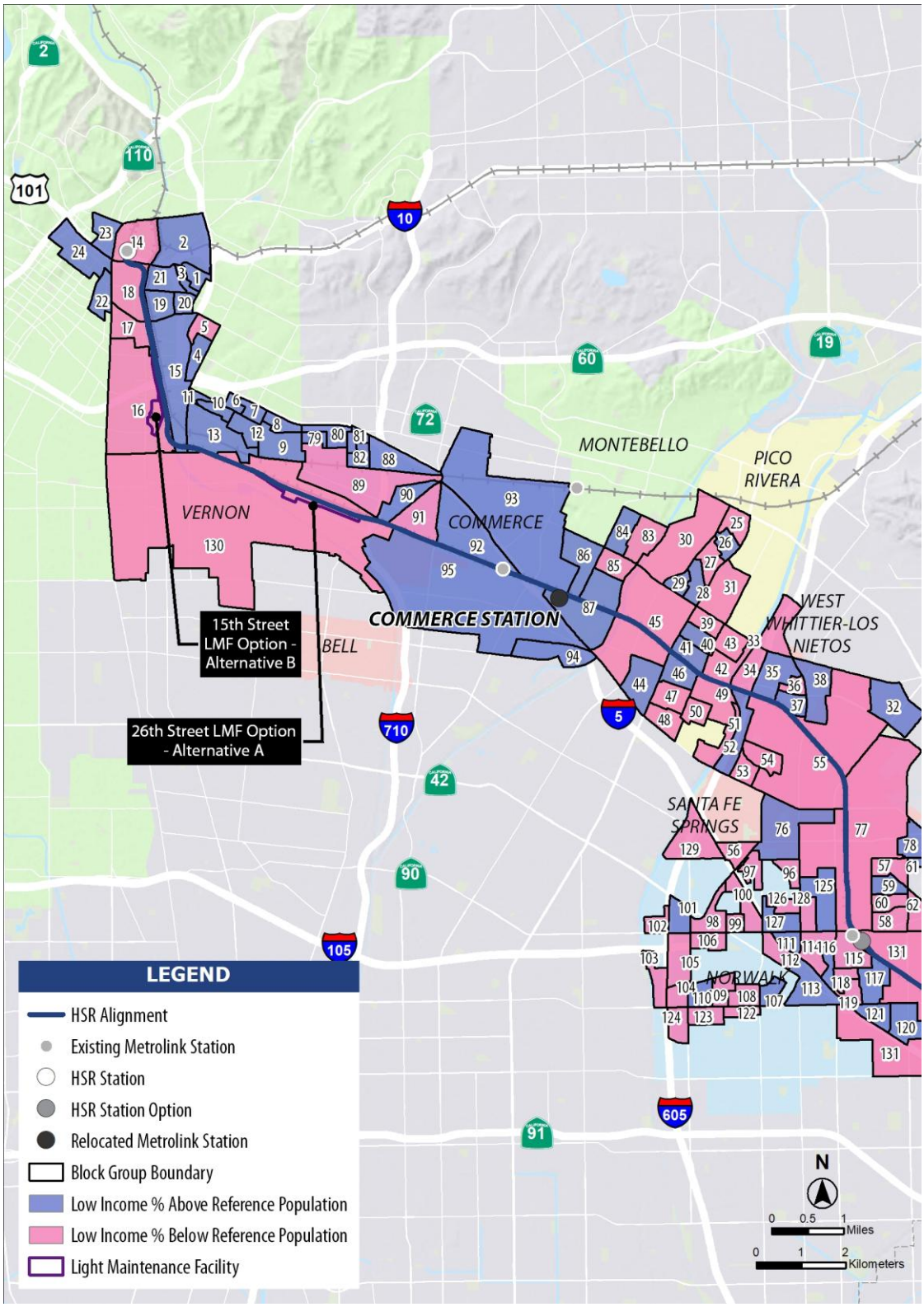
Resource RSA	Percentage in Minority Areas	Percentage in Nonminority Areas	Percentage in Low-Income Areas	Percentage in Non-Low-Income Areas
Transportation	80	20	55	45
Air quality	81	19	57	43
Noise and vibration	83	17	57	43
EMF/EMI	78	22	59	41
Hazardous materials and wastes	82	18	56	44
Socioeconomics and communities	84	16	56	44
Parks, recreation, and open space	80	20	57	43
Aesthetics and visual quality	83	17	57	43
Cultural resources	76	24	57	43

Source: U.S. Census Bureau 2021
EMF/EMI = electromagnetic fields/electromagnetic interference; RSA = resource study area

5.4.1 Low-Income Populations

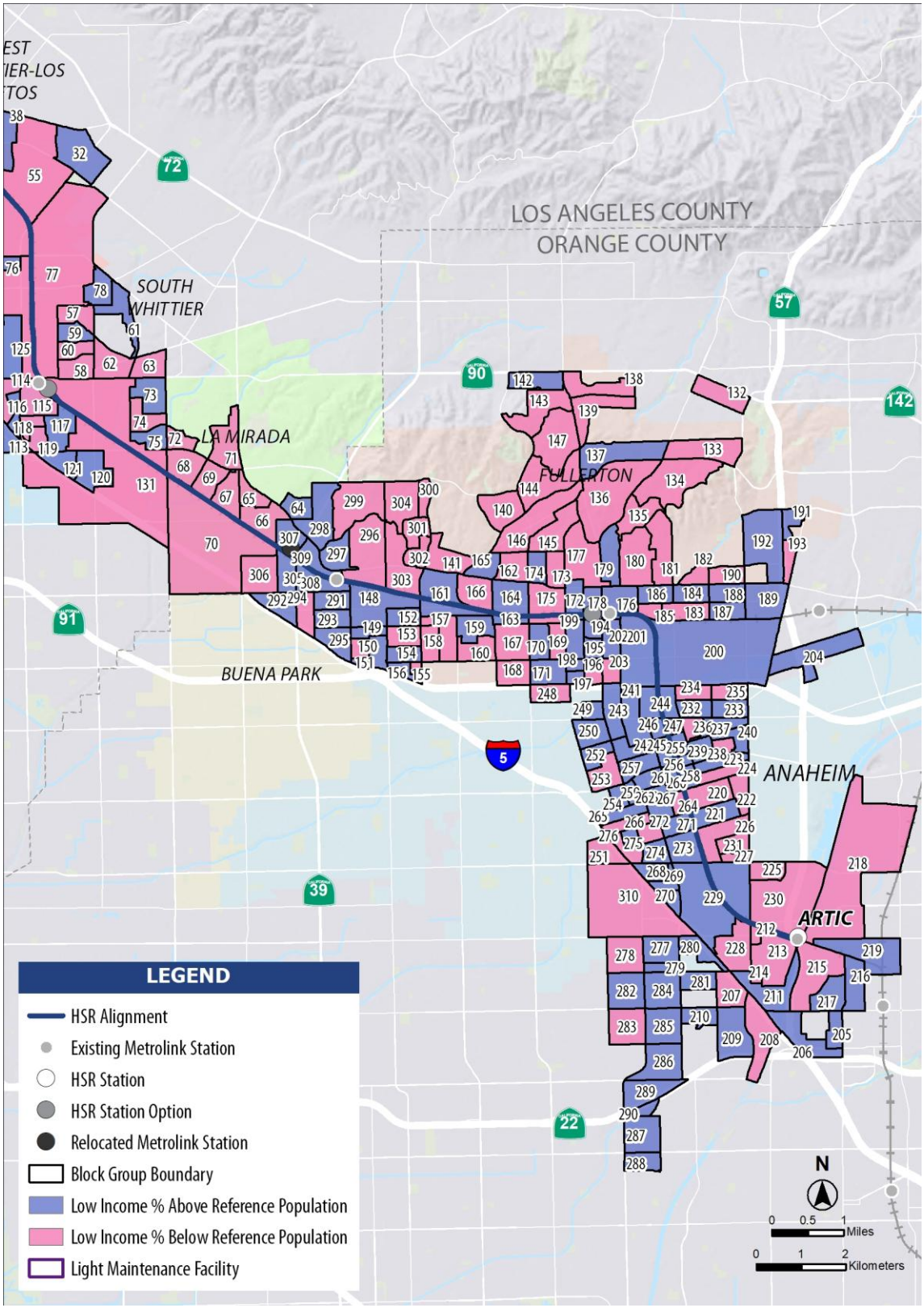
Table 5-5 presents the BGs considered low-income populations for this analysis. As discussed in Section 5.3.4.1, Identification of Resource Study Area Populations, *low income* is defined as those living below 200 percent of the federal poverty level. Figure 5-3, sheets 1 and 2, depicts the census BGs with a percentage of the low-income population above and below that of the reference community for the project section. This analysis considers census BGs with low-income populations above that of the reference populations. Of 310 BGs in the combined resource RSAs, 165 (53.2 percent) are considered low-income populations.

[2] *Pop-ups* are informal information tables set up to distribute information that is tailored to a targeted area.
[3] *Coffees* are informal round-table type discussions held with stakeholders in a targeted area.



Sources: U.S. Census Bureau 2021; ESRI 2024
The block group in Norwalk with no population is occupied by businesses; it contains no residential areas.

Figure 5-3 Low-Income Population in the Community Analysis Resource Study Area, Sheet 1 of 2



Sources: U.S. Census Bureau 2021; ESRI 2024

Figure 5-3 Low-Income Population in the Community Analysis Resource Study Area, Sheet 2 of 2

As depicted on Figure 5-3, the following communities have low-income populations:

- Los Angeles:
  - Aliso Village
  - downtown Los Angeles
  - Skid Row
  - Boyle Heights
  - Soto Street Junction
- Commerce:
  - Hobart
  - west Commerce
- Pico Rivera:
  - McCampbell
  - Downey
  - central Pico Rivera
- West Whittier–Los Nietos CDP:
  - Los Nietos
  - south Whittier
  - southwest West Whittier–Los Nietos CDP
- La Mirada:
  - west La Mirada
- Santa Fe Springs:
  - Fulton Wells
- Montebello:
  - Bandini
- Norwalk:
  - Studebaker
  - central Norwalk
  - east Norwalk
  - northeast Norwalk
- Fullerton:
  - downtown Fullerton
  - Almond
  - north Fullerton
  - south Fullerton

- Anaheim:
  - north Anaheim
  - The Colony
  - west Anaheim Junction
  - central Anaheim
  - southeast Anaheim
  - Platinum Triangle

5.4.2 Minority Populations

Table 5-5 presents the BGs considered minority populations for this analysis. As discussed in Section 5.3.4.1, BGs that exceeded the Los Angeles or Orange County minority population averages (74.5 and 60.9 percent, respectively) were identified as minority communities. Figure 5-4, sheets 1 and 2, depicts the census BGs in the RSA with a percentage of minority populations above and below that of the reference community. Some BGs have too small a population to accurately present demographic information; these BGs are represented as empty BGs on the figures. Of the 310 BGs across the resource RSAs, 258 (83.2 percent) are considered minority populations.

Minority group representation in each resource-specific RSA is presented in Table 5-9. Reference community data are presented as well for comparison. As presented in Table 5-9, the predominant racial/ethnic group within the RSA is Hispanic or Latino. Every RSA is over 60 percent Hispanic or Latino, which is much higher than the percentages in Los Angeles and Orange Counties as a whole. White, Asian, and African American populations represent the next-highest populations, respectively, across the RSAs.

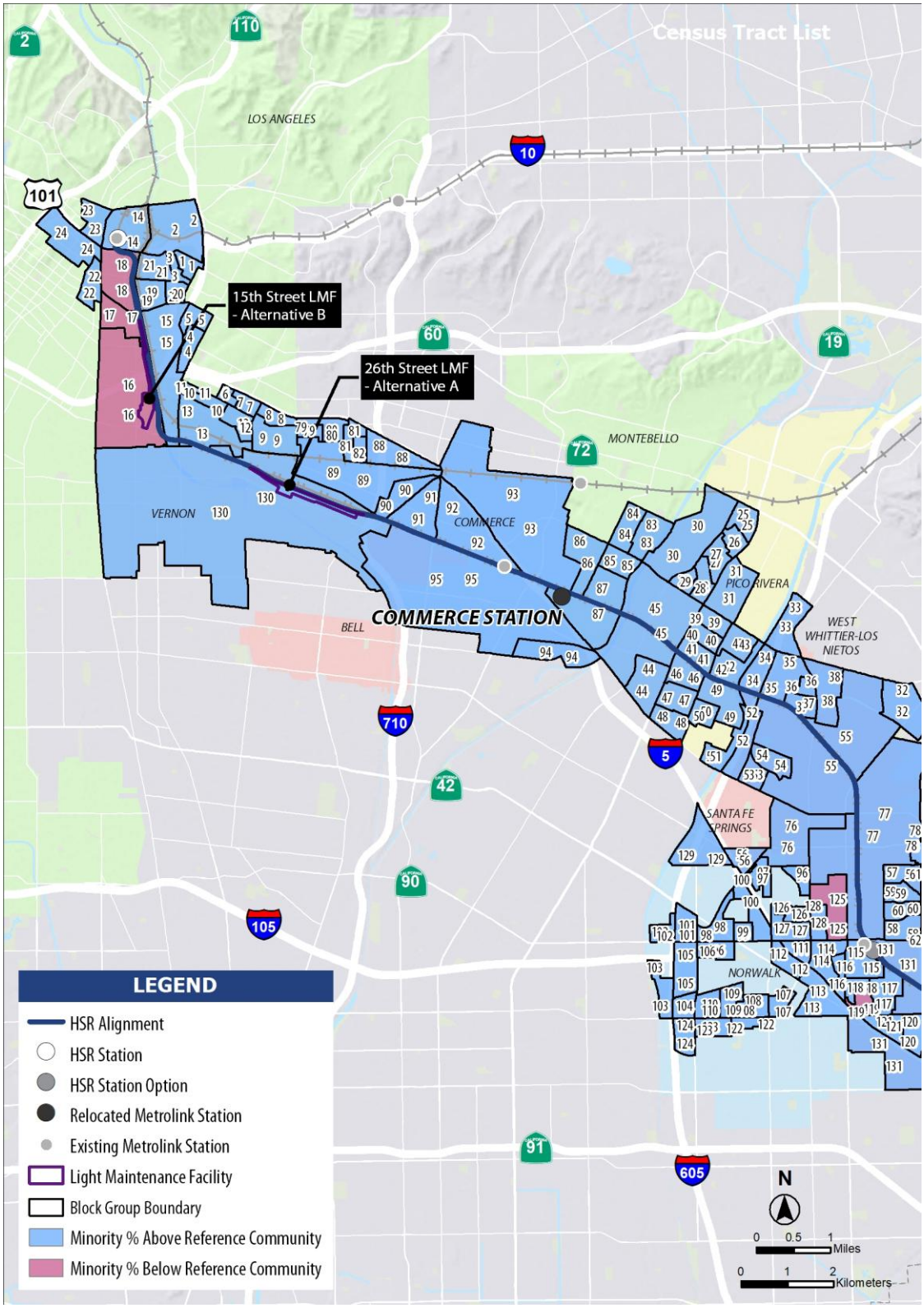
Table 5-9 Race and Ethnicity Characteristics by Percentage in the Resource Study Area

Reference Community or RSA	White	Hispanic of All Races	Native American	Asian	Hawaiian and Pacific Islander	African American	Some Other Race	Two or More Races
Los Angeles County	**25.5**	**48.7**	**0.2**	**14.6**	**0.2**	**7.6**	**0.4**	**2.8**
Orange County	**39.0**	**34.0**	**0.1**	**21.1**	**0.3**	**1.6**	**0.3**	**3.5**
Transportation	21.1	60.7	6.2	14.8	2.6	4.3	1.0	3.2
Air quality	19.3	62.3	6.7	14.8	2.2	5.1	1.3	3.3
Noise and vibration	18.2	64.2	6.2	14.9	2.1	4.6	1.2	3.1
EMF/EMI	19.9	61.9	8.5	14.4	1.8	5.4	1.4	3.2
Hazardous materials and wastes	19.0	62.7	6.7	14.8	2.2	5.0	1.3	3.1
Socioeconomics and communities	17.7	64.3	4.9	15.2	2.4	4.1	1.2	3.4
Parks, recreation, and open space	20.1	61.8	6.1	14.4	2.5	4.7	1.3	3.4

Reference Community or RSA	White	Hispanic of All Races	Native American	Asian	Hawaiian and Pacific Islander	African American	Some Other Race	Two or More Races
Aesthetics and visual quality	18.3	63.5	6.7	14.9	2.1	4.7	1.2	3.0
Cultural resources	20.9	60.9	9.6	13.9	1.6	5.7	1.4	2.9

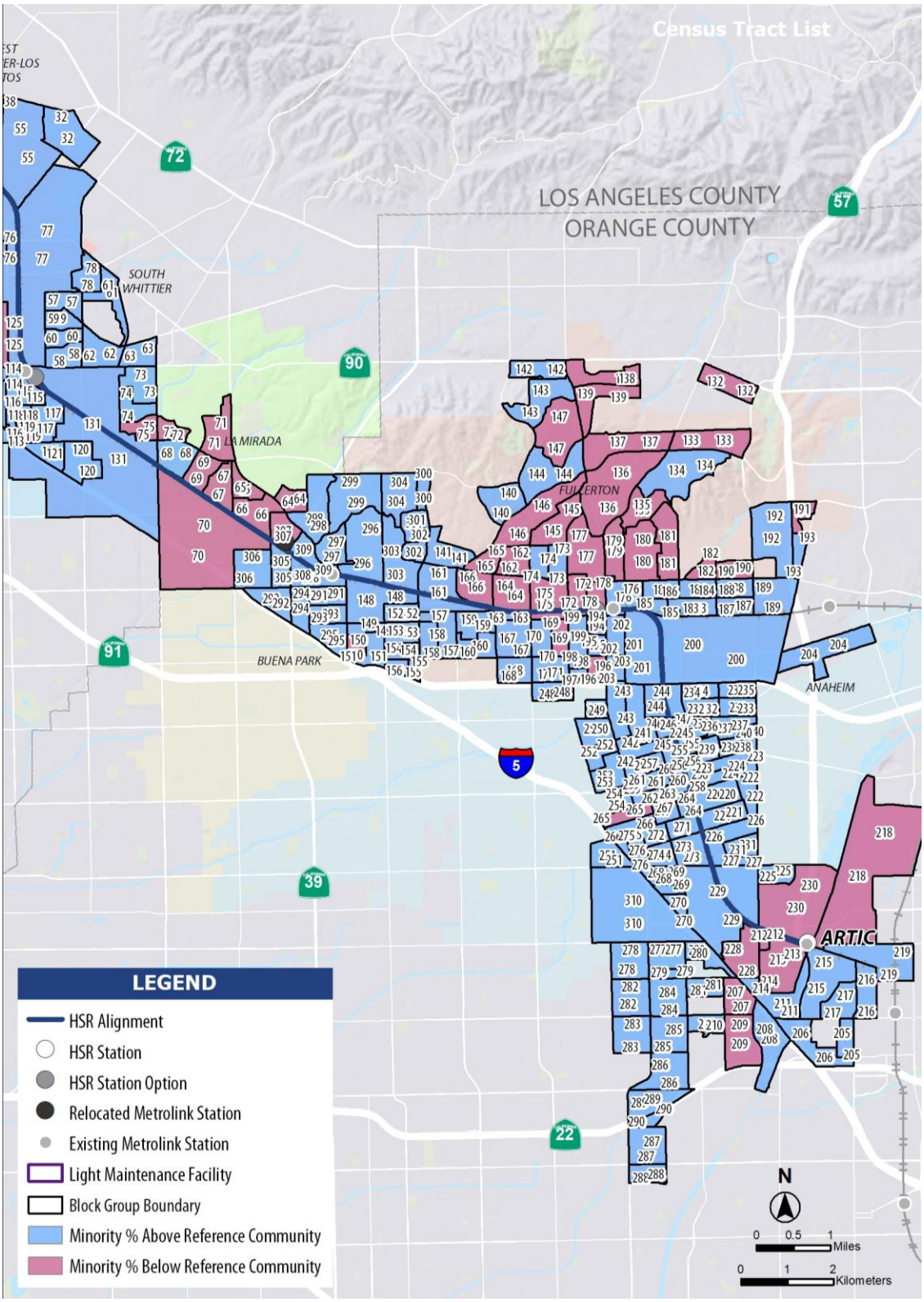
Source: U.S. Census Bureau 2021
EMF/EMI = electromagnetic fields/electromagnetic interference; RSA = resource study area

Figure 5-5, sheets 1 and 2, depicts the minority population density throughout the RSAs. As indicated, minority populations are present throughout the RSAs and consist primarily of dense Hispanic or Latino populations. Concentrated Asian populations are present in the Little Tokyo community in Los Angeles, La Mirada, Buena Park, and Fullerton. Black populations are interspersed throughout the RSAs, with the highest concentrations in Commerce and Buena Park. Anaheim has the most heterogeneous distribution of minority populations, with substantial Hispanic or Latino, Asian, and Native Hawaiian populations concentrated in the Anaheim Platinum Triangle area. Areas with lower densities of minority populations are generally unpopulated commercial and industrial areas in Vernon, Commerce, and Santa Fe Springs. Some BGs have too small a population to accurately present race and ethnicity information; these BGs are represented as empty BGs on the figures.



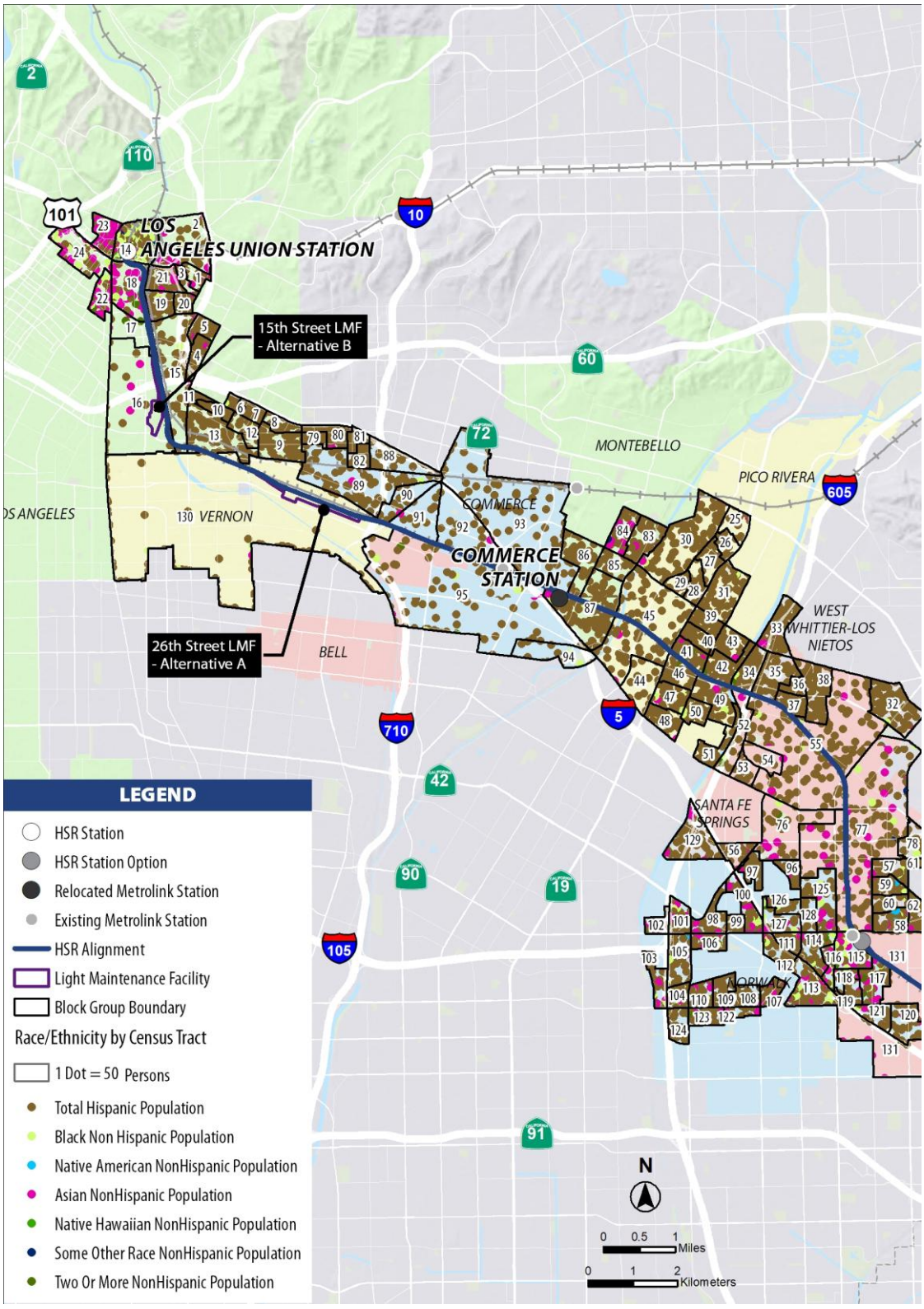
Sources: U.S. Census Bureau 2021; ESRI 2024
The block group in Norwalk with no population is occupied by businesses; it contains no residential areas.

Figure 5-4 Minority Population in the Community Analysis Resource Study Area, Sheet 1 of 2



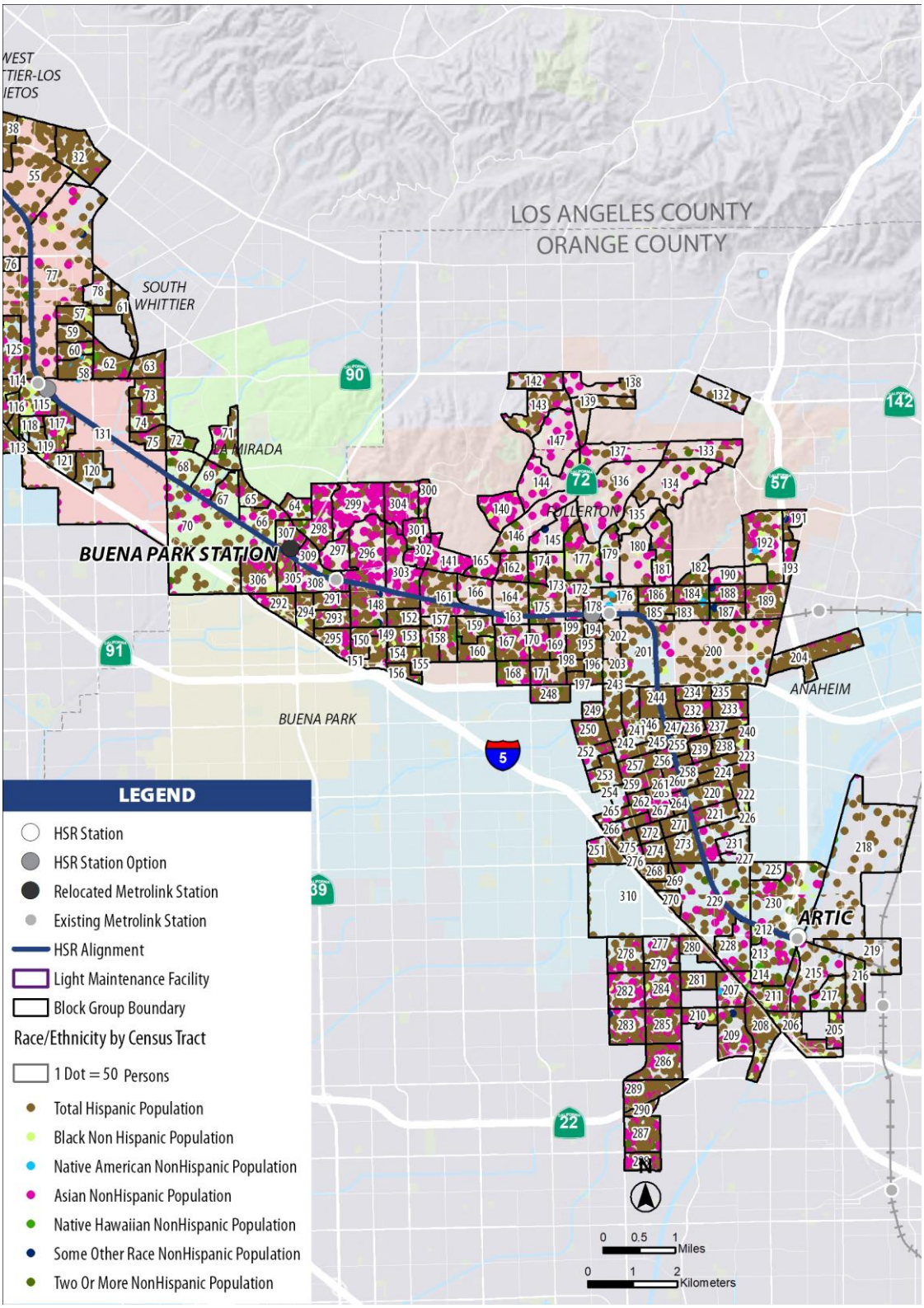
Sources: U.S. Census Bureau 2021; ESRI 2024
The block group in Norwalk with no population is occupied by businesses; it contains no residential areas.

Figure 5-4 Minority Population in the Community Analysis Resource Study Area, Sheet 2 of 2



Sources: U.S. Census Bureau 2021; ESRI 2024
The block group in Norwalk with no population is occupied by businesses; it contains no residential areas.

Figure 5-5 Race and Ethnicity in the Community Analysis Resource Study Area, Sheet 1 of 2



Sources: U.S. Census Bureau 2021; ESRI 2024
The block group in Norwalk with no population is occupied by businesses; it contains no residential areas.

Figure 5-5 Race and Ethnicity in the Community Analysis Resource Study Area, Sheet 2 of 2

5.4.3 Disadvantaged Communities

CalEnviroScreen is a mapping tool developed by California's Office of Environmental Health Hazard Assessment for the California Environmental Protection Agency. It identifies communities that are disproportionately burdened by pollution and socioeconomic challenges. To identify "disadvantaged communities," CalEnviroScreen assigns a score to each census tract in California using 21 indicators grouped into either pollution burden (like air and water quality issues) or population characteristics (such as poverty rates and health outcomes). Each census tract gets separate scores for pollution exposures, environmental effects (like hazardous waste sites), sensitive populations (like high asthma rates or low birth weights), and socioeconomic conditions (like low-income and linguistic isolation). The scores for these components are combined into two core scores: pollution burden and population vulnerability. These two scores are then multiplied to create an overall percentile ranking, which demonstrates how a tract compares to others in California. A high score represents a census tract that experiences a higher pollution burden and vulnerability than census tracts with low scores. For example, a census tract in the 75th percentile has more severe combined pollution impacts than 75 percent of census tracts statewide. Census tracts with a CalEnviroScreen 4.0 score above the 75th percentile are designated as "disadvantaged communities" under Senate Bill 535, making them eligible for targeted state investments and support.

To identify disadvantaged communities in the RSA, the Authority identified census tracts that overlapped a 0.5-mile buffer around the project footprint. According to the CalEnviroScreen 4.0 Map, the majority (72.6 percent) of census tracts that overlap this buffer are disadvantaged communities (OEHHA 2022). Furthermore, 43.8 percent of the census tracts are in the 90th percentile or above, meaning they have more severe combined pollution burden than 90 percent of census tracts in California. Two census tracts covering Vernon and south Santa Fe Springs are above the 95th percentile for pollution in CalEnviroScreen, but have unreliable socioeconomic or health data because of their low populations. These areas have a low population because they are highly industrial areas with minimal residential presence. Overall, the CalEnviroScreen data build upon the identification of low-income and minority communities in Section 5.4.1, Low-Income Populations, and Section 5.4.2, Minority Populations, by highlighting additional environmental burdens and cumulative health risks faced by communities in the project area.

5.4.4 Station and Maintenance Facility Area Demographics

The Shared Passenger Track Alternatives would include one HSR station at Anaheim Regional Transportation Intermodal Center (ARTIC). Shared Passenger Track Alternative A would have a 50-acre Level III facility at 26th Street near Hobart Yard in Vernon. Shared Passenger Track Alternative B would have a Level III facility at 15th Street along the west bank of the Los Angeles River in Los Angeles. A full description of the station and maintenance facilities is included in Chapter 2, Alternatives.

Table 5-10 presents demographic information for the BGs that have proposed HSR stations and maintenance facility locations. The 26th Street light maintenance facility (LMF) site is in a minority and low-income BG, but the 15th Street LMF site is not. The Norwalk/Santa Fe Springs HSR Station Option is in a minority community but not in a low-income community. The ARTIC HSR station and Fullerton HSR Station Option are partially in minority, low-income, or both, BGs. Table 5-11 breaks down the race and ethnicity data for the census BGs.

Figure 5-6, sheets 1 through 4, depicts populations by BG as they correspond to the proposed Shared Passenger Track Alternatives, HSR station options, and LMFs.

Table 5-10 Characteristics for Census Block Groups within Station and Maintenance Facility Areas

Component	Community/ Neighborhood	Census BG(s) Affected[1]	Percent Minority[2]	Median Household Income	Percent Below 200% Poverty[3]	Percent over Age 65	Percent with LEP
Los Angeles County							
26th Street LMF (Shared Passenger Track Alternative A)	Hobart in Vernon	60379800161	94.2	$62,000	32	15.5	11.4
15th Street LMF (Shared Passenger Track Alternative B)	Redondo Junction in Los Angeles	60372060511	24.6	$96,295	11	11.3	11.8
		60372060512	53.5	$127,853	9	8.7	5.6
Norwalk/Santa Fe Springs HSR Station Option	East Norwalk/southwest Santa Fe Springs	60375523012	98.1	$94,634	24	12	5
		60379800341	100.0	N/A	N/A	0.0	0.0
Orange County							
ARTIC	Platinum Triangle in Anaheim	60590761043	0.0	N/A	0	0.0	0.0
		60590761051	71.4	$106,042	14	23.5	3.6
		60590863036	28.0	$93,500	6	40.7	10.4
Fullerton HSR Station Option	Downtown Fullerton	60590112001	50.6	N/A	34	30.5	20.1
		60590112004	57.2	$95,655	15	15.9	0.8
		60590113001	61.0	$71,731	37	12.0	6.2
		60590113003	52.5	$85,938	36	0.0	9.8

Source: U.S. Census Bureau 2021

[1] Census BGs with a low population did not have median household income and poverty level information available.

[2] Calculated as the sum of census respondents that identified as Asian, Black or African American, American Indian or Alaska Native, Hawaiian or other Pacific Islander (not Hispanic), or Hispanic (all races).

[3] Calculated as the percentage of the population for whom poverty status is determined.

ARTIC = Anaheim Regional Transportation Intermodal Center; BG = block group; HSR = high-speed rail; LEP = Limited English Proficiency; LMF = light maintenance facility

Table 5-11 presents the race and ethnicity data for the census BGs that overlap each of the stations and the LMF locations. The BG containing the 26th Street LMF site has a higher percentage of minority individuals, mostly Hispanic/Latino, than Los Angeles County. Conversely, the BGs containing the 15th Street LMF site have a lower percentage of minority individuals than Los Angeles County and have a higher percentage of White individuals.

The BGs that contain the Norwalk/Santa Fe Springs HSR Station Option site have a higher percentage of minority individuals than Los Angeles County; predominant groups are Hispanic/ Latino, Black or African American, and Asian.

The BGs that contain the Fullerton HSR Station Option site generally have lower levels of minority populations and greater levels of White individuals than Orange County as a whole. Hispanic/Latino and Asian populations represent the predominant minority populations in these BGs.

The three BGs that contain ARTIC HSR station have a mix of predominantly White or Hispanic/ Latino populations. Two BGs have higher percentages of White individuals than Orange County, and one BG has a higher percentage of Hispanic/Latino individuals than Orange County.

Figure 5-6, sheets 1 through 4, depicts populations by BG as they correspond to the proposed Shared Passenger Track Alternatives station, HSR station options, and LMFs.

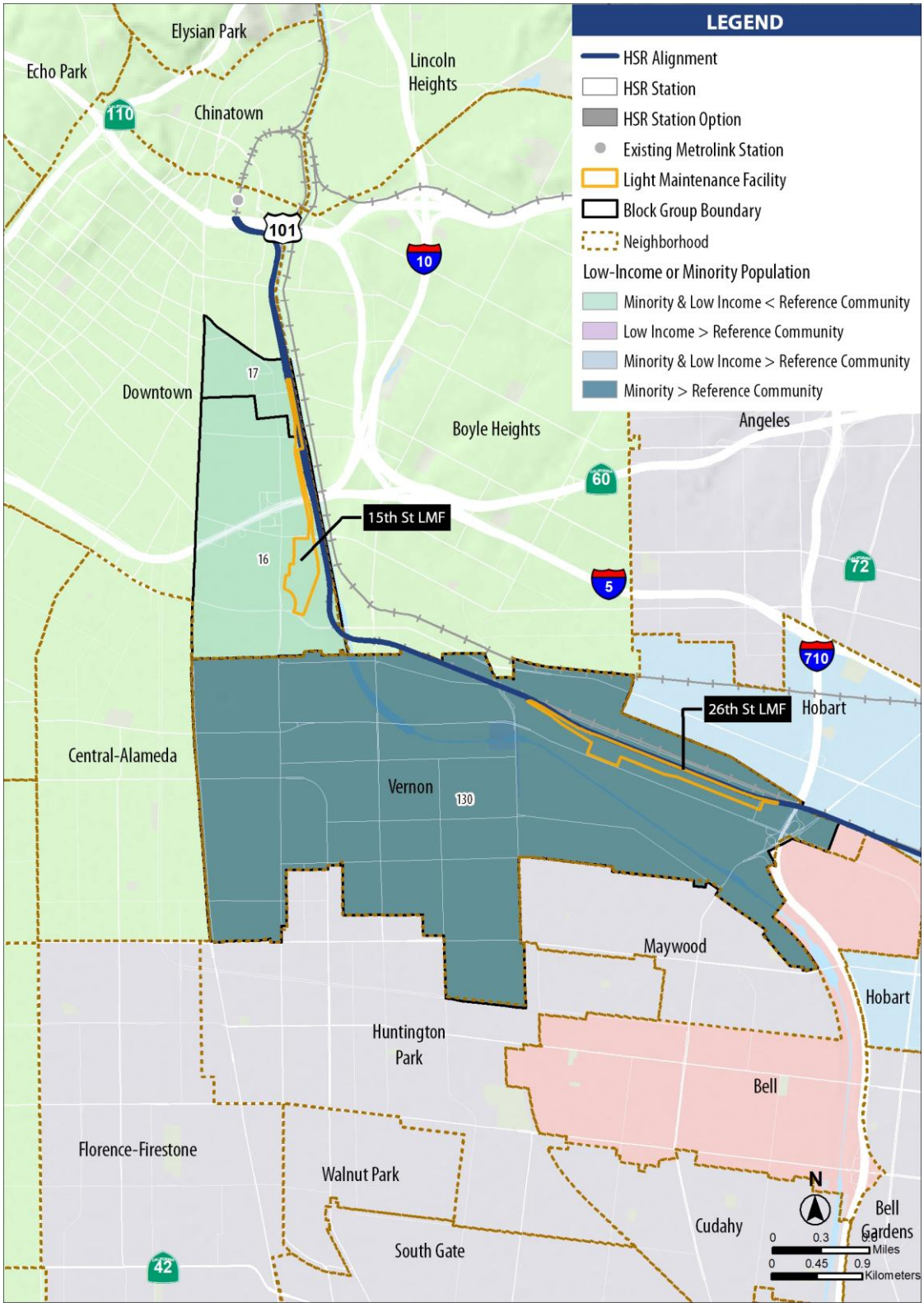
Table 5-11 Race and Ethnicity for Census Block Groups within Station and Maintenance Areas (Percent)

Location	Community/ Neighborhood	Census Block Groups Affected	White	Black/ African American	Hispanic or Latino	American Indian/ Alaska Native	Asian	Hawaiian/ Other Pacific Islander	Other Race(s)	Minority[1]
Los Angeles County			**25.5**	**7.6**	**48.7**	**0.2**	**14.6**	**0.2**	**0.4**	**74.5**
26th Street LMF (Shared Passenger Track Alternative A)	Hobart in Vernon	60379800161	5.8	3.0	90.2	0	0.9	0.0	0.0	94.2
15th Street LMF (Shared Passenger Track Alternative B)	Redondo Junction in Los Angeles	60372060511	75.4	0.0	24.6	0	0.0	0.0	0.0	24.6
		60372060512	46.5	0.0	27.7	0	21.5	1.9	0.0	53.5
Norwalk/Santa Fe Springs HSR Station Option	East Norwalk/ southwest Santa Fe Springs	60375523012	1.9	26.9	41.9	0	25.1	0.0	0.0	98.1
		60379800341	0.0	0.0	0.0	100	0.0	0.0	0.0	100.0
Orange County			**39.0**	**1.6**	**34.0**	**0.1**	**21.1**	**0.3**	**0.3**	**60.9**
Fullerton HSR Station Option	Downtown Fullerton	60590112001	49.4	4.5	16.6	0.0	21.1	0.0	0.0	50.6
		60590112004	42.8	6.0	34.3	0.0	12.7	0.0	0.0	57.2
		60590113001	39.0	2.7	37.9	0.0	15.5	0.0	0.7	61.0
		60590113003	47.5	9.3	25.5	8.0	3.2	0.0	0.0	52.5
ARTIC	Platinum Triangle in Anaheim	60590761043	100.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
		60590761051	28.6	0.0	54.5	0.0	10.9	0.0	0.0	71.4
		60590863036	72.0	0.0	10.5	0.0	12.4	0.0	0.0	28.0

Sources: U.S. Census Bureau 2021

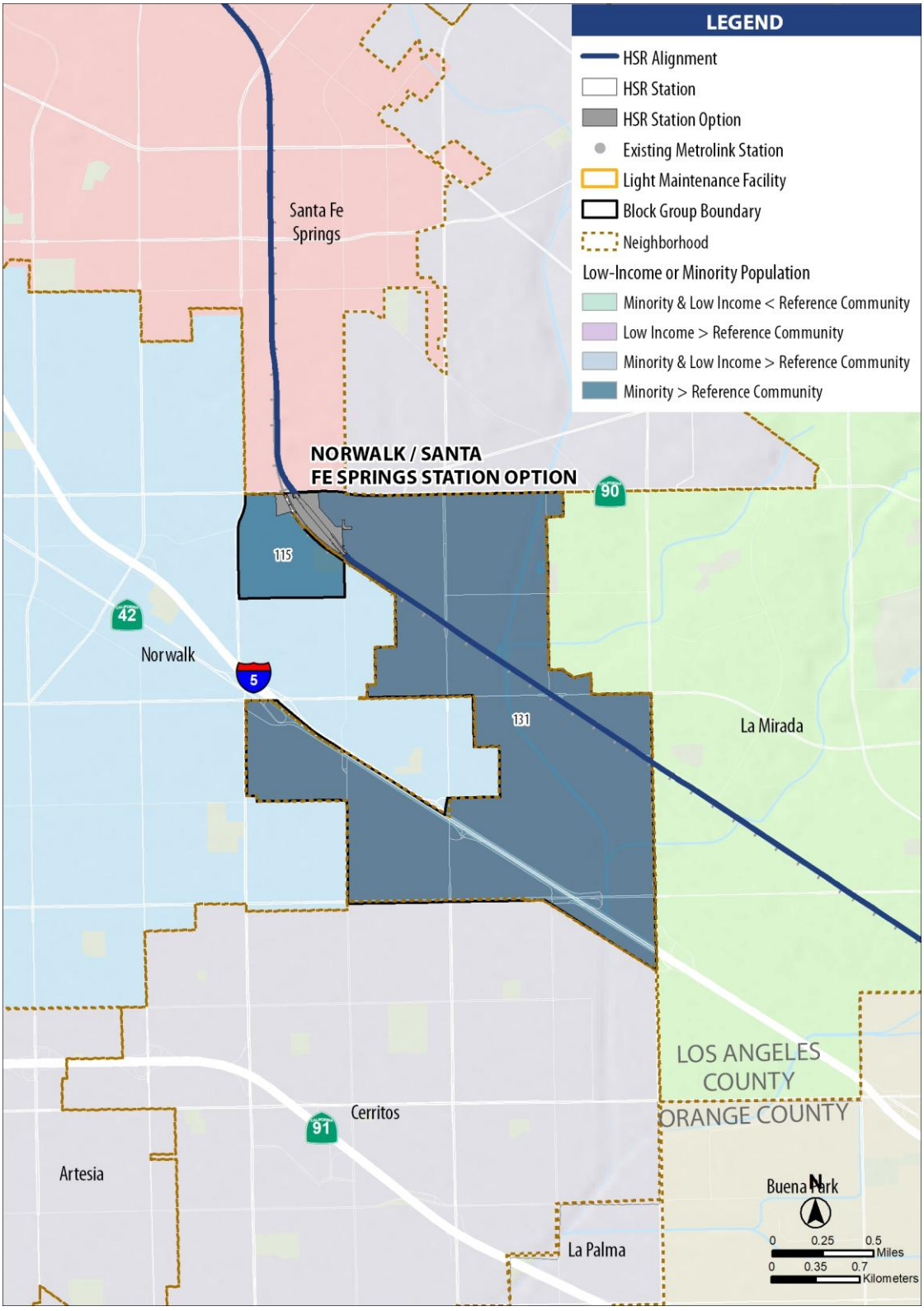
[1] Calculated as the sum of census respondents that identified as Asian, Black or African American, American Indian or Alaska Native, Hawaiian or other Pacific Islander (not Hispanic), or Hispanic (all races).

ARTIC = Anaheim Regional Transportation Intermodal Center; BG = block group; HSR = high-speed rail; LMF = light maintenance facility



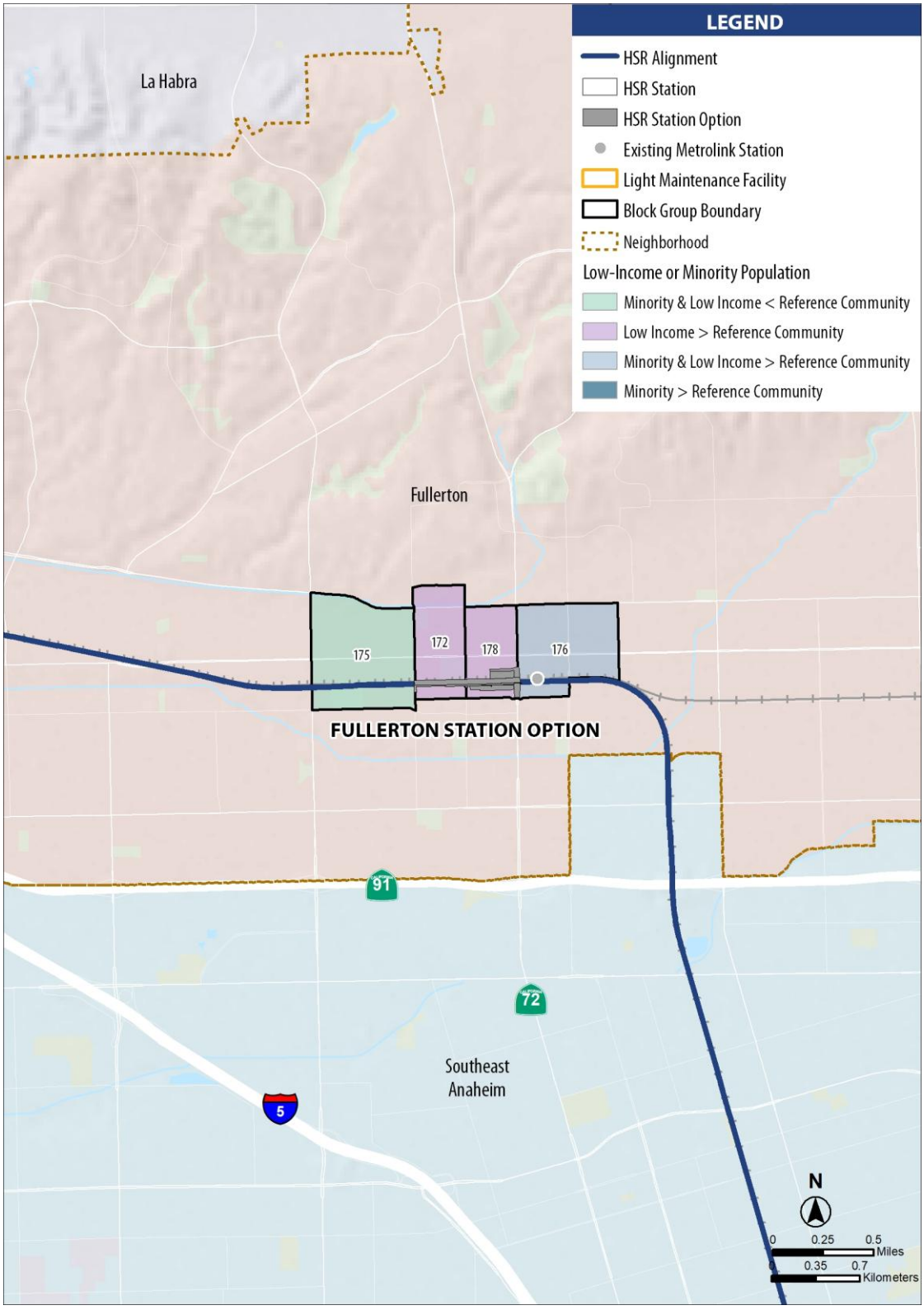
Sources: ESRI 2024; U.S. Census Bureau 2021

Figure 5-6 Proximity of Stations and Light Maintenance Facility to Minority and Low-Income Populations, Sheet 1 of 4



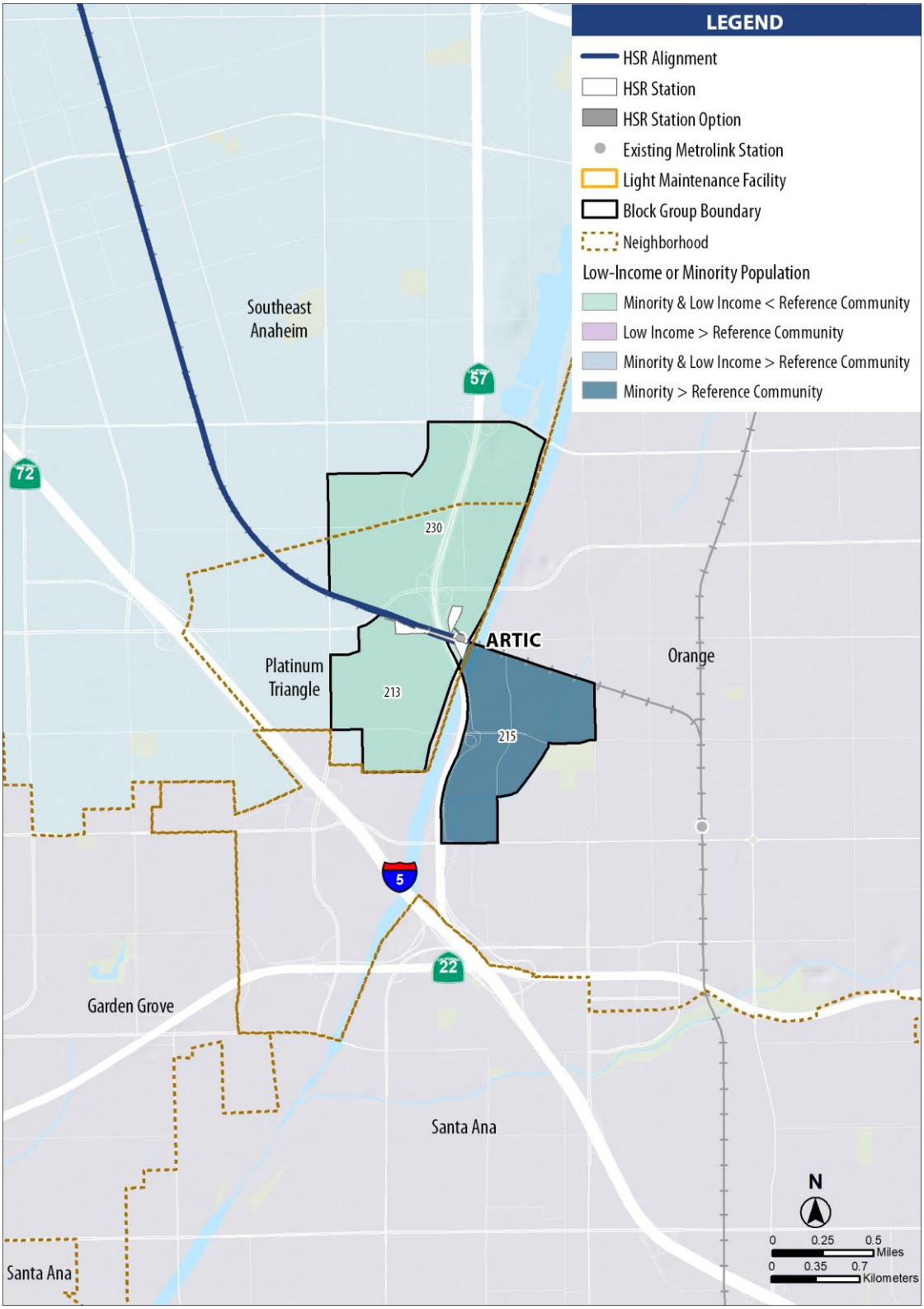
Sources: ESRI 2024; U.S. Census Bureau 2021

Figure 5-6 Proximity of Stations and Light Maintenance Facility to Minority and Low-Income Populations, Sheet 2 of 4



Sources: ESRI 2024; U.S. Census Bureau 2021

Figure 5-6 Proximity of Stations and Light Maintenance Facility to Minority and Low-Income Populations, Sheet 3 of 4



Sources: ESRI 2024; U.S. Census Bureau 2021

Figure 5-6 Proximity of Stations and Light Maintenance Facility to Minority and Low-Income Populations, Sheet 4 of 4

5.5 Inclusive Public Engagement

5.5.1 Affected Populations and Communities

The Authority conducted public outreach and involvement activities in locations where minority and low-income populations may be affected by the construction and operational activities associated with the project section. The purpose of these outreach activities is to inform the public of the project and its status, solicit input on potential and perceived project impacts, and provide opportunities by which minority and low-income communities can effectively take part in the project planning process. Identification for targeted outreach was based on demographic and income information, correspondence with advocacy and community groups, and review of recent reports on inclusive engagement practices.

5.5.1.1 Engagement Methods

The Authority identified minority and low-income serving organizations relevant to the project in support of targeted and inclusive outreach. These organizations were contacted through various methods, including calls, emails, presentations (as applicable), and notifications for upcoming public meetings, with the intent of providing an update about the project and soliciting feedback. Appendix 9-A of Chapter 9 lists the advocacy and community groups serving minority and low-income communities.

Engagement methods identified to reach minority and low-income communities include strategic communication efforts such as:

- Ongoing meetings with elected officials, public agency staff, and community organizations where the Project Team solicits additional feedback on stakeholders and organizations that should be considered and engaged
- Published meeting and project information notices in local community outlets, social posts, advertisements, multilingual notice distribution, and display newspaper advertisements
- Continued online research and communication with Shared Passenger Track Alternatives' project area corridor city organizations that serve minority and low-income populations
- Identification and ongoing communication with local places of worship, schools, business groups. and other institutions that serve minority and low-income populations along the Shared Passenger Track Alternatives' project area
- Extended outreach e-blasts, phone calls, and follow-up correspondence with identified minority and low-income serving groups and stakeholders along the Shared Passenger Track Alternatives' project area
- Ongoing phone and email correspondence and presentations to community groups and public schools with requests to participate in upcoming events or meetings
- Ongoing phone, post-mail, and email correspondence regarding upcoming community meetings and project milestones
- Postcard mailing of public meeting/hearing notification
- Door-to-door notification flyer drop to minority and low-income residential areas
- Provision of language material and translation at public meetings, as applicable per meeting area
- Social media advertisements, in addition to sample text language provided to elected officials to post on their social media sites
- Ongoing participation in outreach events and speakers' bureau presentation opportunities in minority and low-income areas

For additional information on community engagement methods, refer to the Inclusive Public Engagement Plan included as Appendix 9-A of Chapter 9.

5.5.1.2 Outreach Events

Inclusive public engagement for the project section is an ongoing effort that began in 2015. Inclusive public engagement involves engaging minority and low-income populations in the RSAs to communicate project information, listening to and responding to community thoughts and concerns, and identifying potential actions to mitigate disproportionately high and adverse human health and environmental effects, including social and economic effects, on minority and low-income populations. The purpose of these outreach activities is to inform local community members about the project and its status and to provide opportunities by which minority and low-income communities can effectively take part in the planning process for the project.

Public and agency outreach programs were conducted in the railroad corridor cities of Los Angeles, Vernon, Commerce, Bell, Montebello, Pico Rivera, Santa Fe Springs, Norwalk, La Mirada, Buena Park, Fullerton, and Anaheim. Public outreach activities sought to increase project awareness and collaboration, and to provide multiple opportunities for affected communities to provide input. In response to the extensive outreach performed by the Authority to date, community members throughout the project section have provided feedback on the California HSR project at various stages in the project development. Table 5-12 summarizes public outreach activities undertaken during development of the alternatives and Draft EIR/EIS, and the measures taken to ensure that information was accessible to minority and low-income populations present in the project section.

Table 9-1, which is provided at the end of Chapter 9, lists the publications and dates of scoping notices. Appendix 9-A lists the meetings held as part of the Authority's outreach effort.

Table 5-12 Summary of Inclusive Public Engagement Outreach Events

Organization/Event	Location	Community Area	Date	Estimated Attendees[1]	Topics Discussed with Attendees/Key Themes
City of Anaheim/Orange County Citrus Festival	400 W Disney Way Anaheim, CA 92802	Anaheim	6/28/2015	17 engaged	Statewide materials were displayed and distributed both in English and Spanish. Community members were encouraged to study the statewide and project section maps and ask any questions. For more information on the project section and project in general, interested individuals were referred to the Authority's website. Additionally, all individuals were encouraged to provide their contact information to receive new information on the project as it becomes available. **Key Themes:** ▪ Construction timeline ▪ Funding source ▪ Train speed

Organization/Event	Location	Community Area	Date	Estimated Attendees[1]	Topics Discussed with Attendees/Key Themes
City of Los Angeles 20th Annual Central Avenue Jazz Festival	Central Ave between Martin Luther King Blvd and Vernon Ave Los Angeles, CA 90011	Los Angeles	7/25/2015–7/26/2015	250 engaged	This event provided opportunities to share statewide and project section information. For more information on the project section and project in general, interested individuals were referred to the Authority's website. Additionally, all individuals were encouraged to provide their contact information to receive new information on the project as it becomes available. **Key Themes:** ▪ Safety concerns at intersections ▪ Project start and completion date ▪ Community displacement concerns ▪ Connection to Las Vegas ▪ Train speed to Los Angeles ▪ Train speed in relation to the Japanese rail system ▪ Is this the high-speed train voter approved? ▪ Pet policy on train ▪ Will this be underground? ▪ Salary agreement for operators and construction workers ▪ Construction in the Central Valley ▪ Train routes and destinations ▪ Inquiries about shared passenger rail with Amtrak ▪ Project cost ▪ Probability of train derailment

Organization/Event	Location	Community Area	Date	Estimated Attendees[1]	Topics Discussed with Attendees/Key Themes
City of La Mirada/La Mirada Concerts in the Park	La Mirada Regional Park 13701 S Adelfa Ave La Mirada, CA 90638	La Mirada	8/6/2015	36 engaged	Community members were encouraged to study the statewide and project section maps and ask any questions. For more information on the project section and project in general, interested individuals were referred to the Authority's website. Additionally, all individuals were encouraged to provide their contact information to receive new information on the project as it becomes available. Common topics discussed: ▪ Project timeline ▪ Station locations ▪ Earthquake safety measures **Key Themes:** ▪ Project timeline ▪ HSR in comparison to Hyperloop ▪ Funding sources ▪ Station locations and routes ▪ Travel time within LA-A rail corridor ▪ HSR systems internationally ▪ Concerns of safety measures for earthquakes
City of Montebello/ Montebello Concerts in the Park	Montebello City Park 1300 W Whittier Blvd Montebello, CA 90640	Montebello	8/6/2015	250 attendees/45 engaged	This event provided statewide and project section information to individuals mostly unfamiliar with the program. **Key Themes:** ▪ Project overview ▪ Project timeline ▪ Train speed ▪ Job opportunities with HSR ▪ Train routes and destinations ▪ Cost of ridership and affordability

Organization/Event	Location	Community Area	Date	Estimated Attendees[1]	Topics Discussed with Attendees/Key Themes
Commerce Farmers Market/Information Table	2535 Commerce Way between City Hall and Rosewood Park Commerce, CA 90040	Commerce	8/13/2015	10 engaged	This information table at a local farmer's market provided an opportunity to engage community members about: ▪ Project statewide section ▪ LA–A Project Section **Key Themes:** ▪ Project timeline ▪ Job opportunities with HSR ▪ Train speeds ▪ Cost of ridership and affordability
City of Los Angeles/ Los Angeles/City Councilman Gilbert Cedillos' Latin Jazz Festival	Sycamore Grove Park 4702 N Figueroa St Los Angeles, CA 90042	Los Angeles	8/23/2015	130 engaged	During this event, statewide materials were displayed and distributed in English and Spanish. Questions were addressed regarding general information on the project section and statewide program. Individuals were encouraged to provide their contact information to receive future updates. **Key Themes:** ▪ Safety measures at crossings ▪ Project timeline ▪ Displacement of people ▪ Train speeds within LA-A rail corridor ▪ HSR in comparison to Japan's rail system ▪ Onboard pet policies ▪ Tunneling ▪ Salaries and job opportunities for construction and train operators ▪ Cost of construction ▪ Cost of ridership and affordability

Organization/Event	Location	Community Area	Date	Estimated Attendees[1]	Topics Discussed with Attendees/Key Themes
Orange County Heritage Council/Orange County Black History Cultural Faire	205 W Center St Promenade Downtown Anaheim, CA 92805	Anaheim	2/16/2016	8,000 attendees/55 engaged	At this 36th annual event, the outreach team promoted the #IWillRide campaign and encouraged booth visitors to provide their contact information for project updates. Interested visitors asked about: ▪ Project timeline ▪ Project funding sources ▪ Overall statewide program **Key Themes:** ▪ Safety measures at grade crossings ▪ Likelihood of derailment ▪ Displacement of homes and businesses ▪ HSR connections to Las Vegas ▪ Train speed within LA-A rail corridor ▪ Onboard pet policies ▪ Tunneling ▪ Projected wages for construction workers and HSR operators ▪ Train routes and destinations
City of Bell/Bell 5K Run/Walk	Bell Community Center 6250 Pine Ave Bell, CA 90201	Bell	2/21/2016	21 engaged	At this 2nd annual 5K Run/Walk, the City of Bell brought together community members of all ages, including a children's run/walk event. Topics discussed at the information booth: ▪ Train routes and destination ▪ Project timeline ▪ HSR's positive impact on regional connections to public transit **Key Themes:** ▪ Train routes and destinations ▪ Duration of ride ▪ Cost of ridership and affordability

Organization/Event	Location	Community Area	Date	Estimated Attendees[1]	Topics Discussed with Attendees/Key Themes
Soboba Band of Mission Indians; Juaneño Band of Mission Indians; Juaneño Band of Mission Indians Acjachemen Nation; Gabrieleño Band of Mission Indians – Kizh Nation; San Gabriel Band of Mission Indians; Gabrielino Tongva Indians of California Tribal Council; Gabrielino-Tongva Tribe; Tongva Ancestral Territorial Tribal Nation; Gabrielino/Tongva Nation; Los Angeles City/County Native American Indian Commission; Fernandeño Tataviam Band of Mission Indians/Tribal Information Meeting	Authority Southern California Regional Office 700 N Alameda St Los Angeles, CA 90012	Los Angeles County, Orange County	2/25/2016	3 signed in	In collaboration with Authority staff, Arellano Associates met with tribal organizations affected by the project area and rail corridor. **Key Themes:** ▪ Statewide program overview: benefits/status ▪ Southern California overview and focused discussion of LA–A Project Section ▪ Lead federal agency perspective ▪ Status of the cultural resources investigation for LA–A Project Section ▪ HSR program cultural resources investigation process and tribal involvement ▪ Open forum Q&A
ARTIC/Information Booth	Lobby of ARTIC Transit Station 2626 E Katella Ave Anaheim, CA 92806	Anaheim	03/14/2016	16 engaged	The outreach team hosted an information booth at the lobby of ARTIC station to engage transit riders with general statewide and project section information. An iPad tablet was available to present to riders where additional information can be accessed. In addition, the booth's banner display promoted the #IWillRide campaign. **Key Themes:** ▪ Project timeline ▪ Cost of ridership and affordability

Organization/Event	Location	Community Area	Date	Estimated Attendees[1]	Topics Discussed with Attendees/Key Themes
City of Montebello/ Montebello Earth Day	Montebello City Park 1301 W Whittier Blvd Montebello, CA 90640	Montebello	4/16/2016	34 engaged	This event featured booths representing local nonprofit organizations and public utilities. The outreach staff shared general project section information to raise awareness and generate excitement about statewide program. **Key Themes:** ▪ Statewide timeline of Phase 1 ▪ Project funding sources and budget allocations ▪ Safety measures ▪ Is this like Express Lanes? [A Los Angeles County High-Occupancy Toll Freeway Lane program] ▪ Cost of ridership and affordability ▪ Construction timeline of LA-A corridor ▪ Concerns about train noise ▪ Train route along Palmdale to Burbank corridor ▪ Station locations ▪ Opportunities for train routes to Las Vegas ▪ HSR in comparison to Japan's rail systems ▪ HSR in comparison to Hyperloop

Organization/Event	Location	Community Area	Date	Estimated Attendees[1]	Topics Discussed with Attendees/Key Themes
Los Angeles Department of Water and Power/Earth Day Los Angeles	Grand Park 200 N Grand Ave Los Angeles, CA 90012	Los Angeles	4/22/2016	150 engaged	The Authority took the opportunity to share the various environmentally friendly features of the program. Because this event was a green event, no collateral materials were handed out. Instead, the environmental fact sheets were displayed prominently on the table. An iPad tablet was available to share other materials as needed. Community members were encouraged to study the statewide and project section maps and ask any questions. All individuals were encouraged to provide their contact information to receive new information on the project as it becomes available. **Key Themes:** ▪ Project timeline ▪ Status of environmental process ▪ HSR relationship to Las Vegas HSR ▪ HSR routes from Victorville ▪ Construction timeline of High Desert Corridor ▪ Train speed within Palmdale to Burbank corridor ▪ HSR station connections to multimodal transit ▪ Southern California construction timeline ▪ HSR clearance process ▪ HSR amenities and services, such as Wi-Fi ▪ HSR connections to Metrolink and Amtrak stations ▪ Train routes and destinations ▪ Phase 1 environmental clearance timeline

Organization/Event	Location	Community Area	Date	Estimated Attendees[1]	Topics Discussed with Attendees/Key Themes
All Access Entertainment/ Fiesta Broadway	Downtown Los Angeles 1st St and Broadway	Los Angeles	4/24/2016	150,000 attendees; 300 engaged	At the 27th Annual Fiesta Broadway event, the information booth focused on raising general project awareness and addressed questions about the statewide program. Booth visitors were encouraged to sign up to receive future updates. **Key Themes:** ▪ Project timeline ▪ Job opportunities with HSR ▪ Role of Authority for HSR operations ▪ Connections with existing passenger rail, such as Metrolink and Amtrak ▪ HSR involvement in route to Las Vegas, Nevada ▪ Duration of ride ▪ Train routes and destinations, such as cities in Inland Empire ▪ Station locations ▪ Cost of ridership and affordability ▪ Inclusive of diverse passengers on HSR ▪ Phase 2 timeline ▪ Public and government funding sources

Organization/Event	Location	Community Area	Date	Estimated Attendees[1]	Topics Discussed with Attendees/Key Themes
Metropolitan Water District of Southern California/ Spring Green Expo	Downtown Los Angeles Los Angeles Union Station Courtyard 700 N Alameda St Los Angeles, CA 90012	Los Angeles	4/28/2016	120 engaged	Many were interested in taking "I Will Ride" photos and number signed up to receive additional information. To demonstrate the Authority's commitment to promoting a green program and overall sustainability, a monitor was set up playing the Earth Day 2016 – Sustainability Facts video, which can be found on the Authority's YouTube channel. A number of sustainability fact sheets were also displayed. **Key Themes:** ▪ Project timeline ▪ Job opportunities ▪ Train routes and destinations ▪ Station locations ▪ Train speeds and duration of ride ▪ Commuter friendliness ▪ HSR connections to multimodal transportation ▪ Cost of ridership and affordability ▪ Phase 2 timeline ▪ Stations in the Inland Empire

Organization/Event	Location	Community Area	Date	Estimated Attendees[1]	Topics Discussed with Attendees/Key Themes
City of Montebello/ Montebello Walk and Roll	Montebello Acuna Park 1700 W Victoria Ave Montebello, CA 90640	Montebello	5/21/2016	150 attendees/25 engaged	At the information booth, statewide and project section materials were displayed and distributed both in English and Spanish. Community members were encouraged to study the statewide and project section maps and ask any questions. For more information on the project section and project in general, interested individuals were referred to the Authority's website. Additionally, all individuals were encouraged to provide their contact information to receive new information on the project as it becomes available. **Key Themes:** ▪ Safety concerns of train routes near schools ▪ Safety concerns of crossing configurations ▪ Negative impacts on local businesses ▪ Home and property acquisitions ▪ HSR relationship to Metro Eastside project ▪ Cost of ridership and affordability ▪ Noise concerns
Holy Cross Cathedral/ Montebello Armenian Food Fair and Festival	Holy Cross Cathedral 900 W Lincoln Ave Montebello, CA 90640	Montebello	6/4/2016	34 engaged	Community members were encouraged to study the statewide and project section maps and ask questions. Although this was a LA–A event, attendees from Glendale were present and they were also provided with the Burbank to Los Angeles Project Section map. **Key Themes:** ▪ Project timeline ▪ Train routes and destinations ▪ HSR operations within High Desert Corridor ▪ HSR competition to Amtrak services ▪ Frequency of operations, such as evenings ▪ Station locations ▪ Phase 2 timeline ▪ Train speeds and safety measures ▪ How long does [the train] take to slow down?

Organization/Event	Location	Community Area	Date	Estimated Attendees[1]	Topics Discussed with Attendees/Key Themes
Tweedy Mile Association/ South Gate Tweedy Mile Street Fair	3515 Tweedy Blvd South Gate, CA 90280	Los Angeles County, Montebello (South Gate)	6/3/2016–6/5/2016	96 engaged	The 24th Annual Tweedy Mile Street Fair in South Gate, provided an opportunity to conduct broader outreach beyond the corridor cities. By virtue of South Gate's large Latino community, the outreach team's participation at this event provided a unique opportunity to conduct inclusive public outreach. In addition, the Office of Speaker of the Assembly, Anthony Rendon requested public outreach in his district. General statewide and project information was provided to raise awareness and engagement. **Key Themes:** ▪ Train routes and destinations ▪ Negative environmental impacts of HSR ▪ Project timeline ▪ When will there be trains running? ▪ Duration of ride ▪ Train speed ▪ HSR comparison to Hyperloop

Organization/Event	Location	Community Area	Date	Estimated Attendees[1]	Topics Discussed with Attendees/Key Themes
California Walks 2016 PedsCount! Summit	Courtyard Marriott Long Beach Downtown 500 E First St Long Beach, CA 90802	Long Beach	6/6/2016–6/7/2016	62 engaged	This event is organized by California Walks and is attended by state, regional, and local individuals representing various organizations and entities all with the desire to create healthy, safe, and walkable communities throughout California. Most individuals were interested in the project's timeline and were invited to participate in the #IWillRide campaign. **Key Themes:** ▪ Phase 1 timeline ▪ Accessibility to HSR terminus stations in Los Angeles and Anaheim ▪ Onboard amenities and features, such as bike storage ▪ Train routes and destinations north of Sacramento ▪ Bicycle and pedestrian connectivity to HSR for rural communities ▪ Increase connectivity between HSR stations ▪ Displacement of and impact on homeless services ▪ Accessibility and affordability of ridership
City of La Mirada/La Mirada Stroll in the Park	La Mirada Creek Park 12021 Santa Gertrudes Ave La Mirada, CA 90638	La Mirada	7/28/2016	35 engaged	This event encouraged booth visitors to learn more about general project information and ways to stay informed by signing up to receive new updates. Among the people who stopped by the booth was City Manager, Jeff Boynton, who expressed interest in the project and mentioned that the Reimbursable Agreement documents will soon be presented to the City Council. **Key Themes:** ▪ Is the Authority hiring? ▪ Job opportunities with HSR ▪ Cost of ridership and affordability ▪ Duration of ride ▪ Project timeline

Organization/Event	Location	Community Area	Date	Estimated Attendees[1]	Topics Discussed with Attendees/Key Themes
City of Los Angeles/21st Annual Central Avenue Jazz Festival	Central Avenue between Martin Luther King, Jr, Blvd and Vernon Ave Los Angeles, CA 90011	Los Angeles	7/30/2016–7/31/2016	185 engaged	Community members were encouraged to study the statewide and project section maps and ask any questions. For more information on the project section and project in general, interested individuals were referred to the Authority's website. Additionally, all individuals were encouraged to provide their contact information to receive new information on the project as it becomes available. Many visitors had an idea of the program, but not extensive knowledge. Many individuals shared that they often ride the Metro and would be supportive of a statewide HSR program. **Key Themes:** ▪ Where can I find HSR jobs? ▪ Train routes and destinations ▪ HSR connections to multimodal transportation ▪ Cost of ridership and affordability ▪ Project timeline ▪ Duration of ride ▪ Project funding and sources ▪ HSR in comparison to international rail system in Japan ▪ Tunneling and grade separations

Organization/Event	Location	Community Area	Date	Estimated Attendees[1]	Topics Discussed with Attendees/Key Themes
All Access Entertainment/ Mexican Independence Day – Fiesta Patrias Festival	Placita Olvera 125 Paseo de la Plaza Los Angeles, CA 90012	Los Angeles	9/17/2016–9/18/2016	180 engaged	At this celebration event, outreach staff engaged with majority Spanish-speaking community members to share the following: ▪ Statewide Program ▪ LA–A Project Section **Key Themes:** ▪ Train routes and destinations ▪ HSR route to Las Vegas, Nevada ▪ Cost of ridership and affordability ▪ Public funding ▪ Government role in HSR operations ▪ Phase 2 timeline
Buena Park Noon Lions Club 59th Annual Silverado Days – Buena Park	William Peak Park 7225 El Dorado Dr Buena Park, CA 90620	Buena Park	10/15/2016–10/16/2016	95 engaged	During this free, 3-day event, the outreach team promoted the #IWillRide campaign to attendees and presented statewide and project section information. Additional topics included: ▪ Proposed statewide alignment ▪ Creating jobs through HSR ▪ Small business program **Key Themes:** ▪ Project timeline ▪ Projected maximum passenger capacity ▪ Cost of ridership and affordability ▪ Duration of ride ▪ Train speeds ▪ HSR competition in passenger rail, such as Amtrak ▪ Train routes and destinations ▪ Frequency of HSR operations, such as evenings

Organization/Event	Location	Community Area	Date	Estimated Attendees[1]	Topics Discussed with Attendees/Key Themes
Air Quality Management District/Our Voices, Our Air – A Conference on Environmental Justice and Air Pollution	Center at Cathedral Plaza 555 W Temple Los Angeles, CA 90012	Los Angeles	11/16/2016	40 engaged	Hosted by the South Coast Air Quality Management Board, the outreach team provided an information booth to discuss: ▪ Proposed statewide alignment ▪ Environmental benefits of HSR **Key Themes:** ▪ HSR's environmental impacts ▪ Inquiries about environmental benefits
Mexican American Opportunity Foundation and City of Cudahy/Vive tu Vida! Get up! Get Moving! (Gateway Cities Health Fair)	Clara Street Park 4835 Clara St Cudahy, CA 90201	Cudahy	11/19/2016	75 engaged	At this 10th annual health fair, most attendees learned about the statewide program and project section for the first time. Most conversations and project discussions were in Spanish and outreach staff provided resources to stay informed of project updates. **Key Themes:** ▪ Project timeline ▪ Cost of ridership and affordability ▪ Duration of ride ▪ Train speeds throughout statewide system ▪ Frequency of HSR operations, such as evenings ▪ HSR in relation to another passenger rail, such as Metrolink

Organization/Event	Location	Community Area	Date	Estimated Attendees[1]	Topics Discussed with Attendees/Key Themes
City of Buena Park / Buena Park Senior Center	Buena Park Senior Center 8150 Knott Ave Buena Park, CA 90620	Buena Park	12/8/2016	50 engaged	During a lunch hosted by the senior center, the outreach team provided general project information and discussed the following: ▪ Proposed statewide alignment ▪ Sustainability facts ▪ Rail safety **Key Themes:** ▪ Train routes and destinations ▪ HSR stations ▪ Cost of ridership and affordability ▪ Project funding and sources ▪ Construction timeline in Buena Park
SCAG/Metro Green Line Open House #2	Sproul Reception Center 12239 Sproul St Norwalk, CA 90650	Norwalk	1/7/2017	35 engaged	This event addressed the Metro Green Line Extension connecting Norwalk Station to Santa Fe Springs Metrolink Station. The following additional information was provided: ▪ LA–A Project Section updates ▪ General statewide HSR information **Key Themes:** ▪ Project timeline ▪ Train routes and destinations ▪ Project benefits to Norwalk ▪ HSR in comparison to bullet trains internationally

Organization/Event	Location	Community Area	Date	Estimated Attendees[1]	Topics Discussed with Attendees/Key Themes
SCAG/Metro Green Line Open House #2	Sproul Reception Center 12239 Sproul St Norwalk, CA 90650	Norwalk	1/11/2017	35 engaged	This event addressed the Metro Green Line Extension connecting Norwalk Station to Santa Fe Springs Metrolink Station. The following additional information was provided: ▪ LA–A Project Section updates ▪ General statewide HSR information **Key Themes:** ▪ Train speeds in Norwalk and safety measures ▪ Project benefits to Norwalk ▪ HSR in comparison to international rail systems ▪ Project timeline ▪ Duration of ride ▪ Project funding and sources
Orange County Heritage Council/Orange County Black History and Cultural Faire	205 West Center St Promenade Anaheim, CA 92805	Anaheim	2/4/2017	8,000 attendees/125 engaged	At this 37th annual event, the outreach team provided information on: ▪ HSR's environmental benefits ▪ Statewide map ▪ Safety and noise concerns **Key Themes:** ▪ Train routes and destinations ▪ Cost of ridership and affordability ▪ Project timeline

Organization/Event	Location	Community Area	Date	Estimated Attendees[1]	Topics Discussed with Attendees/Key Themes
Korean Community Services/Fullerton Arirang (A.R.) Market (Korean)	A.R. Mart 1701 W Orangethorpe Ave Fullerton, CA 92883	Fullerton	3/12/2017	30 engaged	To engage Korean-speaking community members, the outreach team hosted an information booth outside a highly trafficked supermarket. Project materials distributed and discussions addressed: ▪ Travel duration ▪ LA–A rail corridor map **Key Themes:** ▪ Train routes and destinations ▪ HSR in comparison to Brightline West ▪ Cost of ridership and affordability ▪ Project timeline
Pioneer High School/ Annual Freshman Fair	Pioneer High School 10800 Benavon St Whittier, CA 90606	Whittier	3/23/2017	100 engaged	This event informed incoming students about the school year's involvement activities. The outreach team's information booth provided families details about: ▪ LA–A Project Section updates ▪ Potential construction impacts in Los Nietos area ▪ Invites to future open house meeting to learn more **Key Themes:** ▪ Project timeline ▪ Cost of ridership and affordability ▪ Duration of ride ▪ Train routes and destinations
City of Anaheim/ Downtown Anaheim Farmers Market	Downtown Anaheim 201 Center St Promenade Anaheim, CA 92805	Anaheim	3/23/2017	5 engaged	This farmer's market provided an opportunity for the outreach team to share the following: ▪ Statewide project overview ▪ LA–A Project Section updates ▪ Ways to stay informed by providing contact information **Key Themes:** ▪ Project timeline ▪ Cost of ridership and affordability

Organization/Event	Location	Community Area	Date	Estimated Attendees[1]	Topics Discussed with Attendees/Key Themes
Metropolitan Water District of Southern California/ Spring Green Expo	Downtown Los Angeles Los Angeles Union Station Courtyard 700 N Alameda St Los Angeles, CA 90012	Los Angeles	4/20/2017	60 engaged	At this sustainability centered event, the outreach team hosted an information table to share HSR's environmental impact and general statewide information. Topics included: ▪ Sustainability policy ▪ Project timeline ▪ LA–A Project Section updates **Key Themes:** ▪ Environmental impacts
Southern California Railway Plaza Association/Fullerton Railroad Days	Fullerton Train Station (Metrolink) 120 E Santa Fe Ave Fullerton, CA 92832	Fullerton	5/5/2017–5/6/2017	403 engaged	At the 18th Annual Railroad Days, the outreach team connected with attendees who explored historical and model train exhibits. Topics discussed: ▪ Proposed statewide alignment ▪ Small business program ▪ LA–A Project Section updates **Key Themes:** ▪ Project timeline ▪ Project funding and sources ▪ Cost of ridership and affordability ▪ Duration of ride ▪ Shared tracks with freight and passenger rail ▪ Train routes and destinations ▪ Authority's purpose ▪ Phase 2 timeline

Organization/Event	Location	Community Area	Date	Estimated Attendees[1]	Topics Discussed with Attendees/Key Themes
Los Nietos MASH/ Los Nietos MASH Meeting	Los Nietos Community Center 11640 E Slauson Ave Whittier, CA 90606	Los Nietos/ Whittier unincorporated	5/18/2017	12 engaged	During a MASH group meeting, a PowerPoint presentation was provided. The presentation included: ▪ An overview of the HSR project, including a program overview and timeline construction ▪ Rail connections, grade separations ▪ Environmental process, stakeholder outreach, upcoming meetings, and how to stay connected. The LA–A fact sheet and grade separation insert was distributed to meeting attendees. **Key Themes:** ▪ Project timeline
City of Pico Rivera/Pico Rivera Farmers' Market	Smith Park 6016 Rosemead Blvd Pico Rivera, CA 90660	Pico Rivera	7/26/2017	50 engaged	This community event provided an opportunity to spread awareness about the project section and engage community members to provide their contact information to receive new project updates. Engaged members indicated the following: ▪ Excitement for the project's completion ▪ In favor of constructing the statewide program **Key Themes:** ▪ Project timeline ▪ Cost of ridership and affordability ▪ Duration of ride ▪ HSR in comparison to Hyperloop ▪ Funding sources

Organization/Event	Location	Community Area	Date	Estimated Attendees[1]	Topics Discussed with Attendees/Key Themes
Anaheim Indoor Marketplace/Community Health Fair at Anaheim Marketplace	Anaheim Indoor Marketplace 1440 S Anaheim Blvd Anaheim, CA 92805	Anaheim	8/20/2017	45 engaged	By holding an informational booth at this free, community health fair, many attendees learned about the HSR system for the first time. Outreach staff provided general project information and directed visitors on ways to stay informed of future project updates. **Key Themes:** ▪ Project timeline ▪ Train routes and destinations ▪ Cost of ridership and affordability ▪ Duration of ride
City of Commerce/ Commerce Fiestas Patrias	Bristow Park 1466 S McDonnell Ave Commerce, CA 90040	Commerce	9/16/2017	50 engaged	At this annual celebration event, the outreach team introduced the project to community members previously unaware of HSR and explained its community impacts: ▪ Proposed alignment option LA–A ▪ Statewide program **Key Themes:** ▪ Property impacts ▪ Project timeline ▪ Cost of ridership and affordability ▪ Duration of ride
Metropolitan Water District of Southern California/ Spring Green Expo	Downtown Los Angeles Los Angeles Union Station Courtyard 700 N Alameda St Los Angeles, CA 90012	Los Angeles	4/19/2018	100 engaged	At this sustainability centered event, the outreach team hosted an information table to share HSR's environmental impact and general statewide information. Topics included: ▪ Sustainability measures ▪ Project timeline ▪ Project section overview **Key Themes:** ▪ Environmental impacts

Organization/Event	Location	Community Area	Date	Estimated Attendees[1]	Topics Discussed with Attendees/Key Themes
Commerce Pop-up at Ayers Residential Community	Bandini Park Community Center 4725 Astor Ave Commerce, CA 90040	Commerce	10/27/2018	20 engaged	In collaboration with the Southeast Community Development Corporation, a mobile technology center was parked outside the community center to engage community members. Using a recreational vehicle equipped with laptops, outreach staff presented a PowerPoint presentation and geographic information system map: ▪ State's Preferred Alternative ▪ Commerce Metrolink Station relocation ▪ Statewide program **Key Themes:** ▪ Construction timeline ▪ Notifications to community ▪ Commerce Metrolink Station Relocation
City of Commerce/ Commerce Pop-up at Halloween Trick and Trot 5K	Commerce City Hall 2535 Commerce Way Commerce, CA	Commerce	10/27/2018	25 engaged	At the request of Councilmember Oralia Y. Rebollo, the outreach team staffed an information booth. Topics included: ▪ Project timeline and funding ▪ State's Preferred Alternative ▪ Commerce Metrolink Station relocation **Key Themes:** ▪ Project timeline ▪ Property acquisition and impacts on Commerce ▪ Authority and city coordination
Pioneer High School/ Marketplace	Pioneer High School 10800 Benavon St Whittier, CA 90606	Los Nietos/ Whittier unincorporated	11/10/2018	42 engaged	Topics discussed: ▪ General statewide information ▪ LA–A Project Section ▪ Proposed statewide alignment **Key Themes:** ▪ Project timeline ▪ Construction impacts

Organization/Event	Location	Community Area	Date	Estimated Attendees[1]	Topics Discussed with Attendees/Key Themes
Commerce Neighborhood Watch/Commerce Neighborhood Watch Meeting	Cul-de-sac at Ayers Ave/Leonis St (Ayers Community) Commerce, CA 90040	Commerce	2/28/2019	15 attendees/7 engaged	At this organization's meeting, the outreach team hosted a booth to provide information on impacts on the Ayers residential community and planned stations. Common questions involved: ▪ Potential business impacts ▪ Project timeline **Key Themes:** ▪ Direct impacts on Ayers residential community ▪ Project timeline and scope ▪ HSR station in Commerce ▪ Cost of ridership and affordability ▪ Impacts on businesses ▪ Information booth with La Mirada Neighborhood Watch ▪ Community meetings with HSR
Los Nietos MASH/ Los Nietos MASH Meeting	Los Nietos Community Center 11640 E Slauson Ave Whittier, CA 90606	Los Nietos/ Whittier Unincorporated	3/21/2019	11 engaged	At this organization's meeting, the outreach team gave a PowerPoint presentation on: ▪ General statewide information ▪ LA–A Project Section **Key Themes:** ▪ Project timeline ▪ Project's community benefits

Organization/Event	Location	Community Area	Date	Estimated Attendees[1]	Topics Discussed with Attendees/Key Themes
CCAEJ Briefing	Virtual	Colton, Lenwood	9/22/2020	8 participants	The meeting was requested by CCAEJ through the Authority's virtual office hours, which are being offered to answer questions and help stakeholders navigate the scoping period. CCAEJ requested this as a follow up to its participation at a public scoping meeting because they had additional questions on the LA–A Colton Component. Their questions related to the Authority/BNSF roles on the Colton and Lenwood Components, the decision-making process leading up to the MOU between both agencies, as well as inquiries on the type studies and extent of the analysis that will be included as part of the Draft EIR/EIS to assess the secondary impacts that the Inland Empire components may have on the residential communities. Note: The Authority instructed the organization's representatives to submit and questions and comments by the approaching deadline of September 24, 2020. Comments were received. **Key Themes:** ▪ Environmental analysis and selection process of proposing Colton and Lenwood for BNSF Components ▪ Growth in goods movement and impact of Colton and Lenwood Components on communities ▪ Requests to analyze potential electrification of proposed freight activities in draft environmental documents ▪ BNSF electrify freight operations ▪ Public health risks and air quality concerns ▪ Prior to proposal for BNSF Components, insufficient public outreach in Colton and Lenwood communities ▪ Inquiries about timeline of public engagement in relation to project scoping

Organization/Event	Location	Community Area	Date	Estimated Attendees[1]	Topics Discussed with Attendees/Key Themes
San Bernardino Equity Element	Virtual	San Bernardino	2/19/2021	17 participants	Provided a statewide and LA–A Project Section overview, environmental process milestones, stakeholder engagement efforts, and details of the Colton and Lenwood components. **Key Themes:** ▪ Inclusive public outreach strategies
City of Commerce/Rockin' Walkin' Wednesday	Bandini Park 4725 Astor Ave Commerce, CA 90040	Commerce	8/11/2021	60 attendees/ 10 engaged	General statewide and project section information was shared with attendees. To stay informed of future updates, individuals were encouraged to sign up to be contacted. **Key Themes:** ▪ Project timeline ▪ Funding sources ▪ Train routes and destinations
City of Colton/Movies in the Park	Elizabeth Davis Park 1055 W Laurel Dr Colton, CA 92324	Colton	8/27/2021	15 attendees/ 3 engaged	At this free, community event, booth visitors asked about the proposed Colton Intermodal Facility. ▪ Colton Component **Key Themes:** ▪ Purpose of Colton Component ▪ What will the Colton Intermodal Facility look like? ▪ HSR stations
City of Los Angeles/ Sunday Sessions – Grand Park, Los Angeles	Downtown Los Angeles Gloria Molina Grand Park	Los Angeles	8/29/2021	150 attendees/25 engaged	During this free, outdoor music event, the informational booth invited community members to ask general questions about the statewide program and project section. Visitors asked about the various destinations and train routes. **Key Themes:** ▪ Train routes and destinations ▪ Cost of ridership and affordability ▪ Project funding, such as Infrastructure Bill ▪ Project timeline and construction

Organization/Event	Location	Community Area	Date	Estimated Attendees[1]	Topics Discussed with Attendees/Key Themes
City of Santa Fe Springs/ Fiestas Patrias	Los Nietos Park 11143 Charlesworth Rd Santa Fe Springs, CA 90670	Santa Fe Springs	9/10/2021	300 attendees/35 booth visitors	This community event provided opportunities for individuals to ask questions about the statewide program and project section. **Key Themes:** ▪ Train routes and destinations ▪ Construction time and impacts on corridor cities ▪ Train fares and project budget sources ▪ HSR in comparison to maglev
City of Colton/City of Colton PAWS in the Park	Gonzales Community Center 670 Colton Ave Colton, CA 92324	Colton	9/18/2021	45 engaged	At this pet adoption and wellness event, the outreach team discussed how and why HSR affects the Colton community: ▪ Proposed Colton Intermodal Facility **Key Themes:** ▪ Outreach efforts in Colton ▪ Purpose of Colton Component ▪ HSR stations
Fullerton Night Market	125 E Wilshire Ave Fullerton, CA 92832	Fullerton	9/23/2021	75–100 event attendees/ 30 booth visitors	Topics discussed included an overview of the statewide program and project section. Details were provided on how to stay connected with future project news. **Key Themes:** ▪ Project timeline ▪ Train routes and destination ▪ Cost of ridership and affordability ▪ Funding sources ▪ Shared rail tracks and right-of-way ▪ Phase 2 routes and destinations ▪ HSR in comparison to maglev trains

Organization/Event	Location	Community Area	Date	Estimated Attendees[1]	Topics Discussed with Attendees/Key Themes
City of Colton/Halloween Festival	Fleming Park 525 N La Cadena Dr Colton, CA 92324	Colton	10/28/2021	75 engaged	Community members stopping by the information booth were provided an overview of the LA–A Project Section and the Colton and Lenwood project components. Questions were asked on when HSR will be in operation, station locations, and fare. **Key Themes:** ▪ Purpose of Colton Component ▪ Project timeline ▪ Cost of ridership and affordability ▪ Train routes and destinations
City of Colton/Holiday Spectacular	City of Colton 650 N La Cadena Dr Colton, CA 92324	Colton	12/04/2021	62 engaged	Community members stopping by the information booth were provided an overview of the LA–A Project Section and the Colton and Lenwood project components. Questions on whether HSR will have a station in the Inland Empire, travel time for Los Angeles to San Francisco and if the HSR is the same train going to Las Vegas. **Key Themes:** ▪ Train routes and destinations ▪ Train speeds and duration of ride ▪ HSR system in comparison to Brightline West ▪ Purpose of Colton Component

Organization/Event	Location	Community Area	Date	Estimated Attendees[1]	Topics Discussed with Attendees/Key Themes
People's Collaborative for EJ, Earth Justice, Sierra Club, and USEPA	Virtual	Virtual	6/17/2022	9 participated	The group discussed meeting goals and interested parties identified the following goals: ▪ Receive update on project and better understand future process ▪ Status of conversations with BNSF ▪ Project specifics around Colton ▪ Understand outreach opportunities to engage ▪ Discuss concerns related to project ▪ Receive schedule update The group was provided an update on the statewide program and the LA–A Project Section. **Key Themes:** ▪ Climate crisis and environmental benefits of HSR ▪ Public health concerns from project construction
People's Collaborative for EJ, Earth Justice, Sierra Club, and USEPA	Virtual	Virtual	7/20/2022	9 participated	Follow up from June 2022 meeting. The Authority provided a project overview and a summary of outreach activities in the Inland Empire. Participants raised questions on goods movement, outreach efforts and an alternative location for a multimodal facility. The Authority asked for additional groups to include in outreach efforts. **Key Themes:** ▪ Inquiries about outreach plan ▪ What are the other proposed places [intermodal facility sites other than Colton], and will they be assessed in the draft environmental documents? ▪ Requests for HSR station in Colton

Organization/Event	Location	Community Area	Date	Estimated Attendees[1]	Topics Discussed with Attendees/Key Themes
People's Collaborative for EJ, Earth Justice, Sierra Club, and USEPA	Virtual	Virtual	9/6/2022	10 participated	Provided an overview on the project section, demographic maps and status of Draft EIR/EIS and public notification. Concerns on environmental impacts were expressed. **Key Themes:** ▪ Challenges of releasing the Draft EIR/EIS ▪ Outreach efforts in person, such as public meetings, in Colton ▪ Colton Intermodal Facility impacts on home property values ▪ Public health concerns for Colton residents ▪ Request for more maps of affected properties
City of Commerce/Turkey Trot 5K	Commerce City Hall 2535 Commerce Way Commerce, CA 90040	Commerce	11/18/2023	120 engaged	This annual event brought together community members of all ages who encountered the informational booth at the end of the race. The #IWillRide campaign banner engaged attendees who wanted photos and transitioned to conversations with the outreach staff. Attendees learned an overview of the environmental review process and were directed on where to find more details online. Topics discussed: ▪ Upcoming open house and information sessions ▪ Project timeline ▪ Train routes and destinations **Key Themes:** ▪ Statewide system timeline ▪ Funding sources and construction contracts ▪ HSR system's relationship to Brightline West

Organization/Event	Location	Community Area	Date	Estimated Attendees[1]	Topics Discussed with Attendees/Key Themes
City of Fullerton and Fullerton Certified Farmers' Market Board/ Fullerton Farmer's Market	Fullerton Community Center 340 W Commonwealth Ave Fullerton, CA 92832	Fullerton	11/22/2023	15 engaged	This weekly farmer's market provided an opportunity to engage community members in learning about the project section's purpose and need. Some booth visitors wondered whether the project section was privately funded and asked about projected train fares. Most expressed interest in favor of a high-speed rail. Attendees were encouraged to stay informed with contact information in flyers provided. **Key Themes:** ▪ Construction timeline ▪ Funding sources ▪ Cost of ridership and affordability ▪ Authority's role in HSR
Neighborhood pop-up information table – unincorporated Whittier	Cul-de-sac at 8525 Bradwell Ave Whittier, CA 90606	Los Nietos/ Whittier Unincorporated	11/25/2023	25 engaged	Notices were provided about an upcoming Open House meeting about the Supplemental Alternatives Analysis 2023. General project section information and fact sheets were provided. **Key Themes:** ▪ Project timeline ▪ Ridership cost ▪ Residential property safety from future construction
City of Santa Fe Springs/ Tree Lighting Information Booth	Town Center Hall 11710 Telegraph Rd Santa Fe Springs, CA 90670	Santa Fe Springs	12/02/2023	800 attendees/50 engaged	This community event provided attendees with an opportunity to ask questions about the statewide program and HSR stations in the LA–A rail corridor. Common questions addressed: ▪ Project funding sources ▪ Duration of ride **Key Themes:** ▪ Project timeline for Phase 1 completion ▪ Train routes and destinations, such as Norwalk ▪ Station options

Organization/Event	Location	Community Area	Date	Estimated Attendees[1]	Topics Discussed with Attendees/Key Themes
City of Anaheim/Tree Lighting Information Booth	City Hall 200 S Anaheim Blvd Anaheim, CA 92805	Anaheim	12/03/2023	~500–1000 attendees/102 engaged	This event connected with community members of all ages because many visitors had recently learned of another high-speed rail line by Brightline West. Attendees were interested in learning about whether existing or new rail tracks would be built. Overall, attendees expressed excitement for the statewide system and were eager for its construction. **Key Themes:** ▪ Project timeline ▪ Train speed ▪ Project funding sources
City of Santa Fe Springs/ Las Posadas in Santa Fe Springs	Heritage Park 12100 Mora Dr Santa Fe Springs, CA 90670	Santa Fe Springs	12/08/2023	250 attendees/25 engaged	This event provided an opportunity to introduce community members to the statewide system and share general project section information. Visitors asked about the project timeline and about the differences between the HSR system and the Brightline West line from San Bernardino, California to Las Vegas, Nevada. **Key Themes:** ▪ Project timeline ▪ Train routes and destinations ▪ Authority property acquisition ▪ Funding sources ▪ Tunneling in project section ▪ Grade separations and safety

Organization/Event	Location	Community Area	Date	Estimated Attendees[1]	Topics Discussed with Attendees/Key Themes
High Desert Farmers Market	Victor Valley College 18422 Bear Valley Rd Victorville, CA 92395	Victorville	3/21/2024	200 attendees/78 engaged	This event provided an opportunity to address confusion between the HSR statewide system and the Brightline West line from San Bernardino, California to Las Vegas, Nevada. Many booth visitors asked whether the HSR would pass directly through Hesperia and Victorville. **Key Themes:** ▪ Train routes and destinations, particularly within High Desert Corridor ▪ Job opportunities with HSR
Pico Rivera Regional Rail Station Feasibility Study Community Meeting: Tabling Event	Pico Rivera Senior Center 9200 Mines Ave Pico Rivera, CA 90660	Pico Rivera	2/20/2025	30 booth participants	This event was hosted by Metro and the Authority was offered the opportunity to staff a booth to introduce the statewide system and share general project section information to event participants. **Key Themes** ▪ Station locations ▪ Commerce Station relocation ▪ Project timeline and funding ▪ HSR frequency ▪ HSR expansion ▪ Intermediate stations ▪ Grade separations ▪ General project support
City of Bell Mayor's Clean Up: Pop-Up	City of Bell 7022 Walker Ave Bell, CA 90201	Bell	3/15/2025	50 booth participants	This event provided an opportunity to introduce community members to the statewide system and share general project section information. **Key Themes** ▪ Project support ▪ Interest in HSR stations and connections to other public transportation systems ▪ Construction timeline

Organization/Event	Location	Community Area	Date	Estimated Attendees[1]	Topics Discussed with Attendees/Key Themes
Norwalk/Santa Fe Springs Transportation Center: Pop-Up	Norwalk/Santa Fe Springs Transportation Center 12650 Imperial Hwy, Norwalk, CA 90650	Santa Fe Springs	3/19/2025	Morning event: 14 booth participants with 4 being Spanish speakers Evening event: 35 booth participants with 10 being Spanish speakers	Pop-ups were held both in the morning and evening to introduce transit riders to information on the statewide HSR system and share information on the project section. **Key Themes** ▪ Concerns about Buena Park Metrolink Station relocation ▪ Concerns about property acquisitions ▪ Impacts on passenger experience at the Norwalk/Santa Fe Springs Station ▪ Construction timeline
Future Titan Night at Pioneer High School: Pop-Up	Pioneer High School 10800 Benavon St Whittier, CA 90606	Whittier/Los Nietos	3/20/2025	35 booth participants	This event provided an opportunity to introduce high school students to information on the HSR statewide system and share general information on the project section. **Key Themes:** ▪ Local grade separations ▪ Project timeline and feasibility ▪ Funding ▪ Impact on the Norwalk/Santa Fe Springs Station
Santa Fe Springs Swap Meet: Pop-Up	Santa Fe Springs Swap Meet 13963 Alondra Blvd Santa Fe Springs, CA 90670	Santa Fe Springs	3/29/2025	--	This event provided an opportunity to introduce community members to the statewide system and share general project section information. **Key Themes:** ▪ Concerns on duration of building HSR ▪ Funding ▪ Cost ▪ Timeline ▪ Environmental process

Organization/Event	Location	Community Area	Date	Estimated Attendees[1]	Topics Discussed with Attendees/Key Themes
Korean Resource Fair: Pop-Up	City of Buena Park Buena Park Community Center 6688 Beach Blvd Buena Park, CA 90621	Buena Park	4/5/2025	250 booth participants, 5 Spanish speakers	This event provided an opportunity to introduce community members to the statewide system and share general project section information. **Key Themes:** ▪ Construction timeline ▪ Traffic impacts ▪ Fares and senior discounts ▪ Project support ▪ Clarification between HSR and Brightline West
City of Bell: Spring Festival Pop-Up	Veterans' Memorial Park 6500 Wilcox Ave Bell, CA 90201	Bell	4/12/2025	110 booth participants, 40 Spanish speakers	This event provided an opportunity to introduce community members to the statewide system and share general project section information. **Key Themes:** ▪ First time learning about HSR ▪ Challenges with existing public transportation/ connections ▪ Construction timeline for LA-A ▪ Project funding concerns ▪ Travel duration ▪ Location of relocated Commerce Metrolink Station ▪ Rail corridor ownership ▪ Will HSR have a need to install new tracks? ▪ Project support
Downtown Fullerton Night Market: Pop-Up	Fullerton Downtown Plaza 125 E. Wilshire Ave Fullerton, CA 92832	Fullerton	4/17/2025	52 booth participants	This event provided an opportunity to introduce community members to the statewide system and share general project section information. **Key Themes:** ▪ Construction timeline ▪ Connectivity ▪ Funding concerns ▪ Project support

Organization/Event	Location	Community Area	Date	Estimated Attendees[1]	Topics Discussed with Attendees/Key Themes
City of Pico Rivera Earth Day Fair: Pop-Up	Pico Park 9528 Beverly Blvd Pico Rivera, CA 90660	Pico Rivera	4/19/2025	60 booth participants, 20 Spanish speakers	This event provided an opportunity to introduce community members to the statewide system and share general project section information. **Key Themes:** ▪ Relation to Metro Pico Rivera Rail Station Feasibility Study ▪ HSR station support in Pico Rivera ▪ Property impacts
Downtown Anaheim Farmers Market: Pop-Up	Downtown Anaheim 435 W Center St Promenade Anaheim, CA 92805	Anaheim	5/8/2025	8 booth participants	This event provided an opportunity to introduce community members to the statewide system and share general project section information. **Key Themes:** ▪ Project timeline ▪ Project funding ▪ Environmental benefits ▪ Project support
Downtown Anaheim Farmers Market: Pop-Up (Authority-led)	Downtown Anaheim 435 W Center St Promenade Anaheim, CA 92805	Anaheim	5/22/2025	20 booth participants	This event provided an opportunity to introduce community members to the statewide system and share general project section information. **Key Themes:** ▪ ARTIC Station ▪ Travel time ▪ Project timeline ▪ Politics: Visitor who shops in Anaheim shared they are knowledgeable about the HSR program and its political controversy. Visitors shared that they are supportive of the project because it will improve transportation in California. ▪ Construction impacts ▪ Grade separations ▪ HSR fare

Organization/Event	Location	Community Area	Date	Estimated Attendees[1]	Topics Discussed with Attendees/Key Themes
Norwalk 5K Run/Walk and Health and Wellness Expo: Pop-Up	Norwalk Civic Center 12200 Imperial Hwy Norwalk, CA 90650	Norwalk	6/1/2025	60 booth participants	This event provided an opportunity to introduce community members to the statewide system and share general project section information. **Key Themes:** ▪ Interest in an HSR Norwalk/Santa Fe Springs station ▪ Public transit options to reduce commute times and congestion ▪ Construction timeline ▪ Support for efficient travel to Central and Northern California ▪ Information on ARTIC station
Stride for Pride 5K and Resource Fair: Pop-Up	Montebello City Hall 1600 W. Beverly Blvd Montebello, CA 90640	Montebello	6/7/2025	50 booth participants	This event provided an opportunity to introduce community members to the statewide system and share general project section information. **Key Themes:** ▪ Another booth staffer stopped by our booth and was interested in the ongoing development of the project. He stated he would like to observe more outreach to people of color and queer people who may not have access to their own transportation. ▪ HSR fare ▪ Concerns on ongoing investigation by the current administration. ▪ Status of project section ▪ Funding ▪ Difference between HSR and Brightline West ▪ Status on the release of the Draft EIR/EIS

Organization/Event	Location	Community Area	Date	Estimated Attendees[1]	Topics Discussed with Attendees/Key Themes
Montebello Downtown Street Festival: Pop-Up	Along Whittier Blvd between Montebello Blvd/4th St Montebello, CA 90640	Montebello	7/26/2025	120 total booth visitors, 30 Spanish speakers	Provide project background and update focused on the project section, such as the proposed relocation of Commerce Metrolink Station studied in draft environmental documents. **Key Themes:** ▪ Confusion between project section and Metro, Eastside Transit Corridor Phase 2 ▪ Construction timeline ▪ Funding availability
Commerce Metrolink Station: Pop-Up	6433 E 26th Street Commerce, CA 90040	Commerce	8/5/2025	10 booth visitors	Provide HSR background and update focused on the project section, such as the proposed relocation of Commerce Metrolink Station studied in draft environmental documents. The outreach team shared information about the proposed relocation of the existing Commerce Metrolink Station. Most participants were in a rush to commute to work. **Key Themes:** ▪ Commuters were surprised that the project is still active and continuing with the environmental study ▪ The outreach team shared information about the proposed relocation of the existing Commerce Metrolink Station, but most participants were in a hurry to commute to work ▪ Train speed/projected travel times between LAUS and ARTIC

[1] Many outreach events involved hosting an information booth at a larger event, such as a conference or farmer's market. "Attendees" represent the estimated number of people who attended the event; the number of "engaged" represents the attendees who interacted with the project booth or project-specific outreach activities.
ARTIC = Anaheim Regional Transportation Intermodal Center; Authority = California High-Speed Rail Authority; BNSF = BNSF Railway; CCAEJ = Center for Community Action and Environmental Justice; EIR = environmental impact report; EIS = environmental impact statement; EJ = environmental justice; HSR = high-speed rail; LA–A = Los Angeles to Anaheim; LAUS = Los Angeles Union Station; LMF = might maintenance facility; MASH = More Advocates for Safer Homes; Metro = Los Angeles County Metropolitan Transportation Authority; MOU = memorandum of understanding; project section = Los Angeles to Anaheim Project Section; Q&A = question and answer; SCAG = Southern California Association of Governments; USEPA = U.S. Environmental Protection Agency

5.5.2 Summary of Public Outreach Issues and Concerns

As described in Section 5.4, the RSAs consist mostly of minority and low-income populations. Moreover, as described in Section 5.3.4.4, Methods for Inclusive Public Engagement, the Authority employed strategies to be inclusive of minority and low-income populations, such as direct outreach, translation of informational materials, and interpretation at public meetings. Therefore, issues and concerns raised at outreach events are considered representative of minority and low-income populations. The Authority will continue to conduct inclusive public engagement for all project components throughout the phases of the Draft EIR/EIS process.

5.5.2.1 Issues and Concerns

Given the urban and dense nature of the corridor, the Authority has worked to minimize the area needed for project construction, to the extent possible, to reduce impacts on the surrounding community. As presented in Table 5-12, key issues and concerns regarding the project include:

- **Station connectivity:** For ARTIC, connectivity was a reoccurring theme. Specifically at downtown Los Angeles events, participants inquired as to whether the HSR system would expand connectivity options. In the Platinum Triangle and downtown neighborhoods of Anaheim, stakeholders were interested in how HSR would connect to key destinations including Disneyland and regional airports.
- **Noise and vibration:** Participants raised concerns about effects on sensitive receptors adjacent to the corridor during the initial scoping in 2007 and the 2020 virtual scoping meetings. Concerns included noise and vibration increases along the project alignment. Residents in Montebello specifically raised concerns about noise levels at two separate events in 2016. In addition, during the 2023 Supplemental Alternatives Analysis outreach, residents raised concerns on sensitive receptors along the unincorporated area of Whittier adjacent to the rail corridor.
- **Right-of-way impacts:** Participants raised concerns regarding operational right-of-way issues and property impacts during the initial scoping in 2007 and the 2020 virtual scoping meetings. Concerns included the shared use of existing rail right-of-way, specifically the use of right-of-way between Los Angeles Union Station and Santa Fe Springs Station.
- **Business and resident displacement:** Residential and business displacements were concerns in the Ayers residential community and Hobart neighborhood in Commerce, Montebello, downtown Los Angeles, Whittier, Fullerton, and downtown Anaheim. Specific concerns during the 2020 virtual scoping meetings included the project's impact on property values.
- **Overall safety:** During the initial 2007 scoping and 2023 Supplemental Alternatives Analysis outreach, participants raised concerns about safety and security features (such as fencing) for rail grade separations and at-grade crossings along the rail corridor and in the unincorporated area of Whittier. During the 2020 virtual scoping meetings, concerns included impacts from opaque construction barriers and train derailment safety hazards.
- **Grade crossing impacts:** Participants raised concerns about grade separation impacts in Anaheim, particularly regarding right-of-way requirements and traffic impacts during the initial 2007 scoping meetings.
- **Visual impacts and impacts on community character:** During the 2020 virtual scoping meetings, participants raised concerns about visual impacts of the HSR system and its potential changes to the character of the cities. Specific concerns included impacts on the character of the cities of Los Angeles, Buena Park, and Fullerton; and Los Angeles River bridges.
- **Construction impacts:** Communities expressed fatigue from ongoing infrastructure projects, such as transportation (e.g., bridge replacements, highway expansions, grade separations) and utility improvement projects, which are described in Section 3.19, and listed in

Appendix 3.19-A, Cumulative Plans and Nontransportation Projects List, and Appendix 3.19-B, Cumulative Transportation Projects List.

- **Increased use of the Los Angeles – San Diego – San Luis Obispo Rail Corridor**: The corridor would continue to be developed and serve as a transportation corridor between Los Angeles and Fullerton, as described in Appendix 3.19-B.

5.5.2.2 Response to Issues and Concerns of Minority and Low-Income Populations

The Authority has used feedback received from communities to adapt the project to avoid potential impacts. For example, as part of 2020 revised scoping, interested party feedback on the two BNSF Railway (BNSF) project components raised substantial opposition to and concern for introducing a new intermodal facility far outside the project corridor in a community with substantial numbers of minority and low-income populations. Common themes among comment submittals during 2020 scoping included concerns about health, air quality, traffic/congestion, and noise impacts on a disadvantaged community with the introduction of a new Colton intermodal facility. Many participants were concerned that the existing communities near the BNSF Colton Component are disadvantaged, characterized by substantial numbers of low-income and minority populations, and are already burdened by high levels of pollution and other environmental hazards. Participants were concerned that the BNSF Colton Component would add to this burden without providing sufficient benefits. Interested party opposition is documented in the 2023 Supplemental Alternatives Analysis Report.

For the above reasons, the Authority considered additional alternatives that could avoid minority and low-income communities and eliminate the need to redirect trains and trucks to a new intermodal facility in San Bernardino County. As a result of this feedback, the BNSF Lenwood and Colton Components were no longer considered as part of the project section.

As mentioned above, inclusive public engagement is an ongoing effort. For a full summary of the feedback received during the public engagement periods, refer to Chapter 9.

5.6 Assessment of Impacts

5.6.1 Overview

This section summarizes the potential adverse effects discussed in Chapter 3 of this Draft EIR/EIS. The analysis considers both IAMFs and mitigation measures in determining whether communities would experience adverse effects. All effects in the relevant Chapter 3 sections were reviewed. However, only those effects determined to be relevant for this chapter's community analysis are included in this section.

5.6.2 No Project Alternative

The No Project Alternative assumes the construction and operation of planned and programmed projects (refer to Chapter 2), which have the potential to result in environmental effects on low-income and minority populations. Planned and programmed projects under No Project Alternative conditions would primarily occur in the existing urbanized areas in Los Angeles and Orange Counties. As discussed in Section 5.4, projects in the RSA would predominantly affect low-income and minority populations.

Foreseeable future development projects in Los Angeles and Orange Counties include bridge replacement, highway expansion, grade separation, and utility improvement projects. Property acquisitions for new developments that displace residences and businesses would affect county and local government revenue similar to the project if those displacements cause losses in school district funding, property tax, or sales and use tax revenue. Section 3.19 and Appendices 3.19-A and 3.19-B list foreseeable future development and transportation projects that could affect populations in the RSAs.

Population shifts and associated development pressures could result in disturbances to communities near construction activities during temporary construction activities. Planned

development and transportation projects that would occur as part of the No Project Alternative would likely include implementation of various forms of mitigation to avoid or minimize potential effects on community and environmental resources that have the potential to affect human health, safety, and welfare.

Under the No Project Alternative, recent development trends in the project section are anticipated to continue, leading to direct and indirect effects on low-income or minority populations. Overall, traffic congestion in the project section is anticipated to worsen as the population shifts and employment increases and intersection and roadway segment conditions worsen. With continued land development, population shifts, and employment growth, emissions would increase under the No Project Alternative. However, given increasingly stringent federal and state emission control requirements; replacing older, higher-polluting vehicles with newer, less polluting ones; and state and local initiative plans and policies, air quality is expected to improve in the SCAB under the No Project Alternative. Because substantial low-income or minority populations are often near existing transportation corridors and industrial areas, low-income or minority populations would still likely continue to be disproportionately affected by deteriorating air quality (OEHHA 2015). Land development and infrastructure improvement projects under the No Project Alternative, along with additional rail and road traffic, would result in land conversions and residential and commercial displacements and relocations; divided communities; impacts on unknown archaeological sites, increased access and disturbances to archaeological sites, and impacts on historic built resources; increased localized noise and vibration impacts; impacts on views, visual resources, and visual quality; and degraded nighttime views from an increase in evening light and glare. Under the No Project Alternative, planned rail extension and improvement projects and light rail station improvement projects would continue to occur, which are likely to lead to intensification of development around station locations. The associated development may lead to land use changes such as gentrification along the existing rail corridor under the No Project Alternative. Planned recreational developments under the No Project Alternative would help to relieve the strain on existing recreational facilities, but they may also affect existing recreational and other resources.

It is assumed that each of the planned and programmed projects included under the No Project Alternative would undergo individual environmental review to identify and minimize effects on affected communities, including potential disproportionate adverse impacts on low-income or minority populations. Environmental effects of the No Project Alternative with the potential to result in effects on low-income and minority populations are discussed below.

5.6.2.1 Transportation

As discussed in Section 3.2, under the No Project Alternative, recent development trends are anticipated to continue, leading to increased congestion on regional roadways, despite planned improvements, because anticipated growth would outpace roadway expansion. For Horizon Year 2040, level of service, volume-to-capacity ratios, and delays would continue to deteriorate throughout the project section along the highways. Cities and counties in the region would evaluate the transportation effects of projects in the course of separate environmental review and require that projects incorporate measures to avoid, minimize, or mitigate adverse effects to the extent feasible. Projects assumed as part of the No Project Alternative would undergo environmental review to identify any adverse effects on communities.

Under the No Project Alternative, no communities would benefit from the project-related reduction of vehicle trips and vehicle miles traveled on freeways through the provision of another mode of intercity passenger transportation.

5.6.2.2 Air Quality and Global Climate Change

As discussed in Section 3.3, under the No Project Alternative, statewide emissions of criteria pollutants and greenhouse gases from surface transportation are predicted to decrease over time, despite economic growth and development, because total emissions from vehicles decrease as older, higher-emitting vehicles are retired and replaced by newer, lower-emitting vehicles. Additionally, implementation of the Southern California Association of Governments'

Regional Transportation Plan/Sustainable Communities Strategy would reduce greenhouse gas emissions from passenger vehicles and light-duty trucks by 5 percent per capita by 2020 and 19 percent per capita by 2035 compared to 2005. Statewide emissions of reactive organic gas, carbon monoxide (CO), and nitrogen oxides (NO_X) are predicted to decrease from 2023 to 2040 because of the automobile emissions standards mentioned above. Statewide emissions of sulfur dioxide and particulate matter 10 microns or less in diameter (PM_{10}) and particulate matter 2.5 microns or less in diameter ($PM_{2.5}$) are predicted to increase from 2023 to 2040 because increased emissions from aircraft and power plants will exceed the decreases in motor vehicle emissions. Such emissions would affect communities in the region. Projects assumed as part of the No Project Alternative would undergo environmental review to identify any adverse effects.

Under the No Project Alternative, no communities would benefit from a project-related reduction in long-term automobile emissions associated with the decrease in vehicle miles traveled created by providing another mode of intercity passenger transportation.

5.6.2.3 Noise and Vibration

As discussed in Section 3.4, under the No Project Alternative, population and employment in the RSA would continue to grow, specifically in Orange County. By 2040, changes in noise and vibration sources from development projects and infrastructure improvements along with additional rail and road traffic from other planned projects in the existing rail alignment could cause noise and vibration impacts.

Cities and counties in the region would evaluate the noise and vibration effects of projects in the course of separate environmental review, and would require that projects incorporate measures to avoid, minimize, or mitigate adverse effects to the extent feasible. Projects assumed as part of the No Project Alternative would undergo separate environmental review to identify any adverse effects.

5.6.2.4 Hazardous Materials and Wastes

As discussed in Section 3.10, under the No Project Alternative, recent development trends are anticipated to continue. Planned development projects would require the storage, transport, use, and disposal of hazardous materials during construction and operation. Within the RSA, there are existing schools, hospitals, parks, and other places of congregation near these transportation systems. These facilities could be subjected to risks associated with the routine transport and handling of hazardous materials and the construction and operation of future transportation system improvements. Contamination concerns and risks are associated with potential environmental concern sites identified in the RSA. Planned improvements in areas of existing oil or gas fields could result in the release of hazardous materials from the rupture of a pipeline or disturbance of a well casing. Risks associated with encountering oil and gas wells such as spills, fires, or explosions could threaten the safety of the public. Increased traffic and congestion would likely increase the risk of accidental release of hazardous materials in the environment.

Projects assumed as part of the No Project Alternative would undergo separate environmental review to identify any adverse effects.

5.6.2.5 Socioeconomics and Communities

As discussed in Section 3.12, under the No Project Alternative, recent development trends are anticipated to continue. Planned projects would result in changes to the local economy, a net increase in housing units, and contributions to increased regional urbanization. Development and transportation projects would result in temporary construction impacts such as noise, vehicle delays, traffic detours, and temporary and permanent residential and business displacement impacts and relocations affecting communities and neighborhoods. Additionally, the No Project Alternative could result in economic effects, disrupt or divide established communities, or reduce community cohesion. Projects assumed as part of the No Project Alternative would undergo separate environmental review to identify any adverse effects.

5.6.2.6 Parks, Recreation, and Open Space

As discussed in Section 3.15, under the No Project Alternative, recent development trends could potentially affect recreational resources in the RSA, leading to deterioration of parks, recreation, and open space resources from increased use. Planned development activities including demolition, new construction, ground disturbance and compaction in construction and staging areas, accelerated erosion or increased flooding associated with changes in drainage patterns, and development of new borrow sites could lead to impacts on parks, recreation, and open space resources. These impacts could result in impacts on all communities. Projects assumed as part of the No Project Alternative would undergo separate environmental review to identify any adverse effects. This review would include an analysis of future development effects on parks, recreation, and open space resources, and the environmental effects of acquiring new parks and constructing new recreational facilities necessary to meet acceptable service ratios.

5.6.2.7 Aesthetics and Visual Quality

As discussed in Section 3.16, under the No Project Alternative, recent development trends are anticipated to continue. Visual changes and aesthetic and visual quality impacts would occur from other planned and committed projects to be built by 2040, including increased sources of evening light and glare, which could degrade nighttime views in communities. Planned development activities including demolition, new construction, ground disturbance and compaction in construction and staging areas, accelerated erosion or increased flooding associated with changes in drainage patterns, and development of new borrow sites could lead to impacts on aesthetics and visual quality. In some locations, views toward open spaces—such as the Rio Hondo, the San Gabriel and Santa Ana River Trails, and the San Gabriel Mountains—may be reduced or blocked by new structures. Shifts in population and employment growth in Los Angeles and Orange Counties would add additional residential and commercial developments and associated infrastructure to the viewed landscape and could potentially affect viewers, visual character, and visual quality in some locations. Projects assumed as part of the No Project Alternative would undergo separate environmental review to identify any adverse effects.

5.6.2.8 Cultural Resources

As discussed in Section 3.17, under the No Project Alternative, recent development trends are anticipated to continue. Changes in land use and ground disturbance from infrastructure improvements would continue to disturb unknown archaeological resources and result in the demolition, destruction, relocation, or alteration of historic architectural resources or their setting. Public access to areas containing cultural resources has the potential to affect cultural resources through collection, vandalism, and intentional or unintentional destruction of artifacts.

Projects assumed as part of the No Project Alternative would undergo separate environmental review to identify any adverse effects.

5.6.3 Project Impacts

The following community analysis focuses on the potential for DHAEs on human health and the environment that could affect communities. As discussed in Section 5.3.4.2, Methods for Identifying Potential Adverse Effects, all effects in the respective Chapter 3 sections were reviewed. However, only those effects determined to be relevant for this chapter's community analysis are included in this section. Project construction and operations could result in temporary and permanent adverse effects as well as beneficial effects associated with transportation; air quality; noise and vibration; electromagnetic fields (EMF) and electromagnetic interference (EMI); hazardous materials; socioeconomics and communities; parks, recreation, and open space; aesthetics and visual quality; and cultural resources. The analysis considers both IAMFs and mitigation measures in determining whether communities would experience adverse effects. Table 5-13 summarizes the NEPA effects of the Shared Passenger Track Alternatives before implementation of mitigation measures in topic areas relevant to this analysis. If the project will not have an adverse effect, it will not have a DHAE on any community. Section 5.7 includes a

condensed summary table of environmental topic areas to determine whether, for any resource area, the project would cause any potential DHAEs.

Table 5-13 Summary of NEPA Effects on Communities Premitigation

Environmental Topic	Shared Passenger Track Alternative A	Shared Passenger Track Alternative B	With Inclusion of HSR Station Option	
			Norwalk/Santa Fe Springs HSR Station Option	Fullerton HSR Station Option
Transportation				
Impact TR-1: Temporary Impacts on Intersections, Roadways, and Freeways from Temporary Road Closures, Relocations, and Modifications During Construction	Not adverse	Not adverse	Similar to the Shared Passenger Track Alternatives in the station area.	Similar to the Shared Passenger Track Alternatives in the station area.
Impact TR-2: Permanent Impacts on Signalized Intersections from Construction of Permanent Roadway Modifications	Adverse	Adverse	Same as the Shared Passenger Track Alternatives in the station area.	Same as the Shared Passenger Track Alternatives in the station area.
Impact TR-3: Permanent Impacts on Unsignalized Intersections from Construction of Permanent Roadway Modifications	Adverse	Adverse	Same as the Shared Passenger Track Alternatives in the station area.	Same as the Shared Passenger Track Alternatives in the station area.
Impact TR-4: Permanent Impacts on Roadway Segments from Construction of Permanent Roadway Modifications	Adverse	Adverse	Same as the Shared Passenger Track Alternatives in the station area.	Same as the Shared Passenger Track Alternatives in the station area.
Impact TR-5: Temporary Impacts on Pedestrian, Bicycle, and Transit Facilities During Construction	Not adverse	Not adverse	Similar to the Shared Passenger Track Alternatives in the station area.	Similar to the Shared Passenger Track Alternatives in the station area.
Impact TR-6: Permanent Impacts on Pedestrian, Bicycle, and Transit Facilities from Construction of Permanent Roadway Modifications	Not adverse	Not adverse	Similar to the Shared Passenger Track Alternatives in the station area.	Similar to the Shared Passenger Track Alternatives in the station area.
Impact TR-7: Permanent Impacts on Freeway Mainline Segments and Ramps During Construction	Not adverse	Not adverse	Same as the Shared Passenger Track Alternatives in the station area.	Same as the Shared Passenger Track Alternatives in the station area.
Impact TR-8: Temporary Impacts on Freight and Passenger Rail Operations During Construction	Adverse	Adverse	Same as the Shared Passenger Track Alternatives in the station area.	Same as the Shared Passenger Track Alternatives in the station area.
Impact TR-9: Continuous Permanent Impacts on Vehicle Miles Traveled During Operation	Not adverse	Not adverse	Similar to the Shared Passenger Track Alternatives in the station area.	Similar to the Shared Passenger Track Alternatives in the station area.

Environmental Topic	Shared Passenger Track Alternative A	Shared Passenger Track Alternative B	With Inclusion of HSR Station Option	
			Norwalk/Santa Fe Springs HSR Station Option	Fullerton HSR Station Option
Impact TR-10: Continuous Permanent Impacts on Signalized Intersections During Operations	Adverse	Adverse	Similar to the Shared Passenger Track Alternatives in the station area.	Similar to the Shared Passenger Track Alternatives in the station area.
Impact TR-11: Continuous Permanent Impacts on Unsignalized Intersections During Operations	Adverse	Adverse	Similar to the Shared Passenger Track Alternatives in the station area.	Similar to the Shared Passenger Track Alternatives in the station area.
Impact TR-12: Continuous Permanent Impacts on Roadway Segments During Operations	Adverse	Adverse	Similar to the Shared Passenger Track Alternatives in the station area.	Similar to the Shared Passenger Track Alternatives in the station area.
Impact TR-13: Continuous Permanent Impacts on Pedestrian, Bicycle, and Transit Facilities During Operations	Not adverse	Not adverse	Similar to the Shared Passenger Track Alternatives in the station area.	Similar to the Shared Passenger Track Alternatives in the station area.
Impact TR-14: Continuous Permanent Impacts on Freeway Mainline Segments and Ramps During Operations	Adverse	Adverse	Same as the Shared Passenger Track Alternatives in the station area.	Same as the Shared Passenger Track Alternatives in the station area.
Impact TR-15: Continuous Permanent Impacts on Freight Rail and Passenger Rail System Capacity During Operations	Not adverse	Not adverse	Same as the Shared Passenger Track Alternatives in the station area.	Same as the Shared Passenger Track Alternatives in the station area.
Air Quality and Global Climate Change				
Impact AQ-1: Temporary Direct and Indirect Impacts on Air Quality within Applicable Air Basin	Adverse	Adverse	Similar impacts as the Shared Passenger Track Alternatives in the station area.	Similar impacts as the Shared Passenger Track Alternatives in the station area.
Impact AQ-2: Temporary Direct Impacts on Implementation of an Applicable Air Quality Plan	Adverse	Adverse	Similar impacts as the Shared Passenger Track Alternatives in the station area.	Similar impacts as the Shared Passenger Track Alternatives in the station area.
Impact AQ-3: Temporary Direct and Indirect Impacts on Global Climate Change—Greenhouse Gas Emissions	Not Adverse	Not Adverse	Similar impacts as the Shared Passenger Track Alternatives in the station area.	Similar impacts as the Shared Passenger Track Alternatives in the station area.
Impact AQ-4: Continuous Permanent Direct Impacts on Air Quality within Applicable Air Basin—On-Road Vehicle and Power Plant Emissions	Not adverse	Not adverse	Similar impacts as the Shared Passenger Track Alternatives in the station area.	Similar impacts as the Shared Passenger Track Alternatives in the station area.

Environmental Topic	Shared Passenger Track Alternative A	Shared Passenger Track Alternative B	With Inclusion of HSR Station Option	
			Norwalk/Santa Fe Springs HSR Station Option	Fullerton HSR Station Option
Impact AQ-5: Continuous Permanent Direct Impacts on Implementation of an Applicable Air Quality Plan	Not adverse (beneficial)	Not adverse	Similar impacts as the Shared Passenger Track Alternatives in the station area.	Similar impacts as the Shared Passenger Track Alternatives in the station area.
Impact AQ-6: Continuous Permanent Direct and Indirect Impacts on Global Climate Change—Greenhouse Gas Emissions—On-Road Vehicle, Power Plant, and Electrical Equipment Emissions	Not adverse (beneficial)	Not adverse	Similar impacts as the Shared Passenger Track Alternatives in the station area.	Similar impacts as the Shared Passenger Track Alternatives in the station area.
Impact AQ-7: Temporary Direct Impacts on Localized Air Quality During Construction—Criteria Pollutants	Not adverse	Not adverse	Same as the Shared Passenger Track Alternatives in the station area.	Same as the Shared Passenger Track Alternatives in the station area.
Impact AQ-8: Temporary Direct Impacts on Localized Air Quality—Exposure to Diesel Particulate Matter (Health Risk)	Not adverse	Not adverse	Same as the Shared Passenger Track Alternatives in the station area.	Same as the Shared Passenger Track Alternatives in the station area.
Impact AQ-9: Temporary Direct Impacts on Localized Air Quality—Exposure to Asbestos and Lead-Based Paint	Not adverse	Not adverse	Same as the Shared Passenger Track Alternatives in the station area.	Similar impacts as the Shared Passenger Track Alternatives in the station area.
Impact AQ-10: Temporary Direct Impacts on Localized Air Quality—Exposure to Odors	Not adverse	Not adverse	Similar impacts as the Shared Passenger Track Alternatives in the station area.	Similar impacts as the Shared Passenger Track Alternatives in the station area.
Impact AQ-11: Continuous Permanent Direct Impacts on Localized Air Quality—Carbon Monoxide Hot Spots (NAAQS Compliance)	Not adverse	Not adverse	Same as the Shared Passenger Track Alternatives in the station area.	Same as the Shared Passenger Track Alternatives in the station area.
Impact AQ-12: Continuous Permanent Direct Impacts on Localized Air Quality—Exposure to Mobile Source Air Toxics	Not adverse	Not adverse	Similar impacts as the Shared Passenger Track Alternatives in the station area.	Similar impacts as the Shared Passenger Track Alternatives in the station area.
Impact AQ-13: Continuous Permanent Direct Impacts on Localized Air Quality—Criteria Pollutants	Not adverse	Not adverse	Similar impacts as the Shared Passenger Track Alternatives in the station area.	Similar impacts as the Shared Passenger Track Alternatives in the station area.

Environmental Topic	Shared Passenger Track Alternative A	Shared Passenger Track Alternative B	With Inclusion of HSR Station Option	
			Norwalk/Santa Fe Springs HSR Station Option	Fullerton HSR Station Option
Impact AQ-14: Continuous Permanent Direct Impacts on Localized Air Quality—Particulate Matter Hot Spots (NAAQS Compliance)	Not adverse	Not adverse	Same as the Shared Passenger Track Alternatives in the station area.	Same as the Shared Passenger Track Alternatives in the station area.
Impact AQ-15: Continuous Permanent Direct Impacts on Localized Air Quality—Exposure to Diesel Particulate Matter (Health Risk)	Adverse	Adverse	Same as the Shared Passenger Track Alternatives in the station area.	Same as the Shared Passenger Track Alternatives in the station area.
Impact AQ-16: Continuous Permanent Direct Impacts on Localized Air Quality—Exposure to Odors	Not adverse	Not adverse	Similar impacts as the Shared Passenger Track Alternatives in the station area.	Similar impacts as the Shared Passenger Track Alternatives in the station area.
Noise and Vibration				
Impact N&V-1: Temporary Exposure of Sensitive Receivers to Construction Noise	Adverse	Adverse	Same as the Shared Passenger Track Alternatives in the station area.	Similar impacts as the Shared Passenger Track Alternatives in the station area.
Impact N&V-2: Temporary Exposure of Sensitive Receivers to Vibration from Construction	Adverse	Adverse	Same as the Shared Passenger Track Alternatives in the station area.	Same as the Shared Passenger Track Alternatives in the station area.
Impact N&V-3: Temporary Traffic-Generated Noise from Rerouting Traffic During Construction	Not adverse	Not adverse	Same as the Shared Passenger Track Alternatives in the station area.	Same as the Shared Passenger Track Alternatives in the station area.
Impact N&V-4: Permanent Exposure of Sensitive Receivers to Noise from Project Operation	Adverse	Adverse	Similar to the Shared Passenger Track Alternatives in the station area.	Similar to the Shared Passenger Track Alternatives in the station area.
Impact N&V-5: Permanent Exposure of Sensitive Receivers and Buildings to Ground-Borne Noise and Vibration from Project Operation	Adverse	Adverse	Similar to the Shared Passenger Track Alternatives in the station area.	Similar to the Shared Passenger Track Alternatives in the station area.
Impact N&V-6: Noise Effects on Wildlife and Domestic Animals	Not adverse	Not adverse	Similar to the Shared Passenger Track Alternatives in the station area.	Similar to the Shared Passenger Track Alternatives in the station area.

Environmental Topic	Shared Passenger Track Alternative A	Shared Passenger Track Alternative B	With Inclusion of HSR Station Option	
			Norwalk/Santa Fe Springs HSR Station Option	Fullerton HSR Station Option
Impact N&V-7: Traffic Noise	Not adverse	Not adverse	Same as the Shared Passenger Track Alternatives in the station area.	Same as the Shared Passenger Track Alternatives in the station area.
Impact N&V-8: Noise from High-Speed Rail Stationary Facilities	Not adverse	Not adverse	Same as the Shared Passenger Track Alternatives in the station area.	Same as the Shared Passenger Track Alternatives in the station area.
EMF/EMI				
Impact EMF/EMI-1: Temporary Impacts from Use of Heavy Construction Equipment	Adverse	Adverse	Same as the Shared Passenger Track Alternatives in the station area.	Same as the Shared Passenger Track Alternatives in the station area.
Impact EMF/EMI-2: Temporary Impacts from Communications Equipment	Not adverse	Not adverse	Same as the Shared Passenger Track Alternatives in the station area.	Same as the Shared Passenger Track Alternatives in the station area.
Impact EMF/EMI-3: Temporary Impacts from Operation of Electrical Equipment	Adverse	Adverse	Same as the Shared Passenger Track Alternatives in the station area.	Same as the Shared Passenger Track Alternatives in the station area.
Impact EMF/EMI-4: Permanent Human Exposure to Electromagnetic Fields	Not adverse	Not adverse	Same as the Shared Passenger Track Alternatives in the station area.	Same as the Shared Passenger Track Alternatives in the station area.
Impact EMF/EMI-5: People with Implanted Medical Devices and Exposure to Electromagnetic Fields	Not adverse	Not adverse	Same as the Shared Passenger Track Alternatives in the station area.	Same as the Shared Passenger Track Alternatives in the station area.
Impact EMF/EMI-6: Potential for Corrosion of Underground Pipelines, Cables, and Adjoining Rail	Not adverse	Not adverse	Same as the Shared Passenger Track Alternatives in the station area.	Same as the Shared Passenger Track Alternatives in the station area.
Impact EMF/EMI-7: Potential for Nuisance Shocks	Not adverse	Not adverse	Same as the Shared Passenger Track Alternatives in the station area.	Same as the Shared Passenger Track Alternatives in the station area.
Impact EMF/EMI-8: Effects on Adjacent Existing Rail Lines	Not adverse	Not adverse	Same as the Shared Passenger Track Alternatives in the station area.	Same as the Shared Passenger Track Alternatives in the station area.

Environmental Topic	Shared Passenger Track Alternative A	Shared Passenger Track Alternative B	With Inclusion of HSR Station Option	
			Norwalk/Santa Fe Springs HSR Station Option	Fullerton HSR Station Option
Impact EMF/EMI-9: Permanent Interference with Sensitive Equipment	Adverse	Adverse	Same as the Shared Passenger Track Alternatives in the station area.	Same as the Shared Passenger Track Alternatives in the station area.
Impact EMF/EMI-10: Electromagnetic Interference Effects on Schools	Not adverse	Not adverse	Same as the Shared Passenger Track Alternatives in the station area.	Same as the Shared Passenger Track Alternatives in the station area.
Impact EMF/EMI-11: Effects Related to Adjacent Airports	Not adverse	Not adverse	Same as the Shared Passenger Track Alternatives in the station area.	Same as the Shared Passenger Track Alternatives in the station area.
Hazardous Materials and Wastes				
Impact HMW-1: Transport, Use, Storage, and Disposal of Hazardous Materials and Hazardous Wastes	Not adverse	Not adverse	Same as the Shared Passenger Track Alternatives in the station area.	Same as the Shared Passenger Track Alternatives in the station area.
Impact HMW-2: Upset and Accident Conditions Involving the Release of Hazardous Materials into the Environment	Not adverse	Not adverse	Same as the Shared Passenger Track Alternatives in the station area.	Similar impacts to the Shared Passenger Track Alternatives in the station area.
Impact HMW-3: Inadvertent Disturbance of Hazardous Materials and Wastes	Not adverse	Not adverse	Same as the Shared Passenger Track Alternatives in the station area.	Similar impacts to those of the Shared Passenger Track Alternatives in the station area.
Impact HMW-4: Construction within or Near Sites of Potential Environmental Concern or Cortese List Sites	Adverse	Adverse	Same as the Shared Passenger Track Alternatives in the station area.	Same as the Shared Passenger Track Alternatives in the station area.
Impact HMW-5: Increased Exposure to Lead-Based Paint and Asbestos as a Result of Roadway and Building Demolition	Not adverse	Not adverse	Same as the Shared Passenger Track Alternatives in the station area.	Similar impacts as those of the Shared Passenger Track Alternatives in the station area.
Impact HMW-6: Handling of Hazardous Materials, Substances, or Waste within 0.25 Mile of a School	Adverse	Adverse	Same as the Shared Passenger Track Alternatives in the station area.	Same as the Shared Passenger Track Alternatives in the station area.
Impact HMW-7: Risks During Construction on or Near Landfills and Oil and Gas Wells	Not adverse	Not adverse	Same as the Shared Passenger Track Alternatives in the station area.	Similar impacts as those of the Shared Passenger Track Alternatives in the station area.

Environmental Topic	Shared Passenger Track Alternative A	Shared Passenger Track Alternative B	With Inclusion of HSR Station Option	
			Norwalk/Santa Fe Springs HSR Station Option	Fullerton HSR Station Option
Impact HMW-8: Operations and Maintenance Transport, Use, Storage, and Disposal of Hazardous Materials and Hazardous Wastes	Not adverse	Not adverse	Same as the Shared Passenger Track Alternatives in the station area.	Same as the Shared Passenger Track Alternatives in the station area.
Impact HMW-9: Operations and Maintenance Upset and Accident Conditions Involving the Release of Hazardous Materials into the Environment	Not adverse	Not adverse	Same as the Shared Passenger Track Alternatives in the station area.	Same as the Shared Passenger Track Alternatives in the station area.
Impact HMW-10: Operations and Maintenance Near Sites of Potential Environmental Concern (Including Cortese List Sites)	Not adverse	Not adverse	Same as the Shared Passenger Track Alternatives in the station area.	Same as the Shared Passenger Track Alternatives in the station area.
Impact HMW-11: Operations and Maintenance Handling of Hazardous Materials or Waste within 0.25 Mile of a School	Not adverse	Not adverse	Same as the Shared Passenger Track Alternatives in the station area.	Same as the Shared Passenger Track Alternatives in the station area.
Socioeconomics and Communities				
Impact SO-1: Disruption or Division of Existing Communities from Construction	Adverse	Adverse	Similar impacts as the Shared Passenger Track Alternatives in the station area.	Similar impacts as the Shared Passenger Track Alternatives in the station area.
Impact SO-2: Residential Displacements and Relocations	Not adverse	Not adverse	Same as the Shared Passenger Track Alternatives in the station area.	Same as the Shared Passenger Track Alternatives in the station area.
Impact SO-3: Business Displacements and Relocations	Not adverse	Not adverse	Same as the Shared Passenger Track Alternatives in the station area.	Similar to the Shared Passenger Track Alternatives in the station area. The Fullerton HSR Station Option would displace 9 additional businesses.
Impact SO-4: Physical Deterioration	Not adverse	Not adverse	Same as the Shared Passenger Track Alternatives in the station area.	Similar impacts as the Shared Passenger Track Alternatives in the station area.

Environmental Topic	Shared Passenger Track Alternative A	Shared Passenger Track Alternative B	With Inclusion of HSR Station Option	
			Norwalk/Santa Fe Springs HSR Station Option	Fullerton HSR Station Option
Impact SO-5: Job Creation During Construction	Not adverse	Not adverse	Similar impacts as the Shared Passenger Track Alternatives in the station area.	Similar impacts as the Shared Passenger Track Alternatives in the station area.
Impact SO-6: Changes in School District Funding	Not adverse	Not adverse	Same as the Shared Passenger Track Alternatives in the station area.	Same as the Shared Passenger Track Alternatives in the station area.
Impact SO-7: Property Value Changes and Property Tax Losses	Not adverse	Not adverse	Same as the Shared Passenger Track Alternatives in the station area.	Similar impacts as the Shared Passenger Track Alternatives in the station area.
Impact SO-8: County and City Sales Tax Effects	Not adverse	Not adverse	Similar impacts as the Shared Passenger Track Alternatives in the station area.	Similar impacts as the Shared Passenger Track Alternatives in the station area.
Impact SO-9: Impacts on Children's Health and Safety from Construction	Not adverse	Not adverse	Same as the Shared Passenger Track Alternatives in the station area.	Same as the Shared Passenger Track Alternatives in the station area.
Impact SO-10: Disruption or Division of Existing Communities During Operations	Not adverse	Not adverse	Similar impacts as the Shared Passenger Track Alternatives in the station area.	Similar impacts as the Shared Passenger Track Alternatives in the station area.
Impact SO-11: Job Creation During Operations	Not adverse	Not adverse	Similar impacts as the Shared Passenger Track Alternatives in the station area.	Similar impacts as the Shared Passenger Track Alternatives in the station area.
Impact SO-12: Impacts on Children's Health and Safety from Operations	Not adverse	Not adverse	Same as the Shared Passenger Track Alternatives in the station area.	Same as the Shared Passenger Track Alternatives in the station area.
Impact SO-13: Unplanned Growth	Not adverse	Not adverse	Same as the Shared Passenger Track Alternatives in the station area.	Same as the Shared Passenger Track Alternatives in the station area.

Environmental Topic	Shared Passenger Track Alternative A	Shared Passenger Track Alternative B	With Inclusion of HSR Station Option	
			Norwalk/Santa Fe Springs HSR Station Option	Fullerton HSR Station Option
Parks, Recreation, and Open Space				
Impact PR-1: Temporary Construction Impacts from Noise and Vibration on Recreational Resources	Not adverse	Not adverse	Similar impacts as the Shared Passenger Track Alternatives in the station area.	Similar impacts as the Shared Passenger Track Alternatives in the station area.
Impact PR-2: Temporary Construction Impacts from Fugitive Dust on Recreational Resources	Not adverse	Not adverse	Similar impacts as the Shared Passenger Track Alternatives in the station area.	Similar impacts as the Shared Passenger Track Alternatives in the station area.
Impact PR-3: Temporary Construction Impacts from Visual Changes on Recreational Resources	Not adverse	Not adverse	Same as the Shared Passenger Track Alternatives in the station area.	Similar impacts as the Shared Passenger Track Alternatives in the station area.
Impact PR-4: Project Construction Would Diminish Access to or Use of Recreational Resources	Adverse	Adverse	Same as the Shared Passenger Track Alternatives in the station area.	Same as the Shared Passenger Track Alternatives in the station area.
Impact PR-5: Permanent Easements or Acquisitions of Property from Parks and Recreation Due to Construction	Adverse	Adverse	Same as the Shared Passenger Track Alternatives in the station area.	Same as the Shared Passenger Track Alternatives in the station area.
Impact PR-6: Permanent Changes from Noise to Recreational Resources Character and Use	Not adverse	Not adverse	Similar impacts as the Shared Passenger Track Alternatives in the station area.	Similar impacts as the Shared Passenger Track Alternatives in the station area.
Impact PR-7: Permanent Visual Changes to Recreational Resources Character and Use	Not adverse	Not adverse	Same as the Shared Passenger Track Alternatives in the station area.	Similar impacts as the Shared Passenger Track Alternatives in the station area.
Impact PR-8: Deterioration of Recreational Resources from Increased Use	Not adverse	Not adverse	Same as the Shared Passenger Track Alternatives in the station area.	Same as the Shared Passenger Track Alternatives in the station area.

Environmental Topic	Shared Passenger Track Alternative A	Shared Passenger Track Alternative B	With Inclusion of HSR Station Option	
			Norwalk/Santa Fe Springs HSR Station Option	Fullerton HSR Station Option
Aesthetics and Visual Quality				
Impact AVQ-1: Visual Quality During Construction	Downtown Los Angeles Landscape Unit, Gateway Cities Landscape Unit, and Fullerton/ Anaheim Landscape Unit: Adverse effect	Downtown Los Angeles Landscape Unit, Gateway Cities Landscape Unit, and Fullerton/ Anaheim Landscape Unit: Adverse effect	Same as the Shared Passenger Track Alternatives in the station area.	Same as the Shared Passenger Track Alternatives in the station area.
Impact AVQ-2: Nighttime Lighting During Construction	Adverse	Adverse	Same as the Shared Passenger Track Alternatives in the station area.	Similar impacts as the Shared Passenger Track Alternatives in the station area.
Impact AVQ-3: Visual Quality During Operation	Downtown Los Angeles Landscape Unit, Gateway Cities Landscape Unit, and Fullerton/ Anaheim Landscape Unit: Adverse effect	Downtown Los Angeles Landscape Unit, Gateway Cities Landscape Unit, and Fullerton/ Anaheim Landscape Unit: Adverse effect	Same as the Shared Passenger Track Alternatives in the station area.	Similar impacts as the Shared Passenger Track Alternatives in the station area.
Impact AVQ-4: Nighttime Lighting During Operation	Not adverse	Not adverse	Similar impacts as the Shared Passenger Track Alternatives.	Similar impacts as the Shared Passenger Track Alternatives.
Cultural Resources				
Impact CUL-1: Disturbance of Known Archaeological Sites During Construction	Adverse	Adverse	Same as Shared Passenger Track Alternatives within the station area.	Construction of the Fullerton HSR Station Option would result in two additional archaeological resources being affected: ▪ P-30-001712/CA-ORA-1712 ▪ P-30-001724/CA-ORA-1724

Environmental Topic	Shared Passenger Track Alternative A	Shared Passenger Track Alternative B	With Inclusion of HSR Station Option	
			Norwalk/Santa Fe Springs HSR Station Option	Fullerton HSR Station Option
Impact CUL-2: Permanent Disturbance of Unknown Archaeological Sites During Construction	Adverse	Adverse	Same as Shared Passenger Track Alternatives within the station area.	Similar to Shared Passenger Track Alternatives within the station area.
Impact CUL-3: Permanent Demolition, Destruction, Relocation, or Alteration of Historic Architectural Resources or Setting During Construction	Adverse	Adverse	Same as Shared Passenger Track Alternatives within the station area.	Same as Shared Passenger Track Alternatives within the station area.
Impact CUL-4: Potential for Visual, Noise, or Vibration Effects on a Historic Building or Structure During Construction	Not adverse	Not adverse	Same as Shared Passenger Track Alternatives within the station area.	Same as Shared Passenger Track Alternatives within the station area.
Impact CUL-5: Disturbance of Known Tribal Cultural Resources During Construction Defined by Public Resources Code 21074	No effect	No effect	Same as Shared Passenger Track Alternatives within the station area.	Same as Shared Passenger Track Alternatives within the station area.
Impact CUL-6: Potential for Visual, Noise, or Vibration Effects on a Historic Building or Structure During Operations	Not adverse	Not adverse	Same as Shared Passenger Track Alternatives within the station area.	Same as Shared Passenger Track Alternatives within the station area.

EMF/EMI = electromagnetic fields/electromagnetic interference; HSR = high-speed rail; NAAQS = National Ambient Air Quality Standards; NEPA = National Environmental Policy Act

5.6.3.1 Transportation

Construction

Shared Passenger Track Alternative A

As discussed in Section 3.2, construction of Shared Passenger Track Alternative A would result in the following adverse effects: permanent impacts on signalized intersections from construction of permanent roadway modifications (Impact TR-2), permanent impacts on unsignalized intersections from construction of permanent roadway modifications (Impact TR-3), permanent impacts on roadway segments from construction of permanent roadway modifications (Impact TR-4), and temporary impacts on freight and passenger rail operations (Impact TR-8).

Construction would require permanent changes to roadways or the road network that would lead to changes in traffic and circulation patterns. Construction would occur throughout the project section and pass through several communities in the RSA. Truck trips would be required during project construction that would add vehicles to the transportation networks, contributing to existing traffic congestion. During the inclusive public engagement process, traffic impacts from station and grade separations construction were expressed as key concerns of many community members in Anaheim.

Table 5-14 presents the roadways and intersections that would experience level of service delays as a result of the permanent modifications to roadways under Shared Passenger Track Alternative A (Impacts TR-2, TR-3, and TR-4). As presented in Table 5-14, the majority of affected intersections would be in minority and low-income populations, which means there is a potential DHAE.

Table 5-14 Intersections and Roadways with Level of Service Impacts after Construction of Permanent Roadway Modifications

Intersection/Roadway Segment	Mitigation Measures	Community/ Neighborhood	Census BGs Affected	Minority?	Low-Income?
Signalized Intersections					
Atlantic Blvd/I-710 NB ramps and Bandini Blvd	TRAN-MM#1, TRAN-MM#2, TRAN-MM#4	Hobart in Commerce	6037980016	Yes	No
East St and Lincoln Ave	TRAN-MM#1, TRAN-MM#2, TRAN-MM#4	The Colony in Anaheim	60590873012	Yes	Yes
Unsignalized Intersections					
Indiana St and Bandini Blvd	TRAN-MM#3	Hobart in Commerce	6037980016	Yes	No
Roadway Segments					
Bandini Blvd, Downey Rd to Atlantic Blvd	TRAN-MM#5	Vernon	6037980016	Yes	No
Santa Ana St, west of East St	TRAN-MM#5	The Colony in Anaheim	60590873012	Yes	Yes
		The Colony in Anaheim	6059087302	Yes	Yes
		The Colony in Anaheim	60590873023	Yes	Yes
		The Colony in Anaheim	60590874011	Yes	No
Total	**N/A**	**N/A**	**N/A**	**100%**	**50%**

BG = block group; I = Interstate; N/A = not applicable; NB = northbound

Shared Passenger Track Alternative A would include IAMFs that avoid significant delays to the transportation networks by repairing damage to public roadways caused by construction; implementing a Construction Transportation Plan; ensuring adequate off-street parking for construction-related vehicles; addressing maintenance of pedestrian, bicycle, and transit access; restricting construction during peak period travel; designating appropriate truck routes; restricting roadway construction activities during special events; and preserving or enhancing pedestrian and bicycle accessibility (**TR-IAMF#1**, **TR-IAMF#2**, **TR-IAMF#3**, **TR-IAMF#4**, **TR-IAMF#5**, **TR-IAMF#6**, **TR-IAMF#7**, **TR-IAMF#8**, **TR-IAMF#11**, **TR-IAMF#12**, and **TR-IAMF#13**). However, permanent impacts would remain at the intersections and segments above.

Mitigation measures **TRAN-MM#1**, **TRAN-MM#2**, **TRAN-MM#3**, **TRAN-MM#4**, and **TRAN-MM#5**, if implemented, would reduce adverse effects on the intersections and roadways discussed in Table 5-14. If these measures are implemented, they would be implemented equally for communities and would reduce effects to less-than-adverse levels. Therefore, with implementation of **TRAN-MM#1**, **TRAN-MM#2**, **TRAN-MM#3**, **TRAN-MM#4**, and **TRAN-MM#5**, there would be no DHAE associated with transportation impacts on intersections or roadway segments.

As discussed in Impact TR-8, construction is anticipated to have minimal impacts on freight and passenger rail operations, because service could be maintained with limited disruptions through the scheduling of specific work windows and staging for freight trains provided by the High Desert

Operational Efficiency Project. Because this impact is on freight and passenger rail operators and confined to the rail corridor, it is not relevant to the community analysis. Therefore, this impact does not represent a DHAE and is not discussed further.

Shared Passenger Track Alternative B

Shared Passenger Track Alternative B differs only in that the LMF would be at 15th Street, not 26th Street. The 15th Street LMF is in the Redondo Junction neighborhood of Los Angeles, which is not in minority or low-income BGs. The LMF location would not change impacts related to traffic and circulation patterns or roadway modifications. Therefore, impacts on communities would be the same as those of Shared Passenger Track Alternative A. With incorporation of the IAMFs and implementation of mitigation measures, if the Authority implements them (**TR-IAMF#1**, **TR-IAMF#2**, **TR-IAMF#3**, **TR-IAMF#4**, **TR-IAMF#5**, **TR-IAMF#6**, **TR-IAMF#7**, **TR-IAMF#8**, **TR-IAMF#9, TR-IAMF#11**, **TR-IAMF#12**, **TR-IAMF#13**, **TRAN-MM#1**, **TRAN-MM#2**, **TRAN-MM#3**, **TRAN-MM#4**, **TRAN-MM#5, TRAN-MM#7**), traffic conflicts would be reduced and access would be maintained. Detour routes would also be available during project closures. Level-of-service impacts on intersections and roadways would be reduced. If these measures are implemented, they would be implemented equally for communities and would reduce effects to less-than-adverse levels. Therefore, with implementation of **TRAN-MM#1**, **TRAN-MM#2**, **TRAN-MM#3**, **TRAN-MM#4**, and **TRAN-MM#5,** there would not be a DHAE associated with transportation.

High-Speed Rail Station Options

High-Speed Rail Station Option: Norwalk/Santa Fe Springs

With the Norwalk/Santa Fe Springs HSR Station Option, which is in the minority community of east Norwalk/southwest Santa Fe Springs, traffic and circulation patterns during construction would be similar to those described for the Shared Passenger Track Alternatives in the station area. Construction of the HSR platform, station facilities, and additional parking would result in minor differences in permanent roadway modifications (addition of a new signalized intersection), but it would not result in additional adverse impacts on signalized intersections, unsignalized intersections, or roadway segments when compared to the Shared Passenger Track Alternatives. With incorporation of the IAMFs and implementation of mitigation measures, if the Authority implements them (**TR-IAMF#1**, **TR-IAMF#2**, **TR-IAMF#3**, **TR-IAMF#4**, **TR-IAMF#5**, **TR-IAMF#6**, **TR-IAMF#7**, **TR-IAMF#8**, **TR-IAMF#9**, **TR-IAMF#11**, **TR-IAMF#12**, **TR-IAMF#13**, **TRAN-MM#1**, **TRAN-MM#2**, **TRAN-MM#3**, **TRAN-MM#4**, **TRAN-MM#5**), traffic conflicts would be reduced and access would be maintained. As a result, changes to traffic and circulation patterns during construction would not result in a DHAE associated with transportation.

High-Speed Rail Station Option: Fullerton

With the Fullerton HSR Station Option, which is partially in minority and low-income BGs in downtown Fullerton, traffic and circulation patterns during construction would be similar to those described for the Shared Passenger Track Alternatives in the station area. Construction of the HSR platform, station facilities, and additional parking would result in minor differences in permanent roadway modifications (slightly different changes along the Walnut Avenue realignment), but it would not result in additional adverse impacts on signalized intersections, unsignalized intersections, or roadway segments when compared to the Shared Passenger Track Alternatives. With incorporation of the IAMFs and implementation of mitigation measures, if the Authority implements them (**TR-IAMF#1**, **TR-IAMF#2**, **TR-IAMF#3**, **TR-IAMF#4**, **TR-IAMF#5**, **TR-IAMF#6**, **TR-IAMF#7**, **TR-IAMF#8**, **TR-IAMF#9, TR-IAMF#11**, **TR-IAMF#12**, **TR-IAMF#13**, **TRAN-MM#1**, **TRAN-MM#2**, **TRAN-MM#3**, **TRAN-MM#4**, **TRAN-MM#5**), traffic conflicts would be reduced and access would be maintained. As a result, changes to traffic and circulation patterns during construction would not result in a DHAE associated with transportation.

Operation

Shared Passenger Track Alternative A

As discussed in Section 3.2, project operation would have the following adverse effects: continuous permanent impacts on signalized intersections (Impact TR-10), continuous permanent

impacts on unsignalized intersections (Impact TR-11), continuous permanent impacts on roadway segments (Impact TR-12), and continuous permanent impacts on a freeway ramp during operations (Impact TR-14). These effects would be caused by the additional trips to and from the station area related to HSR station operations, and ambient growth of permanently relocated trips that would result from changes in the roadway network.

Table 5-15 presents the impact location and BG information. As presented in Table 5-15, the majority of impacts would be in minority communities; therefore, there is a potential DHAE from operational traffic impacts.

Table 5-15 Operational Impacts on Traffic from Shared Passenger Track Alternative A

Intersection/Roadway Segment	Mitigation Measures	Community/ Neighborhood	Census BGs Affected	Minority?	Low-Income?
Signalized Intersections					
East St and Lincoln Ave	TRAN-MM#1, TRAN-MM#2, TRAN-MM#4	The Colony in Anaheim	60590873012	Yes	Yes
Garfield Ave and Washington Blvd	TRAN-MM#1, TRAN-MM#2, TRAN-MM#4	East Commerce	60375323033	Yes	Yes
Beach Blvd (SR 39) and La Mirada Blvd/ Malvern Ave	TRAN-MM#1, TRAN-MM#2, TRAN-MM#4	Northeast Buena Park	60591106071	No	Yes
Studebaker Rd and Imperial Hwy	TRAN-MM#1, TRAN-MM#2, TRAN-MM#4	Studebaker in Norwalk	60375503012	Yes	Yes
Bloomfield Ave and Firestone Blvd (south)	TRAN-MM#1, TRAN-MM#2, TRAN-MM#4	East Norwalk	60375522004	Yes	Yes
Carmenita Rd and Rosecrans Ave	TRAN-MM#1, TRAN-MM#2, TRAN-MM#4	East Norwalk	60379800341	Yes	No
Malden Ave and Commonwealth Ave	TRAN-MM#1, TRAN-MM#2, TRAN-MM#4	South-central Fullerton	60590113003	No	Yes
Harbor Blvd and Imperial Hwy (SR 90)	TRAN-MM#1, TRAN-MM#2, TRAN-MM#4	North Fullerton	60590017051	Yes	Yes
Harbor Blvd and Chapman Ave	TRAN-MM#1, TRAN-MM#2, TRAN-MM#4	Central Fullerton	60590113003	No	Yes
Harbor Blvd and Santa Fe Ave	TRAN-MM#1, TRAN-MM#2, TRAN-MM#4	South-central Fullerton	60590113003	No	Yes
Lemon St and Chapman Ave	TRAN-MM#1, TRAN-MM#2, TRAN-MM#4	Central Fullerton	60590114011	No	Yes

Intersection/Roadway Segment	Mitigation Measures	Community/ Neighborhood	Census BGs Affected	Minority?	Low-Income?
Lemon St and Commonwealth Ave	TRAN-MM#1, TRAN-MM#2, TRAN-MM#4	South-central Fullerton	60590113003	No	Yes
Lemon St and Orangethorpe Ave	TRAN-MM#1, TRAN-MM#2, TRAN-MM#4	Southeast Fullerton	60590116022	Yes	Yes
Anaheim Blvd/Lemon St and SR 91 EB ramps	TRAN-MM#1, TRAN-MM#2, TRAN-MM#4	North-central Anaheim	60590865013	Yes	Yes
Raymond Ave and Chapman Ave	TRAN-MM#1, TRAN-MM#2, TRAN-MM#4	Southeast Fullerton	60590114022	No	No
State College Blvd and Chapman Ave	TRAN-MM#1, TRAN-MM#2, TRAN-MM#4	Platinum Triangle in Anaheim	60590761041	Yes	Yes
SR 57 SB ramps and Nutwood Ave	TRAN-MM#1, TRAN-MM#2, TRAN-MM#4	East Fullerton	60590115042	Yes	Yes
State College Blvd and Orangewood Ave	TRAN-MM#1, TRAN-MM#2, TRAN-MM#4	Platinum Triangle in Anaheim	60590761041	Yes	Yes
Sunkist St and Cerritos Ave	TRAN-MM#1, TRAN-MM#2, TRAN-MM#4	Southeast Anaheim	60590863036	No	No
Anaheim Blvd and Cerritos Ave	TRAN-MM#1, TRAN-MM#2, TRAN-MM#4	Platinum Triangle in Anaheim	60590874033	Yes	Yes
Unsignalized Intersections					
Eastern Ave and driveway	TRAN-MM#3	Hobart/west Commerce	60375323042	Yes	Yes
Malden Ave and Chapman Ave	TRAN-MM#3	South Fullerton	60590113002	No	No
Roadway Segments					
Bandini Blvd, from Downey Rd to Atlantic Blvd	TRAN-MM#5	Hobart in Commerce	60379800161	Yes	No
Carmenita Rd, from Imperial Hwy to Orden Dr	TRAN-MM#5	South Santa Fe Springs	60379800341	Yes	No
Studebaker Rd, from Imperial Hwy to I-105	TRAN-MM#5	Studebaker in Norwalk	60375519004	Yes	No
			60375520011	Yes	No

Intersection/Roadway Segment	Mitigation Measures	Community/ Neighborhood	Census BGs Affected	Minority?	Low-Income?
Carmenita Rd, from Orden Dr to Rosecrans Ave	TRAN-MM#5	South Santa Fe Springs	60379800341	Yes	No
Rosecrans Ave, from Studebaker Rd to Pioneer Blvd	TRAN-MM#5	Studebaker in Norwalk	60375521003	Yes	No
			60375521004	Yes	No
			60375521005	Yes	Yes
			60375528001	Yes	No
			60375528004	Yes	No
Euclid St, from Bastanchury Rd to Malvern Ave	TRAN-MM#5	West Norwalk	60590017062	No	No
			60590017063	No	No
			60590110002	No	No
			60590112003	Yes	Yes
Euclid St, Malvern Ave to Commonwealth Ave	TRAN-MM#5	South-central Fullerton	60590110004	No	Yes
			60590112004	No	No
Harbor Blvd, from Imperial Hwy to Bastanchury Rd	TRAN-MM#5	South-central Fullerton	60590017051	Yes	Yes
			60590017053	Yes	No
			60590016042	No	No
			60590016044	No	No
			60590017061	Yes	No
			60590017064	No	No
			60590016032	No	Yes
Harbor Blvd, from Chapman Ave to Commonwealth Ave	TRAN-MM#5	South-central Fullerton	60590113001	Yes	Yes
			60590113003	No	Yes
Harbor Blvd, from Commonwealth Ave to Orangethorpe Ave	TRAN-MM#5	Downtown Fullerton	60590113001	Yes	Yes
			60590113003	No	Yes
			60590116011	Yes	Yes
			60590116012	Yes	Yes
			60590116023	Yes	Yes
Lemon St, from Commonwealth Ave to Orangethorpe Ave	TRAN-MM#5	Downtown Fullerton	60590113001	Yes	Yes
			60590116022	Yes	Yes
			60590116023	Yes	Yes
Lemon St, south of Orangethorpe Ave	TRAN-MM#5	Downtown Fullerton	60590116022	Yes	Yes
			60590116024	Yes	No
			60590865013	Yes	Yes

Intersection/Roadway Segment	Mitigation Measures	Community/ Neighborhood	Census BGs Affected	Minority?	Low-Income?
Chapman Ave, from Harbor Blvd to Raymond Ave	TRAN-MM#5	Downtown Fullerton	60590113001	Yes	Yes
			60590113002	No	No
			60590114011	No	Yes
			60590114012	No	No
			60590114022	No	No
			60590114035	Yes	Yes
Chapman Ave, from Raymond Ave to Acacia Ave	TRAN-MM#5	Southeast Fullerton	60590114022	No	No
			60590114031	No	No
			60590114033	Yes	Yes
Chapman Ave, from Acacia Ave to State College Blvd	TRAN-MM#5	Southeast Fullerton	60590115032	No	No
			60590115022	Yes	Yes
Chapman Ave, from State College Blvd to Commonwealth Ave	TRAN-MM#5	Southeast Fullerton	60590115023	Yes	Yes
			60590115044	Yes	No
SR 57 NB Frontage Rd, from Nutwood Ave to Chapman Ave	TRAN-MM#5	Southeast Fullerton	60590115042	Yes	Yes
			60590115044	Yes	No
Brea Blvd, from Rolling Hills Dr to Bastanchury Rd	TRAN-MM#5	Northeast Fullerton	60590015053	No	No
			60590016032	No	Yes
Brea Blvd, from Harbor Rd to Bastanchury Rd	TRAN-MM#5	Northeast Fullerton	60590114011	No	Yes
			60590016024	No	No
			60590016021	Yes	No
Santa Fe Ave, Harbor Blvd to Lemon St	TRAN-MM#5	Downtown Fullerton	60590113001	Yes	Yes
			60590113003	No	Yes
Freeway On-Ramps					
SB SR 57 on-ramp at WB Katella Ave	TRAN-MM#7	Platinum Triangle in Anaheim	60590863036	No	No
Total	**N/A**	**N/A**	**N/A**	**59.3%**	**42.4%**

BG = block group; EB = eastbound; I = Interstate; N/A = not applicable; NB = northbound; SB = southbound; SR = State Route; WB = westbound

As discussed in Impact TR-10, Impact TR-11, and Impact TR-12, if the Authority implements **TRAN-MM#1**, **TRAN-MM#2**, **TRAN-MM#3**, **TRAN-MM#4**, **TRAN-MM#5**, and **TRAN-MM#7**, effects on traffic in BGs would be reduced for all BGs in Table 5-15. Although the majority of traffic impacts would be in minority communities, with mitigation, effects on intersections and roadways would be reduced to have no adverse effect in any community. Therefore, with **TRAN-MM#1**, **TRAN-MM#2**, **TRAN-MM#3**, **TRAN-MM#4**, **TRAN-MM#5**, and **TRAN-MM#7**, there would not be a DHAE related to transportation.

As discussed in Impact TR-14, one on-ramp queue length is anticipated to exceed the transportation impact thresholds at southbound State Route 57 at westbound Katella Avenue.

This on-ramp is in BG 60590863036 in the Platinum Triangle in Anaheim, which is not a low-income or minority community. If implemented, **TRAN-MM#7** would provide sufficient capacity to accommodate the additional 680-foot queue length for vehicles exiting onto State Route 57 from Katella Avenue during peak hours and would reduce the effect to less-than-adverse levels.

In addition to the impacts discussed above, the project would have a beneficial effect on the continuous permanent impacts on vehicle miles traveled (Impact TR-9). Shared Passenger Track Alternative A would provide benefits to the regional transportation system by reducing vehicle trips on the freeways by diverting intercity trips from road trips to HSR. This reduction in future vehicle trips would improve the system performance of the regional roadway system compared with existing conditions and compared with the No Project Alternative.

Shared Passenger Track Alternative B

As discussed in Section 3.2, the 15th Street LMF would not generate a significant number of trips and would not change the analysis described above. The 15th Street LMF is in the Redondo Junction neighborhood of Los Angeles, which is not in minority or low-income BGs. Shared Passenger Track Alternative B would also have a beneficial effect on the continuous permanent impacts on vehicle miles traveled (Impact TR-9), because the location of the LMF would not affect ridership on the system or vehicle trips on regional roadways. A in terms of intersection and roadway segment delay during operation. With implementation of **TRAN-MM#1**, **TRAN-MM#2**, **TRAN-MM#3**, **TRAN-MM#4**, and **TRAN-MM#5**, adverse impacts would be reduced for intersections and roadway segments along the project corridor.

High-Speed Rail Station Options

High-Speed Rail Station Option: Norwalk/Santa Fe Springs

With the Norwalk/Santa Fe Springs HSR Station Option, which is in the minority community of east Norwalk/southwest Santa Fe Springs, additional intersections and roadway segments would be affected when compared to the Shared Passenger Track Alternatives. These additional intersections and roadways are presented in Table 5-16. As presented in Table 5-16, the majority of these impacts would be in low-income and minority BGs; therefore, these impacts represent a potential DHAE before mitigation. If implemented, **TRAN-MM#1**, **TRAN-MM#2**, **TRAN-MM#3**, **TRAN-MM#4**, and **TRAN-MM#5** would reduce adverse effects for all communities. Therefore, with **TRAN-MM#1**, **TRAN-MM#2**, **TRAN-MM#3**, **TRAN-MM#4**, and **TRAN-MM#5**, there would not be a DHAE.

Table 5-16 Operational Impacts on Traffic from Norwalk/Santa Fe Springs High-Speed Rail Station Option

Intersection/Roadway Segment	Mitigation Measures	Community/ Neighborhood	Census BGs Affected	Minority?	Low-Income?
Signalized Intersections					
Downey Rd and Washington Blvd	TRAN-MM#1, TRAN-MM#2, TRAN-MM#4	Hobart	60379800161	Yes	No
Downey Road and Bandini Blvd	TRAN-MM#1, TRAN-MM#2, TRAN-MM#4	Hobart	60379800161	Yes	No
Bonnie Beach Pl and Bandini Blvd	TRAN-MM#1, TRAN-MM#2, TRAN-MM#4	Hobart	60379800161	Yes	No
Atlantic Blvd/I-710 NB ramps and Bandini Blvd	TRAN-MM#1, TRAN-MM#2, TRAN-MM#4	Hobart	60379800161	Yes	No

Intersection/Roadway Segment	Mitigation Measures	Community/ Neighborhood	Census BGs Affected	Minority?	Low-Income?
Beach Blvd (SR 39) and Stage Rd	TRAN-MM#1, TRAN-MM#2, TRAN-MM#4	North Buena Park	60591106071	No	Yes
Valley View Ave and Alondra Blvd	TRAN-MM#1, TRAN-MM#2, TRAN-MM#4	South Santa Fe Springs	60379800341	Yes	No
Firestone Blvd and Imperial Hwy	TRAN-MM#1, TRAN-MM#2, TRAN-MM#4	Studebaker neighborhood in Norwalk	60375502023	Yes	No
Norwalk Blvd and Imperial Hwy	TRAN-MM#1, TRAN-MM#2, TRAN-MM#4	Northeast Norwalk	60375553003	Yes	Yes
Bloomfield Ave and Imperial Hwy	TRAN-MM#1, TRAN-MM#2, TRAN-MM#4	Northeast Norwalk	60375553003	Yes	Yes
I-5 NB on-ramp and Imperial Hwy	TRAN-MM#1, TRAN-MM#2, TRAN-MM#4	East Norwalk	60375553003	Yes	Yes
Harbor Blvd and Commonwealth Ave	TRAN-MM#1, TRAN-MM#2, TRAN-MM#4	South-central Fullerton	60590113003	No	Yes
Unsignalized Intersections					
Indiana St and Bandini Blvd	TRAN-MM#3	Hobart	60379800161	Yes	No
Ayers Ave and Bandini Blvd	TRAN-MM#3	Hobart	60379800161	Yes	No
Gage Rd and Telegraph Rd	TRAN-MM#3	Bandini	60375322003	Yes	Yes
			60375323042	Yes	Yes
Chapin Rd and Union St	TRAN-MM#3	Bandini	60375322003	Yes	Yes
Pioneer Blvd and Orr and Day Rd	TRAN-MM#3	West Whittier	60375027001	Yes	Yes
Dodds Ave (east) and Stage Rd	TRAN-MM#3	North Buena Park	60591106071	No	Yes
Roadway Segments					
Imperial Hwy, between Norwalk Blvd and Bloomfield Ave	TRAN-MM#5	Northeast Norwalk	60375523011	Yes	No
			60375553001	No	Yes
			60375553004	Yes	No
Shoemaker Rd, between Imperial Hwy and Foster Rd	TRAN-MM#5	East Norwalk/southwest Santa Fe Springs	60379800341	Yes	No
			60375523021	Yes	Yes
			60375523012	Yes	No

Intersection/Roadway Segment	Mitigation Measures	Community/ Neighborhood	Census BGs Affected	Minority?	Low-Income?
Harbor Blvd, between Brea Blvd and Berkeley Ave	TRAN-MM#5	Hillcrest neighborhood in Fullerton	60590016031	No	No
			60590113002	No	No
			60590114011	No	Yes
Harbor Blvd, between Berkeley Ave and Chapman Ave	TRAN-MM#5	Central Fullerton	60590113002	No	No
			60590114011	No	Yes
Harbor Blvd, from south of Orangethorpe Ave	TRAN-MM#5	South-Central Fullerton	60590116013	No	No
			60590116024	Yes	No
			60590866014	Yes	Yes
			60590865013	Yes	Yes
Santa Fe Ave, between Malden Ave and Harbor Blvd	TRAN-MM#5	Southeast Fullerton	60590113003	No	Yes
Total	**N/A**	**N/A**	**N/A**	**67.6%**	**50.0%**

BG = block group; I = Interstate; N/A = not applicable; NB = northbound; SR = State Route

High-Speed Rail Station Option: Fullerton

With the Fullerton HSR Station Option, would be partially in low-income and minority BGs in downtown Fullerton, additional intersections and roadway segments would be affected compared to the Shared Passenger Track Alternatives. These additional intersections and roadways are presented in Table 5-17. As presented in Table 5-17, the majority of these impacts would be in low-income and minority BGs; therefore, these impacts represent a potential DHAE before mitigation. If implemented, **TRAN-MM#1**, **TRAN-MM#2**, **TRAN-MM#3**, **TRAN-MM#4**, and **TRAN-MM#5** would reduce adverse effects for all communities. Therefore, with **TRAN-MM#1**, **TRAN-MM#2**, **TRAN-MM#3**, **TRAN-MM#4**, and **TRAN-MM#5**, there would not be a DHAE.

Table 5-17 Operational Impacts on Traffic from Fullerton High-Speed Rail Station Option

Intersection/Roadway Segment	Mitigation Measures	Community/ Neighborhood	Census BGs Affected	Minority?	Low-Income?
Signalized Intersections					
Beach Blvd (SR 39) and Stage Rd	TRAN-MM#1, TRAN-MM#2, TRAN-MM#4	Northeast Buena Park	60591106071	No	Yes
Valley View Ave and Alondra Blvd	TRAN-MM#1, TRAN-MM#2, TRAN-MM#4	South Santa Fe Springs	60379800341	Yes	No
Firestone Blvd and Imperial Hwy	TRAN-MM#1, TRAN-MM#2, TRAN-MM#4	Studebaker in Norwalk	60375502023	Yes	No
Unsignalized Intersections					
Eastern Ave and driveway	TRAN-MM#3	Hobart/west Commerce	60375323042	Yes	Yes

Intersection/Roadway Segment	Mitigation Measures	Community/ Neighborhood	Census BGs Affected	Minority?	Low-Income?
Malden Ave and Chapman Ave	TRAN-MM#3	South Fullerton	60590113002	No	No
Roadway Segments					
Harbor Blvd, from south of Orangethorpe Ave	TRAN-MM#5	Southeast Fullerton	60590116013	No	No
			60590116024	Yes	No
			60590866014	Yes	Yes
			60590865013	Yes	Yes
Total	**N/A**	**N/A**	**N/A**	**66.7%**	**44.4%**

BG = block group; N/A = not applicable; SR = State Route

5.6.3.2 Air Quality

Construction

Shared Passenger Track Alternative A

As discussed in Section 3.3, construction of Shared Passenger Track Alternative A would result in adverse effects. The following regional, state, and global impacts would result in adverse effects: temporary direct and indirect impacts on air quality within the applicable air basin (Impact AQ-1), temporary direct impacts on implementation of an applicable air quality plan (Impact AQ-2), and temporary direct and indirect impacts on global climate change—greenhouse gas emissions (Impact AQ-3). Shared Passenger Track Alternative A would exceed regulatory limits and health thresholds for NO_X, resulting in the potential to cause regional air quality effects. All communities along the alignment could be affected by regional criteria emissions.

As noted in Section 5.3.2, Impact Avoidance and Minimization Features, the Authority will prepare a dust control plan and employ measures to minimize fugitive dust emissions by washing vehicles before exiting the construction site, watering unpaved surfaces, limiting vehicle travel speed, and suspending dust-generating activities when wind speed is greater than 25 miles per hour (**AQ-IAMF#1**). The Authority will use low-volatile-organic-compound paint that complies with SCAQMD Rule 1113 to limit volatile organic compound emissions (**AQ-IAMF#2**). The Authority will use renewable diesel fuel in equipment and vehicles to reduce exhaust emissions of criteria pollutants and toxic air contaminants (**AQ-IAMF#3**). All heavy-duty off-road construction diesel equipment will be required to use Tier 4 Final engines to reduce exhaust emissions of criteria pollutants and toxic air contaminants (**AQ-IAMF#4**). The average age of heavy-duty construction vehicles will be limited to reduce exhaust emissions of criteria pollutants and toxic air contaminants (**AQ-IAMF#5**).

With application of the IAMFs, emissions of reactive organic gases, nitrogen dioxide, CO, sulfur oxides, PM_{10}, and $PM_{2.5}$ would be less than the U.S. Environmental Protection Agency General Conformity *de minimis* levels applicable to the SCAB. All emissions would be less than the U.S. Environmental Protection Agency General Conformity *de minimis* levels applicable to the Mojave Desert Air Basin. Emissions of NO_X would exceed the General Conformity level applicable to the SCAB. Implementation of **AQ-MM#1** will address these threshold exceedances because emissions of NO_X (for CEQA and conformity) from construction equipment and vehicles would be offset. **AQ-MM#2** will reduce the impact of construction emissions from project-related on-road vehicles and off-road equipment. **AQ-MM#3** requires best industry practices for large stationary equipment (e.g., combustion equipment, paint booths, wastewater treatment), or alternative equipment would be used, to the extent practicable, to reduce emissions of criteria pollutants. However, even with implementation of mitigation measures, emissions of NO_X from construction equipment and vehicles would continue to exceed SCAQMD daily significance thresholds. No thresholds would be exceeded in the Mojave Desert Air Basin. Because all communities in the

SCAB can be affected by regional criteria emissions and mitigation measures would be implemented equally for communities, this would not result in a DHAE associated with air quality.

Shared Passenger Track Alternative B

Construction impacts for Shared Passenger Track Alternative B would be similar to those of Shared Passenger Track Alternative A, with the exception that Shared Passenger Track Alternative B would develop the 15th Street LMF instead of the 26th Street LMF. The 15th Street LMF is in the Redondo Junction neighborhood of Los Angeles, which is not in minority or low-income BGs. Because the design of Shared Passenger Track Alternative A is nearly the same as that of Shared Passenger Track Alternative B and the facilities and capabilities provided at each LMF would be the same, the types and amounts of construction activities also would be nearly the same. Therefore, impacts on communities would be the same as for Shared Passenger Track Alternative A. As discussed in Tables 3.3-12 and 3.3-18, total construction emissions for Shared Passenger Track Alternative B would only be slightly greater than those of Shared Passenger Track Alternative A, because Shared Passenger Track Alternative B covers a larger area for the 15th Street LMF and requires a larger amount of excavation and haul trips to remove excavated material.

With incorporation of the same IAMFs as for Shared Passenger Track Alternative A, only NO_X emissions would exceed the General Conformity level applicable to the SCAB. Implementation of **AQ-MM#1**, **AQ-MM#2**, and **AQ-MM#3** would be used, to the extent practicable, to address emissions of criteria pollutants. However, even with implementation of mitigation measures, emissions of NO_X from construction equipment and vehicles would continue to exceed SCAQMD daily significance thresholds. Because all communities could be affected by regional criteria emissions, this would not result in a DHAE associated with regional air quality.

High-Speed Rail Station Options

High-Speed Rail Station Option: Norwalk/Santa Fe Springs

The Norwalk/Santa Fe Springs HSR Station Option is in the minority community of east Norwalk/ southwest Santa Fe Springs. As discussed in the *Los Angeles to Anaheim Project Section Air Quality and Global Climate Change Technical Report* (Authority 2025d), with inclusion of the HSR station option, construction emissions would be slightly higher when compared to construction of Shared Passenger Track Alternative A or B. With application of the same IAMFs and mitigation measures as for Shared Passenger Track Alternatives A and B, only NO_X emissions would exceed the General Conformity level applicable to the SCAB. Because all communities could be affected by regional criteria emissions, this would not result in a DHAE associated with regional air quality.

High-Speed Rail Station Option: Fullerton

The Fullerton HSR Station Option is partially in minority and low-income BGs in downtown Fullerton. With inclusion of the HSR station option, construction emissions would be slightly higher when compared to construction of Shared Passenger Track Alternative A or B. With application of the same IAMFs and mitigation measures as for Shared Passenger Track Alternatives A and B, only NO_X emissions would exceed the General Conformity level applicable to the SCAB. Because all communities could be affected by regional criteria emissions, this would not result in a DHAE associated with regional air quality.

Operation

Shared Passenger Track Alternative A

Localized Air Quality – Exposure to Diesel Particulate Matter (Health Risk)

As discussed in Section 3.3, project operation would have an adverse effect from continuous permanent direct impacts on localized air quality – exposure to diesel particulate matter (DPM) (Impact AQ-15). During the 2020 scoping meetings, participants raised concerns about air quality impacts of the HSR system. This impact may be changed to not adverse based on new information or comments received during the public comment period. The project would reconfigure Hobart Yard and Commerce Yard to make room for the shared passenger tracks,

BNSF mainline tracks, 26th Street LMF, and BNSF storage and staging tracks. As displayed in Table 5-18, Hobart Yard and Commerce Yard are in minority and low-income communities in the neighborhoods of Hobart/west Commerce, east Commerce, and Hobart in Vernon.

Table 5-18 Hobart Yard and Commerce Yard

Construction Activity	Community/ Neighborhood	Census BGs Affected	Minority?	Low-Income?
Hobart Yard and Commerce Yard Reconfiguration	Hobart/west Commerce	60375323022	Yes	No
	Hobart/west Commerce	60375323042	Yes	Yes
	Hobart in Vernon	60379800161	Yes	No
	Hobart/west Commerce	60375323023	Yes	Yes
	Hobart/west Commerce	60375323031	Yes	No
	East Commerce	60375323032	Yes	Yes
Total	**N/A**	**N/A**	**100%**	**50%**

BG = block group; N/A = not applicable

Operations health risk assessments (HRA) were conducted to evaluate the cancer risk and chronic noncancer risk from DPM emissions generated by the yard equipment activities at Hobart and Commerce Yards to determine the change in health risks caused by the reconfiguration of the yards.[4] The HRAs indicate that health risks would decrease in future years when the project is operational compared to existing conditions, and operation of Shared Passenger Track Alternative A would not result in an incremental increase in cancer risk or chronic noncancer risks. Details of the analysis are provided in the HRAs in Appendix F of the *Los Angeles to Anaheim Project Section Air Quality and Global Climate Change Technical Report* (Authority 2025d).

These results are based on the best data available to the Authority, as provided by BNSF (STV 2021). However, some future operational data on DPM emissions are unavailable. As noted above, project operation at Hobart Yard would add about 101,094 feet of additional storage and staging tracks, spread across 14 new tracks. The BNSF mainline tracks would also be shifted along some locations in the project corridor. Future activity pertaining to the new tracks and BNSF mainline track shift is unknown, and therefore could not be analyzed in the HRA. Without clear activity data to analyze, it is possible that project operation at Hobart Yard could pose health risk from exposure to DPM. Because Hobart Yard is in the low-income and minority communities of Hobart/west Commerce, east Commerce, and Hobart in Vernon, there would be a potential DHAE from exposure to DPM emissions.

To help mitigate this impact, the Authority would implement **AQ-MM#4**, which requires that an operational HRA be conducted prior to the commencement of project operations. **AQ-MM#4** also requires the analysis and incorporation of additional feasible mitigation to reduce risks to the greatest extent practicable prior to project operations. However, because the potential increase in activity at Hobart Yard is unknown, the effectiveness of **AQ-MM#4** cannot be determined precisely. Without knowing if there is a potential health risk impact, or the level of this impact, the Authority is unable to implement other feasible mitigation measures. In the absence of certainty, exposure to DPM emissions would result in a DHAE for purposes of this EIR/EIS. However, the future operational HRA may determine that impacts are below the SCAQMD project-level thresholds and no additional on-site or off-site mitigation measure would be required. If that should occur, there would not be a DHAE from exposure to DPM emissions. Additionally, this

[4] Acute (short-term) noncancer risk was not evaluated because no threshold (reference exposure level) for acute noncancer risk has been established for DPM.

DHAE may be reconsidered based on new information or comments received during the public comment period.

Operational Benefits to Air Quality

As discussed in Section 3.3 (Impacts AQ-4, AQ-5, AQ-6, AQ-11, AQ-12, AQ-13, AQ-14, and AQ-16), project operation would also result in a benefit to air quality through a regional decrease in vehicle miles traveled from a shift in modes of travel from vehicles and aircraft to HSR, which has fewer emissions relative to existing modes of transportation. Shared Passenger Track Alternative A would not create traffic conditions that would result in localized CO hot spots. Localized increases in mobile-source air toxic (MSAT) emissions could occur near ARTIC, which is partially in a minority and low-income community in the Platinum Triangle neighborhood, because of additional passenger and employee commute trips. However, even though there may be localized increases in MSAT emissions with Shared Passenger Track Alternative A, the U.S. Environmental Protection Agency's vehicle and fuel regulations, coupled with fleet turnover, would cause MSAT reductions over time, thereby offsetting the increase in localized traffic associated with project operation. Overall, project operation would result in a net regional decrease in emissions of criteria pollutants and MSAT emissions and a long-term net reduction in greenhouse gas emissions compared to the No Project Alternative. As a result, Shared Passenger Track Alternative A would provide long-term benefits to the region as a whole from improvements in air quality during operations.

Shared Passenger Track Alternative B

Localized Air Quality – Exposure to Diesel Particulate Matter (Health Risk)

As discussed in Section 3.3 (Impact AQ-15), with the LMF at 15th Street in the Redondo Junction neighborhood of Los Angeles, which is not in minority or low-income BGs, impacts would be the same as those described for Shared Passenger Track Alternative A. Impacts would be the same because the operations at Hobart Yard would remain the same regardless of LMF location. Therefore, exposure to DPM emissions would result in a DHAE for purposes of this EIR/EIS. This DHAE may be reconsidered based on new information or comments received during the public comment period.

Operational Benefits to Air Quality

As discussed in Section 3.3 (Impacts AQ-4, AQ-5, AQ-6, AQ-11, AQ-12, AQ-13, AQ-14, and AQ-16), project operation would result similar benefits to air quality as Shared Passenger Track Alternative A. With the LMF at 15th Street in the Redondo Junction neighborhood of Los Angeles, which is not in minority or low-income BGs, operational changes to air quality and impacts on communities would be the same as described for Shared Passenger Track Alternative A. Overall, project operation would result in a net regional decrease in emissions of criteria pollutants and MSAT emissions and a long-term net reduction in greenhouse gas emissions compared to the No Project Alternative. As a result, Shared Passenger Track Alternative B would provide long-term benefits to the region as a whole from improvements in air quality during operations.

High-Speed Rail Station Options

High-Speed Rail Station Option: Norwalk/Santa Fe Springs

Localized Air Quality – Exposure to Diesel Particulate Matter (Health Risk)

As discussed in Section 3.3 (Impact AQ-15), with inclusion of the Norwalk/Santa Fe Springs HSR Station Option, which is in the minority community of east Norwalk/southwest Santa Fe Springs, operational impacts would be the same as for the Shared Passenger Track Alternatives. Impacts would be the same because the operations at Hobart Yard would remain the same, and operation of this HSR station option would not result in additional or different impacts at the station site. Therefore, exposure to DPM emissions would result in a DHAE for purposes of this EIR/EIS.

Operational Benefits to Air Quality

As discussed in Section 3.3 (Impacts AQ-4, AQ-5, AQ-6, AQ-11, AQ-12, AQ-13, AQ-14, and AQ-16), the HSR station option would result in similar benefits to air quality as Shared Passenger Track Alternative A. With the Norwalk/Santa Fe Springs HSR Station Option, which is in the minority community of east Norwalk/southwest Santa Fe Springs, there would be no

exceedances of the California Ambient Air Quality Standards with respect to CO. In addition, with the Norwalk/Santa Fe Springs HSR Station Option, localized operational emission rates would be less than the Localized Significance Thresholds. Localized increases in MSAT emissions could occur near the station because of additional passenger and employee commute trips. However, as described above for Shared Passenger Track Alternative A, even though there may be localized increases in MSAT emissions, the U.S. Environmental Protection Agency's vehicle and fuel regulations, coupled with fleet turnover, would cause MSAT reductions over time, thereby offsetting the increase in localized traffic associated with operation. As a result, the Norwalk/Santa Fe Springs HSR Station Option would provide long-term benefits to the region as a whole from improvements in air quality during operations.

High-Speed Rail Station Option: Fullerton

Localized Air Quality – Exposure to Diesel Particulate Matter (Health Risk)

As discussed in Section 3.3 (Impact AQ-15), with inclusion of the Fullerton HSR Station Option, which is partially in minority and low-income BGs in downtown Fullerton, operational impacts would be the same as for the Shared Passenger Track Alternatives. Impacts would be the same because the operations at Hobart Yard would remain the same, and operation of this HSR station option would not result in additional or different impacts at the station site. Therefore, exposure to DPM emissions would result in a DHAE for purposes of this EIR/EIS.

Operational Benefits to Air Quality

As discussed in Section 3.3 (Impacts AQ-4, AQ-5, AQ-6, AQ-11, AQ-12, AQ-13, AQ-14, and AQ-16), the HSR station option would result in similar benefits to air quality as Shared Passenger Track Alternative A. With the Fullerton HSR Station Option, which is partially in minority and low-income BGs in downtown Fullerton, localized CO concentrations would be less than the California Ambient Air Quality Standards and National Ambient Air Quality Standards. As a result, there would be no exceedances of the California Ambient Air Quality Standards with respect to CO. Localized increases in MSAT emissions could occur near the station because of additional passenger and employee commute trips, and could affect communities near the station. However, even though there may be localized increases in MSAT emissions, the U.S. Environmental Protection Agency's vehicle and fuel regulations, coupled with fleet turnover, would cause MSAT reductions over time, thereby offsetting the increase in localized traffic associated with operation. As a result, the Fullerton HSR Station Option would provide long-term benefits to the region as a whole from improvements in air quality during operations.

5.6.3.3 Noise and Vibration

Construction

Shared Passenger Track Alternative A

As discussed in Section 3.4 (Impacts N&V-1 and N&V-2), there would be adverse effects before mitigation from temporary exposure of sensitive receivers to construction noise and vibration. Construction would require mechanical equipment that would generate temporary noise and vibration increases for various durations at any given location, depending on the construction activity. Most construction would occur 5 days a week between the hours of 7:00 a.m. and 7:00 p.m. However, some construction activities may be conducted at night to limit effects on peak highway traffic.

Noise-sensitive receivers at distances of up to 645 feet of a construction zone may be exposed to noise levels exceeding the FRA criteria for daytime hours. Noise-sensitive receivers at distances of up to 2,038 feet of a construction zone may be exposed to noise levels exceeding the FRA criteria for nighttime hours. Based on these distances, it is estimated that noise impacts could temporarily occur at a total of 1,379 Category 2 (residential) receivers and at four Category 3 (institutional) receivers (including a theater, a library, and two churches) during daytime construction. During nighttime construction, it is estimated that noise impacts could temporarily occur at a total of 7,855 residences. Pile driving is the only construction activity that could potentially cause vibration damage to structures at distances of up to 30 feet for the least

sensitive buildings and up to 75 feet for the most sensitive buildings. Human annoyance or interference by vibration from construction would be expected within a distance of up to 500 feet. In addition, construction of all project elements may result in vibration impacts for residences within 500 feet of a construction zone. As presented in Table 5-8, 83 percent of BGs in the noise and vibration community analysis RSA are minority BGs and 57 percent are low-income BGs; therefore, construction noise and vibration impacts have the potential to be a DHAE on minority and low-income populations before mitigation.

In addition, as discussed in Section 3.4, construction of some early action projects would require a heavy level of construction activity, which could have noise and vibration impacts on sensitive receptors within the relevant screening distances. Table 5-19 presents the census BGs likely to be affected by construction of these early action projects.

Table 5-19 Early Action Project Heavy-Level Construction-Period Noise and Vibration Impact Locations

Construction Activity	Impact Source	Community/ Neighborhood	Census BGs Affected	Minority?	Low-Income?
Pioneer Blvd Grade Separation	Noise and vibration	Southwest West Whittier–Los Nietos CDP	60375023031	Yes	No
			60375023032	Yes	Yes
			60375027001	Yes	Yes
			60375027004	Yes	No
Norwalk Blvd Grade Separation	Noise	Southwest West Whittier–Los Nietos CDP	60375027004	Yes	No
State College Blvd Grade Separation	Noise	Southeast Anaheim	60590761042	Yes	No
			60590863035	Yes	Yes
			60590761043	No	No
Norwalk/Santa Fe Springs Metrolink Station Modifications	Noise	East Norwalk/ south Santa Fe Springs	60375523012	Yes	No
			60379800341	Yes	No
Buena Park Metrolink Station Relocation	Noise and vibration	Northeast Buena Park	60591106073	Yes	Yes
Fullerton Metrolink/Amtrak Station Modifications	Noise	South-central Fullerton	60590113001	Yes	No
HSR Station Platform and Facilities at ARTIC	Noise	Platinum Triangle in Anaheim	60590761051	Yes	No
			60590761043	No	No
			60590863036	No	No

ARTIC = Anaheim Regional Transportation Intermodal Center; BG = block group; CDP = Census-Designated Place; HSR = high-speed rail; N/A = not applicable

During the inclusive public engagement process, noise and vibration effects associated with project construction were a key concern of many community members in central Anaheim, West Whittier–Los Nietos CDP, and Santa Fe Springs. Although construction could occur for various durations around sensitive receptors, the likelihood of a sensitive receptor to be within the minimum distance to experience a noise impact for the entirety of that period is low. In addition, the highest noise-generating activities, such as pile driving for structural foundations, would only occur sporadically and not span the entire construction period. However, given the potential for construction noise effects (absent mitigation), the Authority proposes IAMFs and mitigation

measures to avoid, minimize, or mitigate those impacts to below the applicable federal guidance thresholds for construction noise impacts.

Shared Passenger Track Alternative A would follow the Federal Transit Administration and FRA guidelines for minimizing noise and vibration effects at sensitive receptors during construction, which will minimize construction noise and vibration impacts on communities (**NV-IAMF#1**). Mitigation measure **N&V-MM#1** will further minimize the impacts on sensitive receivers from construction noise by requiring the contractor to prepare a noise-monitoring program for Authority approval prior to construction. The noise-monitoring program shall describe how, during construction, the contractor will monitor construction noise to verify compliance with the noise limits (an 8-hour equivalent noise 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 receiver is present. In addition, **N&V-MM#2** will further minimize impacts on sensitive receivers from construction-related vibration through vibration-reduction methods to meet FRA standards. **N&V-MM#1** and **N&V-MM#2** would be implemented equally for all communities.

Although the majority of communities affected by Shared Passenger Track Alternative A would be in low-income and minority communities, with implementation of **N&V-MM#1** and **N&V-MM#2**, all construction-period effects would be reduced to have no adverse effects related to noise and vibration in any community. Therefore, with **N&V-MM#1** and **N&V-MM#2**, community concerns would be addressed, and there would not be a DHAE related to noise and vibration during construction.

Shared Passenger Track Alternative B

With the LMF at 15th Street in the Redondo Junction neighborhood of Los Angeles, which is not in minority or low-income BGs, temporary exposure of sensitive receptors to noise impacts during construction would be the same as described for Shared Passenger Track Alternative A. Therefore, construction would not result in additional or different impacts and impacts on communities would be the same as those of Shared Passenger Track Alternative A. Incorporation of **NV-IAMF#1** and implementation of **N&V-MM#1** and **N&V-MM#2** will reduce construction-related impacts from noise and vibration to less-than-adverse levels. As a result, there would not be a DHAE from noise and vibration.

High-Speed Rail Station Options

High-Speed Rail Station Option: Norwalk/Santa Fe Springs

During construction of the Norwalk/Santa Fe Springs HSR Station Option, which is in the minority community of east Norwalk/southwest Santa Fe Springs, temporary exposure to noise and vibration impacts would be the same as described for the Shared Passenger Track Alternatives in the station area. Temporary exposure to noise impacts during construction would be limited to sensitive receptors within 295 feet of the station site for daytime construction activity and within 934 feet for nighttime construction activity, which is the same as for the area that would be modified under the Shared Passenger Track Alternatives. Therefore, construction would not result in additional or different impacts and impacts on communities would be the same as those of the Shared Passenger Track Alternatives. Incorporation of **NV-IAMF#1** and implementation of **N&V-MM#1** and **N&V-MM#2** will reduce construction-related impacts from noise and vibration and address the concerns raised by communities during the inclusive public engagement process about noise and vibration effects. As a result, there would not be a DHAE from noise and vibration.

High-Speed Rail Station Option: Fullerton

During construction of the Fullerton HSR Station Option, which is partially in minority and low-income BGs in downtown Fullerton, temporary exposure to noise and vibration impacts would be the same as described for the Shared Passenger Track Alternatives in the station area. Temporary exposure to noise impacts during construction would be limited to sensitive receptors within 321 feet of the station site for daytime construction activity and within 1,014 feet for nighttime construction activity, which is the same as for the area that would be modified under the

Shared Passenger Track Alternatives. Therefore, construction would not result in additional or different impacts and impacts on communities would be the same as those of the Shared Passenger Track Alternatives. Incorporation of **NV-IAMF#1** and implementation of **N&V-MM#1** and **N&V-MM#2** will reduce construction-related impacts from noise and vibration. As a result, there would not be a DHAE from noise and vibration.

Operation

Shared Passenger Track Alternative A

As discussed in Section 3.4 (Impacts N&V-4 and N&V-5), there would be adverse effects before mitigation related to permanent exposure of sensitive receivers to noise and permanent exposure of sensitive receivers and buildings to ground-borne noise and vibration from project operation.

Operational Noise Impacts

Noise levels from project operation would depend on the number of trains per day, speed of the trains, track configuration, and distance of receivers to the tracks. However, no sensitive receivers would be significantly affected by changes in noise caused by project-related relocation of freight tracks within the right-of-way. Operation of HSR trains would result in operational noise levels exceeding the severe impact criteria at 59 residences and moderate impact criteria at 443 residences in the project section. As presented in Table 5-20, the majority of these impacts would occur in minority and low-income BGs; therefore, before mitigation, these impacts could result in a DHAE.

Table 5-20 Premitigation Operational Noise Impacts

Location	Community/ Neighborhood	Moderate Noise Impacts	Severe Noise Impacts	Census BGs Affected	Minority?	Low-Income?
Rio Hondo Channel to Rosemead Blvd	McCampbell in Pico Rivera	14	3	60375025002	Yes	No
Brea Creek to Dale St	Northeast Buena Park	4	0	60591106072	Yes	Yes
				60591106073	Yes	Yes
Euclid St to S Richman Ave	Fullerton	4	0	60590112004	No	No
E La Palma Ave to E Wilhelmina St	Central Anaheim	82	0	60590865023	Yes	Yes
				60590865024	Yes	Yes
E Wilhelmina St to E Sycamore St	Central Anaheim	3	2	60590865022	Yes	Yes
E Sycamore St to Lincoln Ave	Central Anaheim	14	36	60590873011	Yes	Yes
				60590873012	Yes	Yes
Lincoln Aven to E Santa Ana St	Central Anaheim	39	18	60590873021	Yes	Yes
				60590873023	Yes	Yes
E Santa Ana St to Vermont Ave	Central Anaheim	283	0	60590863011	Yes	Yes
				60590863012	Yes	Yes
				60590874011	Yes	Yes
				60590874041	Yes	Yes
Total	**N/A**	**443**	**59**	**N/A**	**99.2%**	**95.8%**

BG = block group; N/A = not applicable

Installing a sound barrier in accordance with **N&V-MM#3** will provide effective noise mitigation for 33 of the 59 residences. For the other locations, a sound barrier would not meet the mitigation guidelines, and other measures would be implemented, including noise abatement at receiver locations (for example, sound insulation of buildings), and easement acquisition. However, the residences in Table 5-21 would have residual severe noise impacts. After mitigation, all remaining severe noise impacts would be in minority and low-income communities; therefore there is a DHAE in the McCampbell neighborhood in Pico Rivera and central Anaheim.

Table 5-21 Post-Mitigation Operational Noise Impacts

Location	Community/ Neighborhood	Severe Noise Impacts	Census BGs Affected	Minority?	Low-Income?
Rio Hondo Channel to Rosemead Blvd	McCampbell in Pico Rivera	3	60375025002	Yes	No
E Wilhelmina St to E Sycamore St	Central Anaheim	2	60590865022	Yes	Yes
E Sycamore St to Lincoln Ave	Central Anaheim	3	60590873011	Yes	Yes
			60590873012	Yes	Yes
Lincoln Ave to E Santa Ana St	Central Anaheim	18	60590873021	Yes	Yes
			60590873023	Yes	Yes
Total	**N/A**	**26**	**N/A**	**100%**	**94.9%**

BG = block group; N/A = not applicable

CA-IAMF#1, Authority Community Ombudsman and Authority-Designated Contractor's Community Liaison, will further reduce train-operation impacts on communities by creating the Authority's community ombudsman and contractor's community liaison positions. Those positions' responsibilities and duties will require consultation with communities on the Operations Noise and Vibration Technical Memorandum (**NV-IAMF#1**). Usually, communities do not have direct input into these types of plans. Giving communities the opportunity to provide direct feedback on noise barriers, building sound insulation, and noise easements could reduce the impacts on communities. Although these measures could reduce noise impacts on residents in the RSA, adverse effects on low-income and minority communities would remain. Therefore, operational noise from Shared Passenger Track A would have a DHAE on minority communities in the McCampbell neighborhood in Pico Rivera, and minority and low-income populations in Central Anaheim.

Operational Vibration Impacts

Operational vibration would result in a permanent impact for 517 residences in the project section. These impacts would be caused by the proximity of the receivers to the proposed track and the speed of the train. As presented in Table 5-22, the majority of these impacts would occur in minority and low-income BGs; therefore, before mitigation, these impacts could result in a DHAE.

Table 5-22 Premitigation Operational Vibration Impacts

Location	Community/ Neighborhood	Vibration Impacts	Census BGs Affected	Minority?	Low-Income?
Rio Hondo Channel to Rosemead Blvd	McCampbell in Pico Rivera	28	60375025002	Yes	No

Location	Community/ Neighborhood	Vibration Impacts	Census BGs Affected	Minority?	Low-Income?
Brea Creek to Dale St	Northeast Buena Park	14	60591106072	Yes	Yes
			60591106073	Yes	Yes
E Orangethorpe Ave to E La Palma Ave	Central Anaheim	13	60590865021	Yes	Yes
			60590116021	Yes	Yes
			60590116022	Yes	Yes
E La Palma Ave to E Wilhelmina St	Central Anaheim	72	60590865023	Yes	Yes
			60590865024	Yes	Yes
E Wilhelmina St to Lincoln Ave	Central Anaheim	50	60590865012	Yes	Yes
			60590873013	Yes	Yes
Lincoln Ave to E Santa Ana St	Central Anaheim	57	60590873021	Yes	Yes
			60590873023	Yes	Yes
E Santa Ana St to Vermont Ave	Central Anaheim	283	60590863011	Yes	Yes
			60590863012	Yes	Yes
			60590874011	Yes	Yes
			60590874041	Yes	Yes
Total	**N/A**	**517**	**N/A**	**100%**	**94.5%**

BG = block group; N/A = not applicable

To reduce impacts on sensitive receivers from operational vibration, the Authority will implement **N&V-MM#4** which includes vehicle suspension enhancements, special track support systems, building modifications, and other measures. In particular, special track support systems such as resiliently supported ties, ballast mats, high-resilience fasteners, and floating track slabs are standard techniques used in the railroad industry to reduce vibration effects and have been used successfully in many railroad and transit system projects worldwide. These measures provide a range of vibration reductions that will be evaluated during project design as needed to comply with the FRA criteria.

CA-IAMF#1 will further reduce train-operation impacts on communities by creating the Authority's community ombudsperson and contractor's community liaison positions. Those positions' responsibilities and duties require consultation with communities on the Operations Noise and Vibration Technical Memorandum (**NV-IAMF#1**). Usually, communities do not have direct input into these types of plans. As discussed above, giving communities the opportunity to provide direct feedback on noise barriers, building sound insulation, and noise easements could reduce the impacts on communities. Although these measures could reduce vibration impacts on residents in the RSA, adverse effects on communities would remain. Therefore, operational vibration from Shared Passenger Track Alternative A would have a DHAE on minority communities in the McCampbell neighborhood in Pico Rivera and minority and low-income populations in northeast Buena Park and central Anaheim.

Shared Passenger Track Alternative B

With the LMF at 15th Street in the Redondo Junction neighborhood of Los Angeles, which is not in minority or low-income BGs, operational noise and vibration would be the same as that of Shared Passenger Track Alternative A. The alternatives differ only in the LMF site and, because there are no noise- or vibration-sensitive land uses within 1,000 feet of either LMF site, the effects are expected to be the same for both alternatives. Therefore, because adverse effects on low-

income and minority communities would remain after implementation of **N&V-MM#3** and **N&V-MM#4**, there would be a DHAE related to noise and vibration during operation in the McCampbell neighborhood in Pico Rivera, northeast Buena Park, and central Anaheim.

High-Speed Rail Station Options

High-Speed Rail Station Option: Norwalk/Santa Fe Springs

With inclusion of the Norwalk/Santa Fe Springs HSR Station Option, which is in the minority community of east Norwalk/southwest Santa Fe Springs, impacts would be similar to those of the Shared Passenger Track Alternatives in the station area. With the HSR station option, there would be lower train speeds and lower noise levels in the vicinity of the station. Operational noise levels are not predicted to exceed noise impact criteria and there would be no additional affected receivers. Operational activities would not result in permanent exposure of sensitive receivers and buildings to vibration generated during project operation, and permanent vibration impacts at sensitive buildings during operation would be the same as those described for the Shared Passenger Track Alternatives. Therefore, because adverse effects would not remain in the vicinity of the Norwalk/Santa Fe Springs HSR Station Option after implementation of **N&V-MM#3** and **N&V-MM#4**, there would not be a DHAE related to noise and vibration in the station area.

High-Speed Rail Station Option: Fullerton

With inclusion of the Fullerton HSR Station Option, which is partially in minority and low-income BGs in downtown Fullerton, impacts would be similar to those of the Shared Passenger Track Alternatives in the station area. With the HSR station option, there would be lower train speeds and lower noise levels in the vicinity of the station. Operational noise levels are not predicted to exceed noise impact criteria and there would be no additional affected receivers. Operational activities would not result in permanent exposure of sensitive receivers and buildings to vibration generated during project operation, and permanent vibration impacts at sensitive buildings during operation would be the same as those described for the Shared Passenger Track Alternatives. Therefore, because adverse effects would not remain in the vicinity of the Fullerton HSR Station Option after implementation of **N&V-MM#3** and **N&V-MM#4**, there would not be a DHAE related to noise and vibration in the station area.

5.6.3.4 Electromagnetic Fields and Electromagnetic Interference

Construction

Shared Passenger Track Alternative A

As discussed in Section 3.5, Shared Passenger Track A would have adverse effects related to temporary impacts from use of heavy construction equipment (Impact EMF/EMI-1) and temporary impacts from operation of electrical equipment (Impact EMF/EMI-3). EMF/EMI was not raised as a concern by communities during outreach.

As discussed in Impact EMF/EMI-1, many types of construction equipment, in addition to heavy construction equipment, contain generators or electric motors that generate EMFs. Substantial EMF fluctuations caused by construction vehicle movements would be limited to within 50 feet of the construction footprint, and radio communications systems would comply with Federal Communications Commission regulations designed to prevent EMI. Regarding magnetically sensitive equipment, magnetic field strengths from large electric welders could be in the range of 1 to 5 milligauss at a distance of 50 feet, so transient interference with magnetically sensitive equipment is possible. The potential for impacts applies at Nutrilite Health Institute in the northeast Buena Park neighborhood (BG 60591106073, low income). EMF fluctuations caused by construction vehicle movements would be limited to within 50 feet of the construction easement and, with incorporation of **EMF/EMI-IAMF#2** and implementation of **EMF/EMI-MM#1**, effects would not be adverse.

Although the receptor potentially affected by Shared Passenger Track Alternative A would be in a low-income community, with implementation of **EMF/EMI-MM#1**, all construction-period effects would be reduced to have no adverse effects on EMF/EMI. Therefore, with **EMF/EMI-MM#1**, there would not be a DHAE related to EMF/EMI during construction.

Shared Passenger Track Alternative B

Impacts for Shared Passenger Track Alternative B would be the same as those described for Shared Passenger Track Alternative A regarding temporary impacts from operation of electrical and heavy construction equipment, because it would require the same types of electrical and heavy construction equipment during construction, and the sensitive receptors within the RSA would be the same. Shared Passenger Track Alternative B only differs in the LMF location. The 15th Street LMF is in the Redondo Junction neighborhood of Los Angeles, which is not in minority or low-income BGs. Therefore, impacts on low-income and minority communities would be the same as those of Shared Passenger Track Alternative A. **EMF/EMI-IAMF#2** and **EMF/EMI-MM#1** will ensure that temporary impacts regarding operation of electrical equipment are not adverse. Therefore, with **EMF/EMI-MM#1**, there would not be a DHAE related to EMF/EMI during construction.

High-Speed Rail Station Options

High-Speed Rail Station Option: Norwalk/Santa Fe Springs

Impacts for the Norwalk/Santa Fe Springs HSR Station Option, which is in the minority community of east Norwalk/southwest Santa Fe Springs, would be the same as those described for Shared Passenger Track Alternative A in the station area. The station option would require the same types of electrical and heavy construction equipment during construction, and the sensitive receptors within the RSA would be the same. Therefore, construction of this HSR station option would not result in additional or different impacts at the station site, and impacts on low-income and minority communities would be the same as those of Shared Passenger Track Alternative A. **EMF/EMI-IAMF#2** and **EMF/EMI-MM#1** will ensure that temporary impacts regarding operation of electrical equipment are not adverse. Therefore, with **EMF/EMI-MM#1**, there would not be a DHAE related to EMF/EMI during construction.

High-Speed Rail Station Option: Fullerton

Impacts for the Fullerton HSR Station Option, which is partially in minority and low-income BGs in downtown Fullerton, would be the same as those described for Shared Passenger Track Alternative A in the station area. The HSR station option would require the same types of electrical and heavy construction equipment during construction, and the sensitive receptors within the RSA would be the same. Therefore, construction of this HSR station option would not result in additional or different impacts at the station site, and impacts on low-income and minority communities would be the same as those of Shared Passenger Track Alternative A. **EMF/EMI-IAMF#2** and **EMF/EMI-MM#1** will ensure that temporary impacts regarding operation of electrical equipment are not adverse. Therefore, with **EMF/EMI-MM#1**, there would not be a DHAE related to EMF/EMI during construction.

Operation

Shared Passenger Track Alternative A

As discussed in Section 3.5, Shared Passenger Track A would have adverse effects related to permanent interference with sensitive equipment (Impact EMF/EMI-9). EMF/EMI was not raised as a concern by communities during outreach.

Four potentially affected facilities were identified in the project section that are believed to be currently operating magnetically sensitive equipment or police and fire radio services: Nutrilite Health Institute in the northeast Buena Park neighborhood (BG 60591106073, low income), Los Angeles Fire Department, Station 17 in the Redondo Junction Neighborhood (BG 60372060511), Fullerton Municipal Airport in the Almond neighborhood (BG 60590018011), and Fullerton Fire Department in downtown Fullerton (BG 60590113001, low income). The potential for interference with high-tech equipment will be addressed through **EMF/EMI-IAMF#2**, intended to prevent EMI with identified neighboring uses. In addition, the Authority will coordinate with third parties to identify nearby sensitive equipment with the potential to be affected by the HSR system and, if necessary for specific sensitive equipment, identify appropriate mitigation to avoid these effects, including performing tests to confirm equipment is free from impacts (**EMF/EMI-MM#1**). Interference with police and fire radio services would be avoided because the project will use

dedicated frequency blocks and procurement of communications equipment meeting Federal Communications Commission regulations.

Although all receptors potentially affected by Shared Passenger Track Alternative A would be in low-income and minority communities, with implementation of **EMF/EMI-MM#1**, all operational effects would be reduced to have no adverse effects on EMF/EMI in communities. Therefore, with **EMF/EMI-MM#1**, there would not be a DHAE related to EMF/EMI during operations.

Shared Passenger Track Alternative B

Impacts for Shared Passenger Track Alternative B would be the same as those described for Shared Passenger Track Alternative A, because the 15th Street LMF would not affect different sensitive receptors. The 15th Street LMF is in the Redondo Junction neighborhood of Los Angeles, which is not in minority or low-income BGs. Therefore, impacts on low-income and minority communities would be the same as those of Shared Passenger Track Alternative A. **EMF/EMI-IAMF#2** and **EMF/EMI-MM#1** will ensure that effects from permanent interference with sensitive equipment are not adverse. Therefore, with **EMF/EMI-MM#1**, there would not be a DHAE related to EMF/EMI during operations.

High-Speed Rail Station Options

High-Speed Rail Station Option: Norwalk/Santa Fe Springs

The Norwalk/Santa Fe Springs HSR Station Option is in the minority community of east Norwalk/ southwest Santa Fe Springs. Impacts for the Norwalk/Santa Fe Springs HSR Station Option would be the same as those described for Shared Passenger Track Alternative A in the station area, because the HSR station option would not affect different sensitive receptors. Therefore, operation of this HSR station option would not result in additional or different impacts at the station site, and impacts on low-income and minority communities would be the same as those of Shared Passenger Track Alternative A. **EMF/EMI-IAMF#2** and **EMF/EMI-MM#1** will ensure that effects from permanent interference with sensitive equipment are not adverse. Therefore, with **EMF/EMI-MM#1**, there would not be a DHAE related to EMF/EMI during operations.

High-Speed Rail Station Option: Fullerton

Impacts for the Fullerton HSR Station Option, which is partially in minority and low-income BGs in downtown Fullerton, would be the same as those described for Shared Passenger Track Alternative A in the station area, because the HSR station option would not affect different sensitive receptors. Therefore, operation of this HSR station option would not result in additional or different impacts at the station site, and impacts would be the same as those of Shared Passenger Track Alternative A. **EMF/EMI-IAMF#2** and **EMF/EMI-MM#1** will ensure that effects from permanent interference with sensitive equipment are not adverse Therefore, with **EMF/EMI-MM#1**, there would not be a DHAE related to EMF/EMI during operations.

5.6.3.5 Hazardous Materials and Wastes

Construction

Shared Passenger Track Alternative A

As discussed in Section 3.10, Shared Passenger Track Alternative A would have an adverse impact related to construction near sites of potential environmental concern or Cortese List sites (Impact HMW-4), and handling of hazardous materials, substances, or waste within 0.25 mile of a school (Impact HMW-6). These impacts may be changed to not adverse based on new information or comments received during the public comment period.

Construction Near Sites of Potential Environmental Concern or Cortese List Sites

As discussed in Section 3.10, the project involves construction near potential environmental concern sites, including potential impacts associated with two Superfund sites.

The Exide property is a Superfund site at 2700 S Indiana Street in the Hobart neighborhood of Vernon in BG 60379800161, a minority community. Groundwater beneath the site is contaminated with trichloroethylene at concentrations exceeding the U.S. Environmental Protection Agency's Safe Drinking Water Act Maximum Contaminant Level. Moreover, lead

contamination in soils has been found in on-site acid pits as well as in the residential neighborhoods around the site.

The Orange County North Basin site is a Superfund site (listed in September 2020) that features a contaminated groundwater plume that extends to mixed residential, commercial, and industrial areas in Anaheim, Fullerton, and Placentia, and has affected the Orange County Groundwater Basin. This Superfund site is likely associated with Autonetics/Raytheon at 311 S Highland Avenue and Fullerton Manufacturing/Raytheon at 310 E Walnut Avenue in the southeast and downtown neighborhoods of Fullerton. The site is in BG 60590112001 (low income) and BG 60590116022 (minority).

Table 5-23 displays the BGs and neighborhoods where the Superfund sites are located. The BGs where the Superfund sites are located are primarily minority communities. Therefore, there is a potential DHAE before mitigation on minority communities in the Hobart and southeast/downtown Fullerton neighborhoods.

Table 5-23 Superfund Sites within the Hazardous Materials and Wastes Resource Study Area

Site Name	Community/ Neighborhood	Block Group	Minority?	Low-Income?
Exide Site	Hobart	60379800161	Y	N
Orange County North Basin Site	Southeast/ downtown Fullerton	60590112001	N	Y
		60590116022	Y	N
Total			**66.6% Minority**	**33.3% Low-Income**

N = no; Y = yes

It may be feasible to avoid disturbing contaminants during construction on most off-site potential environmental concern sites by complying with stipulations in the construction management plan being prepared as part of **HMW-IAMF#4** and **GEO-IAMF#3**, which would incorporate information (including the review of existing documents for known contamination, extent of contamination, contaminants, and land use restriction requirements) regarding known and suspected contamination and include requirements for protection of human health and the environment to be implemented on sites that may be contaminated. Through incorporation of **HMW-IAMF#1**, contaminants of concern will be identified during the right-of-way acquisition phase. The Authority may also use barriers that are included in the project design, in conjunction with site investigation and remediation, to limit the potential exposure to subsurface contaminants (**HMW-IAMF#3**). In addition, potential accidental releases during transport of contaminated soils or groundwater and potential releases of contaminated media during the remediation of an affected site (as a result of operational failure of treatment systems) will be temporary and minimized through incorporation of procedures established in the spill prevention, control, and countermeasures plan included in the project design through **HMW-IAMF#6** and environmental management system (**HMW-IAMF#9**).

Even with the IAMFs above, risks associated with construction near the Superfund sites represent an adverse impact on minority communities in the Hobart and south-central Fullerton neighborhoods. Because completion of remediation activities at each site is currently unknown, significant exposure to contaminants associated with these sites could occur during construction of Shared Passenger Track Alternative A. The two Superfund sites are being monitored and remediated under the purview of the Department of Toxic Substances Control and Regional Water Quality Control Board and, therefore, construction activities in areas affected by these sites would also require coordination with the applicable oversight agency. With implementation of **HMW-MM#2**, ongoing U.S. Environmental Protection Agency remedial actions at a proposed or listed Superfund site would occur, and remediation may also need to be funded by the Authority to be accomplished in accordance with the requirements of the appropriate oversight agency.

This measure would be implemented for all communities equally and would reduce but not eliminate adverse effects. Therefore, after implementation of **HMW-MM#2**, there would still be a DHAE on minority communities in the Hobart and southeast/downtown Fullerton neighborhoods. This DHAE may be reconsidered based on new information or comments received during the public comment period.

Handling of Hazardous Materials, Substances, or Waste within 0.25 Mile of a School

As discussed in Section 3.10 (Impact HMW-6), hazardous materials used during construction and stored within the limits of construction or staging areas would be within 0.25 mile of educational facilities, which are considered to be sensitive receptors. Hazardous materials would be transported along the construction haul routes listed in Table 2-23, which may fall within 0.25 mile of a school. The transport, storage, and use of extremely hazardous substances or mixtures containing hazardous substances during construction in proximity to schools would pose a health or safety hazard to students or employees in the event of an inadvertent release or spill of hazardous materials.

Exposure to hazardous materials was not raised as a concern during outreach to communities. However, as presented in Table 5-24, there are 40 schools within 0.25 mile of the project footprint; because the majority of these schools are in low-income and minority communities, there is a potential DHAE on low-income and minority communities in the Chinatown neighborhood of Los Angeles, downtown Los Angeles, Hobart/west Commerce, the Downey neighborhood in Pico Rivera, south Pico Rivera, the southwest neighborhood of West Whittier–Los Nietos CDP, the Los Nietos neighborhood of Whittier, southeast Santa Fe Springs, east Norwalk, southwest La Mirada, northeast and north Buena Park, south Fullerton, downtown Fullerton, and north-central and central Anaheim.

Table 5-24 Schools within 0.25 Mile of the Project Footprint

School Name	Address	Community/ Neighborhood	Block Group	Minority?	Low-Income?
FIRST 5 LA	750 N Alameda St	Chinatown in Los Angeles	60372060201	Y	N
Union Station Gateway Child Development	1 Gateway Plaza Dr	Chinatown in Los Angeles	60372060201	Y	N
Harry Pregerson Child Care Center	255 E Temple Street	Downtown Los Angeles	60372074001	Y	Y
Proyecto Pastoral at Dolores Mission [Women's Cooperative Child Care Center]	135 N Mission Road	Downtown Los Angeles	60372060541	Y	Y
Nishi Hongwanji Child Development Center – Day Care Center	815 E 1st St	Downtown Los Angeles	60372060521	N	N
Felicitas and Gonzalo Mendez High	1200 Plaza Del Sol E	Downtown Los Angeles	60372060541	Y	Y
Childtime of Commerce	4820 S Eastern Ave #F	Hobart/west Commerce	60375323042	Y	Y
Maof Child Care Center	9125 Burke St	Downey in Pico Rivera	60375026021	Y	Y
Plaza de la Raza / Maizeland Elementary	7601 Cord Ave	South Pico Rivera	60375024021	Y	Y

School Name	Address	Community/ Neighborhood	Block Group	Minority?	Low-Income?
St. Mariana de Paredes School	7911 Buhman Ave	South Pico Rivera	60375026031	Y	N
Pioneer High School	10800 Benavon St	Southwest West Whittier–Los Nietos CDP	60375023032	Y	Y
Los Nietos Middle School	11425 E Rivera Rd	Los Nietos in Whittier	60375023034	Y	Y
Rio Hondo College Fire Academy	11400 Greenstone Ave	Southeast Santa Fe Springs	60375042002	Y	N
John H. Glenn High School	13520 Shoemaker Ave	East Norwalk	60375523021	Y	Y
Eagle's Nest Preschool and Infant Center	14340 Valley View Ave	Southwest La Mirada	60375039022	Y	N
YMCA of Greater Whittier - La Mirada Youth Services Center	14540 San Cristobal Dr	Southwest La Mirada	60375039022	Y	N
Escalona Elementary	15135 Escalona Rd	South La Mirada	60375039021	N	N
Froebel Daycare	15932 Dalmatian Ave	Southwest La Mirada	60375039012	Y	Y
La Mirada Adult Center (Cerritos College La Mirada Campus)	15920 Barbata Rd	Southwest La Mirada	60375039012	Y	Y
LiMai Montessori Academy	5309 Beach Blvd	Northeast Buena Park	60591106071	N	N
Jesus' Hands	5621 Beach Blvd	North Buena Park	60591106061	Y	Y
Dream-I Education Center	5832 Fullerton Ave	North Buena Park	60591106061	Y	Y
Evergreen Preschool	5882 Beach Blvd	Northeast Buena Park	60591106072	Y	Y
Sunny Hills Preschool	8252 Artesia Blvd	North Buena Park	60591106031	Y	Y
Fullerton Children's Academy	3516 W Commonwealth Ave	South Fullerton	60590018021	Y	N
Bumblebee Christian Learning Center	2353 Williamson Ave	Southwest Fullerton	60590018021	Y	Y
Arborland Montessori	1700 W Valencia Dr	South-central Fullerton	60590019021	Y	Y
Wilshire Avenue Preschool	212 E Wilshire Blvd	South-central Fullerton	60590113001	Y	Y

School Name	Address	Community/ Neighborhood	Block Group	Minority?	Low-Income?
Color Our World Daycare	1613 W Valencia Dr	South-central Fullerton	60590019021	Y	Y
Pacific Drive Elementary School	1501 W Valencia Dr	South-central Fullerton	60590019021	Y	Y
Fullerton First United Methodist Preschool	114 N Pomona Ave	Downtown Fullerton	60590113001	Y	Y
Maple Elementary School	244 E Valencia Dr	South-central Fullerton	60590116023	Y	Y
Richman Elementary School	700 S Richman Ave	South-central Fullerton	60590116016	Y	Y
Anaheim Montessori Academy	744 N East St	North-central Anaheim	60590864051	Y	N
Zion Lutheran Early Childhood Education Center (ECEC)	222 N East Street	North-central Anaheim	60590864054	Y	Y
Zion Lutheran School	1244 E Cypress St	North-central Anaheim	60590864054	Y	Y
Jefferson (Thomas) Elementary	504 E South St	Central Anaheim	60590874041	Y	Y
Olive Street Elementary	890 S Olive St	Central Anaheim	60590874041	Y	Y
Little Blessings Preschool Academy	1026 S East Street	Central Anaheim	60590863037	Y	Y
QPE Technical Institute	1557 N Gemini Pl	Central Anaheim	60590116021	Y	Y
Total	**N/A**	**N/A**	**N/A**	**92.5% Minority**	**72.5% Low-Income**

N = no; N/A = not applicable; Y = yes

IAMFs incorporated as part of Shared Passenger Track Alternative A include preparation and implementation of plans for construction management, demolition, spill prevention, hazardous materials, undocumented contamination, and hazardous materials transportation (**HMW-IAMF#5**, **HMW-IAMF#6**, **HMW-IAMF#7**, and **HMW-IAMF#8**). Because Shared Passenger Track Alternative A would not completely avoid the potential for emissions or the handling and inadvertent release of hazardous substances near educational facilities with these IAMFs, there would be a DHAE on minority and low-income populations in the Chinatown neighborhood of Los Angeles, downtown Los Angeles, Hobart/west Commerce, the Downey neighborhood in Pico Rivera, south Pico Rivera, the southwest neighborhood of West Whittier–Los Nietos CDP, the Los Nietos neighborhood of Whittier, southeast Santa Fe Springs, east Norwalk, southwest La Mirada, northeast and north Buena Park, south Fullerton, downtown Fullerton, and north-central and central Anaheim.

However, **HMW-MM#1** limits the use of extremely hazardous substances in quantities equal to or greater than the state threshold quantity specified pursuant to subdivision (j) of Section 25532 of the Health and Safety Code (as defined in 40 Code of Federal Regulations Part 355.61) within 0.25 mile of a school. Prior to construction activities, signage will be installed to delimit work areas within 0.25 mile of a school, informing the contractor not to bring extremely hazardous

substances into the area. This mitigation measure for hazardous materials is consistent with California Public Resources Code Section 21151.4. **HMW-MM#1** would be applied equally to all block groups listed in Table 5-24. With implementation of **HMW-MM#1**, the effect of hazardous materials in proximity to schools will be reduced and there would be no adverse effect. Therefore, after implementation of **HMW-MM#1**, there would not be a DHAE on minority and low-income populations related to exposure of hazardous materials during construction.

Shared Passenger Track Alternative B

Construction Near Sites of Potential Environmental Concern or Cortese List Sites

Impacts for Shared Passenger Track Alternative B would be the same as those described for Shared Passenger Track Alternative A, with the exception that Shared Passenger Track Alternative B would build the LMF at 15th Street. The 15th Street LMF is in the Redondo Junction neighborhood of Los Angeles, which is not in a minority or low-income community. Construction would involve haul routes north on S Santa Fe Avenue to Interstate 10. Construction of the 15th Street LMF would not disturb known contamination at additional sites.

Although the 26th Street LMF would not be included, construction associated with Hobart Yard modifications would still occur near the Exide property, which overlaps the project alignment and, therefore, could be exposed to a substantial volume of contaminants. Therefore, impacts on communities from Shared Passenger Track B would be the same as those of Shared Passenger Track Alternative A and there would be a potential DHAE before mitigation on minority and non-low-income communities in the Hobart and south-central Fullerton neighborhoods.

Shared Passenger Track Alternative B would implement the same mitigation measure used for Shared Passenger Track Alternative A (**HMW-MM#2**). With implementation of **HMW-MM#2**, ongoing U.S. Environmental Protection Agency remedial actions at a proposed or listed Superfund site would occur, and remediation may also need to be funded by the Authority to be accomplished in accordance with the requirements of the appropriate oversight agency. This measure would be implemented for all BGs equally and would reduce but not eliminate effects. Therefore, after implementation of **HMW-MM#2**, there would still be a DHAE on communities related to exposure of hazardous materials during construction. This DHAE may be reconsidered based on new information or comments received during the public comment period.

Handling of Hazardous Materials, Substances, or Waste within 0.25 Mile of a School

Impacts for Shared Passenger Track Alternative B would be the same as those of Shared Passenger Track Alternative A because the same 40 educational facilities are within the RSA (the RSA for schools is the project footprint plus a 0.25-mile buffer) for Shared Passenger Track Alternative B. Therefore, impacts on communities would be the same as those of Shared Passenger Track Alternative A and would represent a potential DHAE on low-income and minority communities in the south Montebello, south Pico Rivera, Los Nietos (Whittier), central Norwalk, east Norwalk, southwest La Mirada, west Fullerton, south-central Fullerton, North-central Anaheim, and southeast Anaheim neighborhoods. Shared Passenger Track Alternative B will incorporate the same IAMFs and would implement the same mitigation measure used for Shared Passenger Track Alternative A (**HMW-IAMF#5**, **HMW-IAMF#6**, **HMW-IAMF#7**, **HMW-IAMF#8**, and **HMW-MM#1**), which will minimize impacts to less-than-adverse levels. Therefore, after implementation of **HMW-MM#1**, there would not be a DHAE on communities related to exposure of hazardous materials during construction.

High-Speed Rail Station Options

High-Speed Rail Station Option: Norwalk/Santa Fe Springs

Construction Near Sites of Potential Environmental Concern or Cortese List Sites

With inclusion of the Norwalk/Santa Fe Springs HSR Station Option, which is in the minority community of east Norwalk/southwest Santa Fe Springs, impacts on communities would be the same as those of the Shared Passenger Track Alternatives in the station area. Therefore, the HSR station option will incorporate the same IAMFs used for Shared Passenger Track Alternative A (**HMW-IAMF#1**, **HMW-IAMF#3**, **HMW-IAMF#4**, **HMW-IAMF#6**, **HMW-IAMF#9**, and **GEO-**

IAMF#3), which will minimize impacts. With the IAMFs, there would not be a DHAE related to exposure of hazardous materials during construction.

Handling of Hazardous Materials, Substances, or Waste within 0.25 Mile of a School

Impacts for the Norwalk/Santa Fe Springs HSR Station Option, which is in the minority community of east Norwalk/southwest Santa Fe Springs, would be the same as those described for the Shared Passenger Track Alternatives. There are no additional schools within the station area RSA when compared to Shared Passenger Track Alternatives A and B. The project will incorporate the same IAMFs and would implement the same mitigation measure used for the Shared Passenger Track Alternatives (**HMW-IAMF#4**, **HMW-IAMF#5**, **HMW-IAMF#6**, **HMW-IAMF#7**, **HMW-IAMF#8**, and **HMW-MM#1**), which will minimize impacts on schools near the stations. With incorporation of IAMFs and implementation of mitigation measures, the risk of a hazardous materials spill would be reduced and the project would not adversely affect the community of east Norwalk/southwest Santa Fe Springs. Therefore, there would not be a DHAE related to exposure of hazardous materials during construction.

High-Speed Rail Station Option: Fullerton

Construction Near Sites of Potential Environmental Concern or Cortese List Sites

With inclusion of the Fullerton HSR Station Option, which is partially in minority and low-income BGs in downtown Fullerton, impacts on communities would be greater than those of the Shared Passenger Track Alternatives in the station area. The construction area for the HSR platform, facilities, and parking would be within a larger area and would include more extensive excavations than what would be modified under the Shared Passenger Track Alternatives. Although there are two additional potential environmental concern sites within the Fullerton HSR Station Option footprint compared to the area that would be modified under the Shared Passenger Track Alternatives, these two additional potential environmental concern sites are not on the Cortese List. However, construction and the more extensive excavation required for the Fullerton HSR Station Option within the Orange County North Basin Superfund project area would potentially cause a significant hazard to the public or environment from release of hazardous materials. Therefore, the HSR station option will incorporate the same IAMFs and mitigation measures used for Shared Passenger Track Alternative A (**HMW-IAMF#1**, **HMW-IAMF#3**, **HMW-IAMF#4**, **HMW-IAMF#6**, **HMW-IAMF#9**, **GEO-IAMF#3**, and **HMW-MM#2**), which will minimize but not eliminate impacts. Therefore, there would still be a DHAE related to exposure of hazardous materials during construction.

Handling of Hazardous Materials, Substances, or Waste within 0.25 Mile of a School

Impacts for the Fullerton HSR Station Option, which is partially in minority and low-income BGs in downtown Fullerton, would be the same as those described for the Shared Passenger Track Alternatives in the station area. There are no additional schools within the station area RSA when compared to Shared Passenger Track Alternatives A and B. The project will incorporate the same IAMFs and would implement the same mitigation measure used for the Shared Passenger Track Alternatives (**HMW-IAMF#4**, **HMW-IAMF#5**, **HMW-IAMF#6**, **HMW-IAMF#7**, **HMW-IAMF#8**, and **HMW-MM#1**), which will minimize impacts on schools near the station. With incorporation of IAMFs and implementation of mitigation measures, the risk of a hazardous materials spill would be reduced and the project would not adversely affect populations in downtown Fullerton. Therefore, there would not be a DHAE related to exposure of hazardous materials during construction.

Operation

Shared Passenger Track Alternative A

As discussed in Section 3.10 (Impact HMW-8, HMW-9, HMW-10, and HMW-11), project operation would have no adverse effects related to hazardous materials. Therefore, there would not be a DHAE.

Shared Passenger Track Alternative B

As discussed in Section 3.10 (Impact HMW-8, HMW-9, HMW-10, and HMW-11), project operation would have no adverse effects related to hazardous materials. Therefore, there would not be a DHAE.

High-Speed Rail Station Options

High-Speed Rail Station Option: Norwalk/Santa Fe Springs
As discussed in Section 3.10 (Impact HMW-8, HMW-9, HMW-10, and HMW-11), HSR station option operation would have no adverse effects related to hazardous materials. Therefore, there would not be a DHAE.

High-Speed Rail Station Option: Fullerton
As discussed in Section 3.10 (Impact HMW-8, HMW-9, HMW-10, and HMW-11), HSR station option operation would have no adverse effects related to hazardous materials. Therefore, there would not be a DHAE.

5.6.3.6 Safety and Security

Construction

Shared Passenger Track Alternative A

As discussed in Section 3.11, Shared Passenger Track Alternative A would result in an adverse effect from temporary exposure to construction site hazards (Impact SS-3). Construction would increase the potential for exposure of construction workers to construction equipment and activity hazards that could result in workplace accidents, potentially resulting in accidental injuries to and deaths of construction workers and also potentially the public in the event a workplace accident such as a fire or explosion results in off-site consequences. Construction activities could also result in exposure of construction workers to hazardous chemicals, fall hazards, and electrical hazards. Construction could potentially release hazardous materials and wastes on or near potential environmental concern sites. As discussed in Section 3.10, Impact HMW-4, Shared Passenger Track Alternative A will incorporate **HMW-IAMF#1**, **HMW-IAMF#3**, **HMW-IAMF#4**, **HMW-IAMF#6**, **HMW-IAMF#9**, and **GEO-IAMF#3** during construction, which will minimize impacts related to releases of hazardous materials and wastes on or near sites of potential environmental concern.

However, because of the extensive nature of potential impacts associated with the two Superfund sites (Orange County North Basin site and the Exide site in Vernon) and because completion of remediation activities at each site is currently unknown, construction workers could be exposed to significant exposure to contaminants associated with these sites. The two Superfund sites are being monitored and remediated under the purview of the U.S. Environmental Protection Agency, California Department of Toxic Substances Control, and the Regional Water Quality Control Board and, therefore, construction activities in areas affected by these sites would also require coordination with the applicable oversight agency. With implementation of **HMW-MM#2**, ongoing U.S. Environmental Protection Agency remedial actions at a proposed or listed Superfund site will occur, and additional coordination by the Authority with the responsible parties and applicable oversight agencies (with the purpose of obtaining all necessary approvals) may be required. Potential controls intended for the protection of human health and the environment and compliance with applicable cleanup requirements would be implemented as necessary. With **HMW-MM#2**, effects on construction workers will be reduced but not eliminated. However, because the demographics of the future workforce are unknown and workers may not be residents of the communities in the safety and security RSA, this adverse effect does not represent a DHAE.

Shared Passenger Track Alternative B

The 15th Street LMF is in the Redondo Junction neighborhood of Los Angeles, which is not in a minority or low-income community. With the LMF at 15th Street, temporary exposure of workers to construction site hazards during construction would be similar to that described for Shared

Passenger Track Alternative A with the exception of potential exposure to construction site hazards associated with the Exide site. The alternatives primarily differ in the location of the LMF; as described in Section 3.10, the 26th Street LMF (that traverses the entire Exide site) would not be included under Shared Passenger Track Alternative B and therefore potential exposure to construction site hazards associated with the Exide Technologies Plant site would be reduced for Shared Passenger Track Alternative B. Otherwise, impacts in terms of exposure to temporary construction hazards during project construction are expected to be similar for both alternatives.

The same IAMFs listed for Shared Passenger Track Alternative A (**SS-IAMF#2**, **SS-IAMF#5**, **HMW-IAMF#1**, **HMW-IAMF#3**, **HMW-IAMF#4**, **HMW-IAMF#6**, **HMW-IAMF#9**, and **GEO-IAMF#3**) apply to Shared Passenger Track Alternative B. The same mitigation measure listed for Shared Passenger Track Alternative A (**HMW-MM#2**) applies to Shared Passenger Track Alternative B. With **HMW-MM#2**, effects will be reduced but not eliminated. However, because the demographics of the future workforce are unknown and workers may not be residents of the communities in the safety and security RSA, this adverse effect does not represent a DHAE.

High-Speed Rail Station Options

High-Speed Rail Station Option: Norwalk/Santa Fe Springs

With inclusion of the Norwalk/Santa Fe Springs HSR Station Option, which is in the minority community of east Norwalk/southwest Santa Fe Springs, exposure to temporary construction site hazards would be the same as that described for the Shared Passenger Track Alternatives within the station area. The same IAMFs listed for Shared Passenger Track Alternative A (**SS-IAMF#2**, **SS-IAMF#5**, **HMW-IAMF#1**, **HMW-IAMF#3**, **HMW-IAMF#4**, **HMW-IAMF#6**, **HMW-IAMF#9**, and **GEO-IAMF#3**) apply to the Norwalk/Santa Fe Springs HSR Station Option. Because the demographics of the future workforce are unknown and workers may not be residents of the communities in the safety and security RSA, this effect does not represent a DHAE.

High-Speed Rail Station Option: Fullerton

With inclusion of the Fullerton HSR Station Option, which is partially in minority and low-income BGs in downtown Fullerton, impacts would be the same as those described for the Shared Passenger Track Alternatives. The same IAMFs listed for Shared Passenger Track Alternative A (**SS-IAMF#2**, **SS-IAMF#5**, **HMW-IAMF#1**, **HMW-IAMF#3**, **HMW-IAMF#4**, **HMW-IAMF#6**, **HMW-IAMF#9**, and **GEO-IAMF#3**) apply to the Fullerton HSR Station Option. Because the demographics of the future workforce are unknown and workers may not be residents of the communities in the safety and security RSA, this effect does not represent a DHAE.

Operation

Shared Passenger Track Alternative A

As discussed in Section 3.11, Impact SS-12, operation could result in delays to emergency response times. The project would retain eight existing at-grade crossings in Anaheim, leading to increased gate-down events, up to four per hour, because of added HSR train frequency. Although no new at-grade crossings would be introduced, the increased frequency of gate-down events could delay emergency response vehicles either by requiring them to wait at closed gates or detour to alternate routes. These at-grade crossings are in central Anaheim and are all in minority and low-income BGs (Table 5-25); therefore, before mitigation, these impacts could result in a DHAE.

Table 5-25 Existing At-Grade Crossings

Grade Separation	Community/ Neighborhood	Census BGs Affected	Minority?	Low-Income?
Orangethorpe Avenue	Central Anaheim	60590865021	Yes	Yes
La Palma Avenue	Central Anaheim	60590865021	Yes	Yes
Sycamore Street	Central Anaheim	60590865022	Yes	Yes

Grade Separation	Community/ Neighborhood	Census BGs Affected	Minority?	Low-Income?
Broadway Avenue	Central Anaheim	60590873023	Yes	Yes
Santa Ana Street	Central Anaheim	60590863011	Yes	Yes
South Street	Central Anaheim	60590874041	Yes	Yes
Vermont Avenue	Central Anaheim	60590863011	Yes	Yes
Ball Road	Central Anaheim	60590863035	Yes	Yes
Total	**N/A**	**N/A**	**100%**	**100%**

BG = block group; N/A = not applicable

Incorporation of **TR-IAMF#13** would ensure that future passenger rail schedules are coordinated so that there would not be traffic queues from combined passenger rail gate-down sequences, which could affect emergency response. **SS-MM#1** requires the Authority to coordinate with the City of Anaheim on monitoring of the at-grade crossings and developing an emergency vehicle priority treatment plan to address impacts resulting from HSR operations. With implementation of **SS-MM#1**, all operational effects would be reduced to have no adverse effects related to emergency response. Therefore, with **SS-MM#1**, there would not be a DHAE related to safety and security during operations.

Shared Passenger Track Alternative B

As discussed in Section 3.11 (Impact SS-12), impacts would be the same as described for Shared Passenger Track Alternative A, because the location of the LMF would not affect emergency response times at the eight at-grade crossings in Anaheim. Therefore, there would not be a DHAE.

High-Speed Rail Station Options

High-Speed Rail Station Option: Norwalk/Santa Fe Springs

With inclusion of the Norwalk/Santa Fe Springs HSR Station Option, impacts related to permanent interference with emergency response times would be the same as those described for the Shared Passenger Track Alternatives. Operation of the HSR station elements would not include activities that would interfere with emergency response times in the vicinity of the station area. Therefore, there would not be a DHAE.

High-Speed Rail Station Option: Fullerton

With inclusion of the Fullerton HSR Station Option, impacts related to permanent interference with emergency response times would be greater than those described for the Shared Passenger Track Alternatives. Because HSR trains would stop in Fullerton, and the analysis conservatively assumed the train would be traveling at slower speeds through the at-grade crossings, the gate-down times would be higher than for the Shared Passenger Track Alternatives. **TR-IAMF#13** and **SS-MM#1** will ensure that effects from permanent interference with emergency response times are not adverse. Therefore, there would not be a DHAE.

5.6.3.7 Socioeconomics and Communities

Construction

Shared Passenger Track Alternative A

Impacts on communities related to socioeconomics and communities are discussed below. As discussed in Section 3.12 (Impact SO-1), project construction would have an adverse effect from disruption or division of existing communities related to community access and displacements during construction. In addition, construction would have a beneficial effect from changes in employment during project construction (Impact SO-5).

Community Access and Cohesion

Access to community facilities could be temporarily modified during construction, potentially inconveniencing patrons, but would be maintained during construction as required by **SOCIO-IAMF#1**. As discussed in Table 5-8, the overall socioeconomics community analysis RSA is 84 percent minority and 56 percent low-income. Therefore, there is a possibility that construction-related access could result in a potential DHAE on low-income and minority communities in both counties. Construction activities could be particularly disruptive to community facilities and institutions that have normal hours of operation that coincide with construction work hours. However, roadway capacity would be maintained to the greatest extent possible in all communities. In addition, project construction would relocate the Commerce and Buena Park Metrolink Stations and modify the Norwalk/Santa Fe Springs and Fullerton Metrolink/Amtrak Stations, which are all in low-income and minority communities. Access to these stations would be altered during the construction period but would be maintained to prevent impacts on travel patterns and cohesion in communities.

In some instances, construction of grade separations would result in temporary disruptions to existing communities and neighborhoods. Table 5-26 presents the communities potentially affected by grade separations.

Table 5-26 Grade Separations

Grade Separation	Community/ Neighborhood	Census BGs Affected	Minority?	Low-Income?
State College Blvd	Southeast Anaheim	60590761042	Yes	No
		60590863035	Yes	Yes
		60590761043	No	No
Pioneer Blvd	West Whittier–Los Nietos CDP	60375027004	Yes	No
		60375023031	Yes	Yes
Cerritos Ave	Hermosa Village in Anaheim	60590761042	Yes	No
		60590863035	Yes	Yes
		60590761043	No	No
Los Nietos Rd and Norwalk Blvd	Northern Santa Fe Springs	60375027004	Yes	No
Lakeland Rd (Partial Grade Separation)	Southeast Santa Fe Springs	60375042002	Yes	No
Total	**N/A**	**N/A**	**80.0%**	**30.0%**

BG = block group; CDP = Census-Designated Place; N/A = not applicable

As presented in Table 5-26, 80.0 percent of potentially affected BGs in grade-separation areas are in minority communities and 30.0 percent are in low-income communities. Therefore, there is a possibility changes in access from their construction could result in a potential DHAE on low-income and minority communities. Specifically, construction of the proposed Pioneer Boulevard undercrossing could result in community disruptions from access changes, because this area of West Whittier–Los Nietos CDP is developed and contiguous on both sides of the rail corridor and the existing crossing is a vital connection between the neighborhoods on either side of the rail corridor. The existing crossing is a vital connection between the neighborhoods on either side of the rail corridor and provides access to Pioneer High School. Although the Cerritos Avenue grade separation is not in a residential area, Cerritos Avenue does provide access to the Salvation Army Emergency Center and Anaheim Adult Rehabilitation Center. Similarly, the Lakeland Road partial grade separation is not in a residential area but provides access to multiple community facilities in northeastern Norwalk, including the California Conservation Corps, Metropolitan State

Hospital Museum, Norwalk Community Hospital, and Southern Youth Correctional Reception Center and Clinic.

The grade-separation improvements would be phased so that vehicular, bicycle, pedestrian, and emergency access across the existing rail corridor would be maintained. However, construction of the grade separations would still result in a new physical barrier to the affected low-income and minority communities; because all of the grade separations would occur in minority communities, low-income communities, or both, there is a potential DHAE. **SO-MM#2** would reduce impacts associated with the division of communities from grade-separation construction by evaluating the community's modified access, including the effectiveness of providing overcrossings or undercrossings of the HSR track to allow continued use of community facilities and connectivity. These mitigation measures would be implemented for all communities. The Authority will also conduct community workshops about the future use of the area beneath the rail guideway, where these would exist. These meetings will provide the community an opportunity to identify design and use options that could strengthen community cohesion and be compatible with the existing community character. The Authority will be responsible for implementing the measures to reduce impacts through project design and through the long-term management of the measures. By implementing measures identified by the affected communities, **SO-MM#2** will effectively mitigate impacts on community cohesion.

In conclusion, construction activities, including grade separations and Metrolink station modifications or relocations, could have an indirect impact on community cohesion for communities by temporarily changing travel patterns and access. However, as discussed above, the Authority has included multiple IAMFs and mitigation measures that will minimize and reduce the potential effects related to access disruptions for communities. With incorporation of these IAMFs and implementation of these mitigation measures, the effect on community cohesion will not be adverse, and there would not be a DHAE related to community access and cohesion.

Residential and Business Displacements

Construction of Shared Passenger Track Alternative A would require acquiring right-of-way, which would displace residents and businesses and therefore potentially disrupt existing communities. There would be no displacement of community facilities. As presented in Table 5-27, residential and business displacements would take place primarily in minority communities.

Table 5-27 Shared Passenger Track Alternative A Displacements within the Community Analysis Resource Study Area

Residential and Business Displacements	Number of Displacements (Percentage of Total Displacements)
Total number of residential displacements in RSA	3
Residential displacements in minority BG	3 (100%)
Residential displacements in low-income BG	3 (100%)
Residential displacements in nonminority or non-low-income BG	0 (0%)
Total number of business displacements in RSA	256
Business displacements in minority BG	203 (79.3%)
Business displacements in low-income BG	51 (19.9 %)
Business displacements in nonminority and non-low-income BG	42 (16.4%)

Sources: U.S. Census Bureau 2021; Authority 2025b
BG = block group; RSA = resource study area

Residential displacements, which would only occur in areas with low-income and minority communities, cannot be avoided. Three residential units with an estimated 12 residents would be

displaced in the southwest neighborhood of West Whittier–Los Nietos CDP. All displacements would occur in BG 60375023032, which is a minority and low-income BG. Pioneer Boulevard and the existing rail corridor already divide the existing residential neighborhoods. Because project construction would be limited to widening this existing barrier, residential displacements would not result in an adverse impact related to the division of existing communities.

Property acquisitions and protection of residential property were brought up as concerns during outreach in Whittier (Table 9-1). A surplus of suitable replacement residential sites exists, and all displaced residents would be accommodated. Additionally, IAMFs included in the project design will provide individualized relocation assistance to displaced residents and businesses (**SOCIO-IAMF#2** and **SOCIO-IAMF#3**). As described in Section 3.12, compliance with the Uniform Relocation Assistance and Real Property Acquisition Policies Act (**SOCIO-IAMF#2**) would address effects related to property acquisitions by providing relocation assistance to all residents displaced by the project. In addition, **SO-MM#1** would reduce impacts on community cohesion from residential displacements by making efforts to locate suitable replacement properties for displaced residents and taking measures to purchase vacant land or buildings in the area for those who wish to remain in the immediate vicinity.

Shared Passenger Track Alternative A would displace 256 commercial and industrial businesses and 2,948 employees in the RSA. Businesses include automotive, wholesale suppliers, restaurants, gas stations, distribution companies, and more. A complete list of commercial and industrial displacements is provided in Appendix C of the *Los Angeles to Anaheim Project Section Draft Relocation Impact Report* (Authority 2025b). A breakdown of displacements by census BG is presented in Table 5-28. As presented in Table 5-28, the percentage of displacements in minority BGs exceeds Los Angeles County's minority population (74.4 percent), and the percentage of displacements in low-income BGs exceeds Orange County's low-income population (23.3 percent). Therefore, business displacements represent a potential DHAE on minority communities in Los Angeles County and low-income communities in Orange County.

Table 5-28 Business Displacements within the Community Analysis Resource Study Area

City	Neighborhood	BG	Number of Business Displacements	Minority BG?	Low-Income BG?
Los Angeles County					
Vernon	Hobart	60379800161	37	Yes	No
Commerce	Hobart/west Commerce	60375323022	111	Yes	No
Commerce	Hobart/west Commerce	60375323042	5	Yes	Yes
Pico Rivera	Downey	60375026021	1	Yes	Yes
Santa Fe Springs	Southeast Santa Fe Springs	60375042002	4	Yes	No
Santa Fe Springs	Southeast Santa Fe Springs	60379800341	6	Yes	No
Santa Fe Springs	Northern Santa Fe Springs	60375027004	7	Yes	No
La Mirada	Southwest La Mirada	60375039012	5	No	No
Total	**N/A**	**N/A**	**176**	**97.2%**	**3.4%**
Orange County					
Buena Park	Cerritos/La Palma	60375039024	1	No	No
Buena Park	Northeast Buena Park	60591106071	12	No	Yes
Fullerton	Almond	60590018011	1	Yes	Yes

City	Neighborhood	BG	Number of Business Displacements	Minority BG?	Low-Income BG?
Fullerton	Downtown Fullerton	60590112004	2	No	No
Fullerton	Downtown Fullerton	60590110001	20	Yes	Yes
Anaheim	Platinum Triangle	60590863034	1	No	No
Anaheim	Southeast Anaheim	60590863035	10	Yes	Yes
Anaheim	Platinum Triangle	60590863036	33	No	No
Total	**N/A**	**N/A**	**80**	**38.8%**	**53.8%**

Sources: U.S. Census Bureau 2021; Authority 2025b
BG = block group; N/A = not applicable

A comparative analysis between the inventory of available commercial and industrial units and number of displaced businesses finds there are sufficient replacement units to accommodate the displaced properties in each of the respective cities, except for Vernon and Commerce. Vernon has a deficit of 16 commercial units, and Commerce has a deficit of 43 commercial units. During the engagement process, property acquisition and business displacements were expressed as key concerns of many community members in Commerce (Table 9-1). Shared Passenger Track Alternative A includes CA-specific measures that include development and implementation of a relocation mitigation plan with a subsection dedicated to addressing adverse effects on businesses in the communities (**CA-IAMF#4, Business Relocation/Displacement Assistance**). As part of this IAMF, the Authority will hold community roundtable meetings to seek and consider input from affected communities prior to finalizing the Authority's Relocation Mitigation Plan. In addition, **CA-IAMF#2, Business Spotlighting**, will provide assistance to businesses in adversely affected communities to maintain visibility during construction, such as providing signage and targeted advertising and marketing campaigns, incentives for construction worker patronage (as applicable), or Authority-sponsored community events.

With incorporation of **SOCIO-IAMF#2**, **SOCIO-IAMF#3**, and **CA-IAMF#4**, and implementation of **SO-MM#1**, it is expected that displaced residents and businesses would relocate within relatively close proximity (e.g., in the same or adjacent community or city) to their current locations. After incorporation of these measures, communities with a surplus of suitable replacement sites would not experience a DHAE. However, because there is a deficit of suitable replacement sites to accommodate the 153 business displacements in Commerce and Vernon, businesses may be unable to relocate in the same community. Therefore, adverse impacts would remain in these communities from these displacements. Of these 153 displacements, 100 percent are in minority communities and 3.3 percent are in low-income communities; therefore, adverse effects would disproportionately affect minority communities. No additional practicable mitigation measures are available or known at this time to further reduce this impact. Because there is a deficit of suitable replacement sites and adverse effects would remain, there would be a DHAE on minority communities from business displacements in the Hobart neighborhood in Vernon and west Commerce.

Changes in Employment

As discussed in Section 3.12 (Impact SO-5), construction of Shared Passenger Track Alternative A has the potential to stimulate short-term employment and would support 31,950[5] additional job-

[5] Employment effects are rounded up to the nearest 10 jobs, and totals may not add because of rounding. Job estimates were scaled to reflect an estimate for savings that could be reasonably accrued from standard value engineering review. The savings estimate is based on actual Authority engineering design review of the project section. More detail on the type of refinements considered as value engineering is found in the Preliminary Engineering for Project Definition General Notes.

years in the two affected counties.[6] Of the total created annual job-years, 15,300 would be direct and 16,650 would be indirect and induced. Given the number of unemployed workers in the RSA, there would be an ample supply of local residents to fill many of the new jobs. These benefits would be experienced by communities throughout Los Angeles and Orange Counties; however, they would primarily be experienced by low-income and minority communities, who are predominant throughout the counties. Because there would not be an adverse impact, there would be no DHAE related to changes in employment.

Shared Passenger Track Alternative B

With the LMF location at 15th Street in the Redondo Junction neighborhood of Los Angeles, which is not in minority or low-income BGs, disruption of community cohesion during construction would be the same as described for Shared Passenger Track Alternative A. The following discussion focuses on impacts specific to the 15th Street LMF that would occur in addition to the impacts discussed above for Shared Passenger Track Alternative A.

Community Access and Cohesion

The 15th Street LMF is in an industrial area adjacent to an existing rail corridor and is not in a low-income or minority community; therefore, project construction would not result in changes to community character that would disrupt community cohesion for minority or low-income populations. With incorporation of IAMFs and implementation of mitigation measures discussed above, construction activities will not serve as a physical barrier that would divide or isolate communities. Because the 15th Street LMF is not in a low-income or minority community, the impact would not result in a DHAE related to community access and cohesion.

Residential and Business Displacements

Property acquisitions for project construction would be the same as those described for Shared Passenger Track Alternative A, with 18 additional business displacements in BG 60372060511 in the Redondo Junction neighborhood in Los Angeles; there would be no residential displacements associated with the LMF. The Redondo Junction neighborhood in Los Angeles is not in minority or low-income BGs. All other displacements would be the same as described for Shared Passenger Track Alternative A; a complete list of commercial and industrial displacements is provided in Appendix C of the *Los Angeles to Anaheim Project Section Draft Relocation Impact Report* (Authority 2025b). With incorporation of **SOCIO-IAMF#2**, **SOCIO-IAMF#3**, and **CA-IAMF#4**, and implementation of **SO-MM#1**, it is expected that displaced residents and businesses would relocate within relatively close proximity (e.g., in the same or adjacent community or city) to their current locations. However, because of the lack of sufficient replacement sites in Commerce and Vernon, businesses in these cities may not be able to relocate in the same community. Therefore, because adverse effects on low-income and minority communities would remain after implementation of **SO-MM#1**, there would be a DHAE on minority communities from business displacements in the Hobart neighborhood in Vernon and west Commerce. No additional practicable mitigation measures are available or known at this time to further reduce this impact, but additional mitigation measures may be identified during subsequent outreach to the affected communities.

Changes in Employment

As discussed in Section 3.12, because the LMF location would not affect construction employment estimates, changes to employment for Shared Passenger Track Alternative B would be the same as those described for Shared Passenger Track Alternative A. Benefits would be experienced by communities throughout Los Angeles and Orange Counties; however, they would primarily be experienced by low-income and minority communities, who are predominant throughout the counties. Because there would not be an adverse impact, there would be no DHAE.

[6] An “annual job-year” is equivalent to one person fully employed for 1 year.

High-Speed Rail Station Options

High-Speed Rail Station Option: Norwalk/Santa Fe Springs

With the Norwalk/Santa Fe Springs HSR Station Option, which is in the minority community of east Norwalk/southwest Santa Fe Springs, the following disruption of community cohesion during construction would occur when compared to the Shared Passenger Track Alternatives.

Community Access and Cohesion

The location of the Norwalk/Santa Fe Springs HSR Station Option is an existing transportation center; therefore, the addition of an HSR station would not substantially change the community's character or disrupt community cohesion. In addition, no community facilities would be displaced by the station option, and no additional community facilities would be affected in comparison to Shared Passenger Track Alternative A. Because station construction would occur adjacent to an existing rail corridor, construction would not result in physical barriers that would disrupt community cohesion, and there would not be a DHAE.

Residential and Business Displacements

There would be no additional residential or business relocations associated with the Norwalk/ Santa Fe Springs HSR Station Option, which is in the minority community of east Norwalk/ southwest Santa Fe Springs. Therefore, there would not be a DHAE from property acquisitions that would affect community cohesion.

Changes in Employment

With the Norwalk/Santa Fe Springs HSR Station Option, changes to employment would include slightly higher construction-related employment when compared to the Shared Passenger Track Alternatives. As discussed in Section 3.12 (Impact SO-5), construction of the Norwalk/Santa Fe Springs HSR Station Option would create an estimated 840 total annual job-years, with 400 direct and 440 indirect or induced annual job-years in construction. During each of the peak years of construction (2035 and 2036), project-related expenditures in the RSA were estimated to support 150 annual job-years, accounting for 70 direct jobs and 80 indirect and induced jobs. These benefits would be experienced by communities throughout Los Angeles County. Because there would not be an adverse impact, there would be no DHAE.

High-Speed Rail Station Option: Fullerton

With inclusion of the Fullerton HSR Station Option, the following additional disruption of community cohesion during construction would occur compared to the Shared Passenger Track Alternatives. Because station construction would not result in physical barriers that would disrupt community cohesion, there would not be a DHAE.

Community Access and Cohesion

The location of the Fullerton HSR Station Option, which is partially in minority and low-income BGs in downtown Fullerton, is an existing transportation center; therefore, the addition of an HSR station would not substantially change the community's character or disrupt community cohesion. In addition, no community facilities would be displaced by the HSR station option, and no additional community facilities would be affected in comparison to Shared Passenger Track Alternative A. Because station construction would occur adjacent to an existing rail corridor, construction would not result in physical barriers that would disrupt community cohesion. Therefore, there would not be a DHAE.

Residential and Business Displacements

The Fullerton HSR Station Option would displace five additional commercial businesses and four additional industrial businesses in downtown Fullerton (Table 5-29). The businesses include automotive, fitness, warehousing, and brewing facilities. As presented in Table 5-29, because the majority of displacements would occur in low-income BGs, the displacements represent a potential DHAE on low-income populations in downtown Fullerton.

Table 5-29 Fullerton High-Speed Rail Station Option Business Displacements

BG	Neighborhood	Number of Business Displacements	Minority BG?	Low-Income BG?
60590112004	Downtown Fullerton	4	No	No
60590113003	Downtown Fullerton	5	No	Yes
Total	**N/A**	**9**	**0%**	**55.5%**

BG = block group; N/A = not applicable

A comparative analysis between the inventory of available commercial and industrial units and number of displaced businesses finds there are sufficient replacement units to accommodate the displaced properties in Fullerton for displacements. The project will minimize the impacts on displacements by incorporating **SOCIO-IAMF#2**, **SOCIO-IAMF#3**, and **CA-IAMF#4**, and implementing **SO-MM#1**. With incorporation of these measures, impacts on displacements would be reduced and there would not be an adverse effect from displacements. Because there would not be an adverse effect, displacements for the Fullerton HSR Station Option would not result in a DHAE.

Changes in Employment

With the Fullerton HSR Station Option, which is partially in minority and low-income BGs in downtown Fullerton, changes to employment would include slightly higher construction-related employment when compared to the Shared Passenger Track Alternatives. As discussed in Section 3.12 (Impact SO-5), construction of the Fullerton HSR Station Option would create an estimated 1,740 total annual job-years, with 820 direct and 920 indirect or induced annual job-years in construction. During each of the peak years of construction (2035 and 2036), project-related expenditures in the RSA were estimated to support 310 annual job-years, accounting for 150 direct jobs and 160 indirect and induced jobs. These benefits would be experienced by communities throughout Orange County Because there would not be an adverse impact, there would be no DHAE.

Operation

Impacts on communities related to socioeconomics and communities are discussed below. As discussed in Section 3.12 (Impact SO-11), operation would have a beneficial effect from changes in employment during project construction.

Shared Passenger Track Alternative A

Disruption or Division of Existing Communities During Operation

As discussed in Section 3.12, Shared Passenger Track Alternative A would not create physical division within or between existing communities. Roadway modifications may change some access because of new grade separations and modifications to existing grade separations, but these modifications would benefit transit, bicycle, and pedestrian facilities, as well as provide a benefit to safety in communities. Project operation would bring social benefits to communities and the region by improving access to jobs and community amenities. Those who live or work in the general vicinity of the existing ARTIC, which is partially in a minority community in the Platinum Triangle neighborhood, would benefit from improved access to new HSR facilities. The HSR station would promote transit-oriented development on underused properties in the area, thus serving as a catalyst for planned growth in Anaheim's Platinum Triangle. Urban development in the 828-acre Platinum Triangle neighborhood surrounding ARTIC is guided by the Platinum Triangle Master Land Use Plan. Because ARTIC is already an existing transit hub and local development is guided by a master land use plan, new HSR facilities would not be the primary catalyst for growth in this neighborhood. The HSR station would likely encourage some business and residential redevelopment while also attracting new businesses, resulting in primarily beneficial social impacts. Planned operation is anticipated to provide fast, frequent, and reliable service between the project section and suburban/exurban communities (Authority 2018), which

may encourage some households to relocate in the project section or to exurban communities with convenient access to HSR stations. The availability of housing where the ARTIC HSR Station is proposed or in nearby communities would be consistent with adopted land use plans, policies, and regulations of local governments. Therefore, increases in population would not be new regional growth or growth stimulated by local economic expansion; rather, it would be a redistribution of existing residents in the region and its exurban communities and would not lead to changes in community cohesion during operation. These benefits would result in improvements to community cohesion and character for communities throughout and around the RSA. Therefore, there would not be a DHAE related to the disruption or division of communities during operation.

Changes in Employment During Operation

As discussed in Section 3.12 (Impact SO-11), operation and maintenance of Shared Passenger Track Alternative A are projected to result in employment growth and the creation of 680 direct, indirect, and induced jobs in Los Angeles and Orange Counties by 2040, which could employ members from communities throughout the RSA. In addition, increased accessibility is expected to result in 4,900 additional jobs in Los Angeles County by 2040. In the project section, these benefits would be experienced by communities throughout Los Angeles and Orange Counties. Therefore, there would not be a DHAE from changes in employment during operation.

Shared Passenger Track Alternative B

Disruption or Division of Existing Communities During Operation

As discussed for Shared Passenger Track Alternative A, Shared Passenger Track Alternative B would not create physical division within or between existing communities. Project operation would bring social benefits to communities and the region by improving access to jobs and community amenities. Those who live or work in the general vicinity of the station would benefit from improved access to new HSR facilities. Therefore, there would not be a DHAE related to the disruption or division of communities during operation.

Changes in Employment During Operation

With the LMF at 15th Street in the Redondo Junction neighborhood of Los Angeles, which is not in minority or low-income BGs, changes to employment related to operations, maintenance, and increased mobility would be similar to those described for Shared Passenger Track Alternative A. These benefits would be experienced by communities throughout Los Angeles and Orange Counties. Because there would be no adverse impacts, there would not be a DHAE from changes in employment during operation.

High-Speed Rail Station Options

High-Speed Rail Station Option: Norwalk/Santa Fe Springs

Disruption or Division of Existing Communities During Operation

With the Norwalk/Santa Fe Springs HSR Station Option, which is in the minority community of east Norwalk/southwest Santa Fe Springs, project operation would increase regional access and connectivity, especially for communities near the station. The station would not create physical division within or between existing communities because it would be along an existing rail corridor. In addition, station operations would bring social benefits to communities throughout the region by improving access to jobs and community amenities. These benefits would result in improvements to community cohesion and character for communities throughout and around the corridor and station area. Therefore, there would not be a DHAE related to the disruption or division of communities during operation.

Changes in Employment During Operation

Changes to employment from project operation and maintenance of the Norwalk/Santa Fe Springs HSR Station Option in the RSA are not expected to be substantially different from those

of Shared Passenger Track Alternatives.[7] The majority of jobs resulting from HSR 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. These benefits would be experienced by communities throughout Los Angeles County In addition, the Norwalk/Santa Fe Springs HSR Station Option is in the minority community of east Norwalk/southwest Santa Fe Springs and operational employment impacts may provide additional benefits to the communities in the area. Because there would be no adverse impacts, there would not be a DHAE from changes in employment during operation.

High-Speed Rail Station Option: Fullerton

Disruption or Division of Existing Communities During Operation

With the Fullerton HSR Station Option, which is partially in minority and low-income BGs in downtown Fullerton, project operation would increase regional access and connectivity for all communities near the station. The station would not create physical division within or between existing communities because it would be along an existing rail corridor. As discussed above, station operations would bring social benefits to communities in the region by improving access to jobs and community amenities. These benefits would result in improvements to community cohesion and character for all communities throughout and around the RSA. Therefore, there would not be a DHAE related to the disruption or division of communities during operation.

Changes in Employment During Operation

With the Fullerton HSR Station Option, changes to employment from project operation and maintenance are not expected to be substantially different from those discussed for the Norwalk/Santa Fe Springs HSR Station Option. As discussed above, projected job creation from project operation and increased accessibility would provide benefits to the local economy. These benefits would be experienced by communities throughout Orange County Because there would be no adverse impacts, there would not be a DHAE from changes in employment during operation.

5.6.3.8 Parks, Recreation, and Open Space

Construction

Shared Passenger Track Alternative A

As discussed in Section 3.15, Shared Passenger Track Alternative A would result in an adverse effect related to: diminished access to or established use of the recreational resources in Table 5-30 (Impact TR-4) and permanent easements or acquisitions of property from parks and recreation (Impact TR-5).

As presented in Table 5-30, the majority of resources that construction would diminish access to are in minority communities. Therefore, there is a potential DHAE related to parks and recreation prior to mitigation. During outreach, impacts on parks and recreation were not brought up as a concern among communities.

Table 5-30 Diminished Access to or Use of Recreational Resources in the Resource Study Area

Recreational Resource	Neighborhood	BG	Minority BG?	Low-Income BG?
Rio Hondo River Trail	McCampbell in Pico Rivera	60375025002	Yes	No
Rio Hondo River Bike Path		60375323041	Yes	Yes

[7] It is not possible to estimate the long-term job effects that would result from operations and maintenance of new station sites because there are no historical data to input into the Regional Input-Output Modeling System II model.

Recreational Resource	Neighborhood	BG	Minority BG?	Low-Income BG?
	McCampbell in Pico Rivera, Bandini in Montebello	60375007006	Yes	No
		60375321021	Yes	No
		60375025002	Yes	No
San Gabriel River Trail	Follows the San Gabriel River along Pico Rivera's eastern border, from Whittier Junction to south Pico Rivera	60375026042	Yes	No
		60375027001	Yes	Yes
		60375023031	Yes	No
		60375024021	Yes	No
		60375026031	Yes	No
		60375778001	Yes	No
		60375519002	Yes	No
San Gabriel River Bike Path	Southwest West Whittier–Los Nietos CDP, south Pico Rivera	60375023031	Yes	No
		60375026031	Yes	No
		60375024021	Yes	Yes
		60375027001	Yes	Yes
Coyote Creek North Fork Bikeway	East Norwalk/south Santa Fe Springs	60379800341	Yes	No
Coyote Creek Main Branch Bikeway Extension (planned)	Connects Cerritos/La Palma in Buena Park to south La Mirada	60591106062	Yes	No
		60591106043	Yes	Yes
		60591106061	Yes	Yes
		60591106071	No	No
		60375039024	No	No
Brea Creek Bastanchury Corridor (planned)	Northeast Buena Park	60591106041	Yes	No
		60591106054	Yes	No
		60591106031	Yes	Yes
		60591106072	Yes	Yes
		60591106073	Yes	Yes
Union Pacific Trail Phase II	South-central Fullerton	60590113001	Yes	Yes
		60590112001	No	Yes
		60590113001	No	Yes
		60590113003	No	Yes
		60590112004	No	No
Total	**N/A**	**N/A**	**81.3%**	**40.6%**

BG = block group; CDP = Census-Designated Place; N/A = not applicable

Shared Passenger Track Alternative A will be designed to maintain access to existing park, recreation, and open space facilities in communities during construction through incorporation of **PK-IAMF#1**. However, as discussed in Section 3.15, the project would require temporary construction easements that would temporarily diminish access to resources in Table 5-30. With implementation of **PR-MM#1**, portions of the recreational resources listed above would remain open and accessible during project construction and detours would be established for portions of the paths that would be temporarily closed during construction. In addition, **PR-MM#2** would ensure that connections to recreational resource portions or nearby roadways are maintained after construction. These mitigation measures would be applied equally to all communities in the RSA. Although the majority of parks affected by Shared Passenger Track Alternative A are in low-income and minority communities, with implementation of **PR-MM#1** and **PR-MM#2**, all construction-period effects would be reduced to have no adverse effects on parks and recreation in communities. Therefore, with **PR-MM#1** and **PR-MM#2**, there would not be a DHAE related to diminished access to parks, recreation, and open space during construction.

As discussed in Impact PR-5, construction of Shared Passenger Track Alternative A would occur directly adjacent to and within the resource boundaries of the Union Pacific Trail Phase II. Approximately 0.18 acre would be acquired for implementation of the project and an approximately 110-foot segment of the trail would need to be realigned to maintain trail connectivity. This would constitute a permanent change to its planned configuration that could reduce the capacity, function, or value of the resource. Because the Union Pacific Trail Phase II is within the mostly low-income community of south-central Fullerton, this represents a potential DHAE. With implementation of **PR-MM#4**, impacts on the resource will be minimized and there would not be a DHAE related to permanent acquisitions of property from parks and recreation.

Shared Passenger Track Alternative B

Impacts for Shared Passenger Track Alternative B would be similar to those described for Shared Passenger Track Alternative A with the exception of a portion of the planned Los Angeles River Trail. The trail would be 0.5 mile from the nearest temporary construction easement. Incorporation of **PK-IAMF#1** and implementation of **PR-MM#1** will ensure that impacts from diminished access are minimized. Because the 15th Street LMF is in the Redondo Junction neighborhood of Los Angeles, which is not in minority or low-income BGs, there would not be a DHAE related to parks, recreation, and open space during construction.

High-Speed Rail Station Options

High-Speed Rail Station Option: Norwalk/Santa Fe Springs

With the Norwalk/Santa Fe Springs HSR Station Option, which is in the minority community of east Norwalk/southwest Santa Fe Springs, there would be no additional temporary construction impacts that would diminish access to recreational resources. No additional recreational resources are anticipated to be affected by construction of this HSR station option. Therefore, there would not be a DHAE related to parks, recreation, and open space during construction.

High-Speed Rail Station Option: Fullerton

With the Fullerton HSR Station Option, which is partially in minority and low-income BGs in downtown Fullerton, there would be no temporary construction impacts that would diminish access to recreational resources. No other recreational resources are anticipated to be affected by construction of this HSR station option. Therefore, there would not be a DHAE related to parks, recreation, and open space during construction of this HSR station option.

Operation

Shared Passenger Track Alternative A

As discussed in Section 3.15 (Impact PR-6, PR-7, and PR-8), project operation would have no effect on parks and recreational resources related to permanent changes from noise and would have no adverse effect related to permanent visual changes or deterioration of recreational resources from increased use. Therefore, there would not be a DHAE.

Shared Passenger Track Alternative B

As discussed in Section 3.15 (Impact PR-6, PR-7, and PR-8), impacts would be the same as described for Shared Passenger Track Alternative A. Project operation would have no effect on parks and recreational resources related to permanent changes from noise and would have no adverse effect related to permanent visual changes or deterioration of recreational resources from increased use. Therefore, there would not be a DHAE.

High-Speed Rail Station Options

High-Speed Rail Station Option: Norwalk/Santa Fe Springs

The Norwalk/Santa Fe Springs HSR station option is in the minority community of east Norwalk/ southwest Santa Fe Springs. As discussed in Section 3.15 (Impact PR-6, PR-7, and PR-8), impacts would be the same as described for Shared Passenger Track Alternative A. HSR station option operation would have no effect on parks and recreational resources related to permanent changes from noise and would have no adverse effect related to permanent visual changes or deterioration of recreational resources from increased use. Therefore, there would not be a DHAE.

High-Speed Rail Station Option: Fullerton

As discussed in Section 3.15 (Impact PR-6, PR-7, and PR-8), impacts would be the same as described for Shared Passenger Track Alternative A. HSR station option operation would have no effect on parks and recreational resources related to permanent changes from noise and would have no adverse effect related to permanent visual changes or deterioration of recreational resources from increased use. Therefore, there would not be a DHAE.

5.6.3.9 Aesthetics and Visual Quality

Construction

Shared Passenger Track Alternative A

As discussed in Section 3.16, Shared Passenger Track Alternative A would have an adverse effect on visual quality in the Downtown Los Angeles Landscape Unit, the Gateway Cities Landscape Unit, and the Fullerton/Anaheim Landscape Unit during construction (Impact AVQ-1). Visual impacts and impacts on community character were expressed as a key concern of many community members during the inclusive public engagement process.

Temporary elements introduced during construction activities (e.g., construction materials, equipment, on-site workers) and at construction staging areas (e.g., stored material and equipment) would result in visual changes to communities adjacent to the project footprint. The proposed staging and laydown areas would be in the general vicinity of the work site and have been incorporated into the footprint for this project section where feasible. As presented in Table 5-6, the aesthetics and visual quality RSA has a population that is 83 percent minority and 57 percent low income. Through incorporation of **AVQ-IAMF#1** and **AVQ-IAMF#2**, staging areas will be governed by the contractor's plan to minimize the staging areas' potential to affect adjacent sensitive uses in adverse ways. The contractor's plan will be based on city, state, and federal regulations and standards. Because of their lengthy period of use, visual quality impacts would be noticeable if they were to occur near higher-sensitivity receptors, such as recreationists or residents. Upon completion of construction at a given location, construction equipment would be removed, and construction staging areas and temporary structures would be dismantled. **AVQ-IAMF#1** and **AVQ-IAMF#2** will reduce the temporary visual changes that would occur during construction, and changes in visual quality would not result in DHAE.

Once built, the project elements (e.g., tracks, support structures) and the removal of existing structures would introduce permanent visual changes. The 26th Street LMF is proposed at the existing railroad yard on the west bank of the Los Angeles River where the current BNSF storage tracks are located. Because of the project LMF location at an existing rail yard, the scale and size of the proposed LMF would not substantially alter or degrade existing views.

Even after incorporating the IAMFs above, the addition of built security features (intrusion-protection railings,[8] signage, lighting, and signal lights) to four historic bridges in the Downtown Los Angeles Landscape Unit would conflict with the visual character of these historic bridges and substantially affect the scenic values of the bridges as important visual resources. These built security features would be permanent construction effects, because they would remain after the construction period. The bridges affected are presented in Table 5-31. Because 100 percent of the affected BGs are low-income and minority communities, there is a potential DHAE on low-income and minority communities in the downtown Los Angeles and Boyle Heights neighborhoods before mitigation.

Table 5-31 Visual Impacts on Historic Bridges

Resource	Community/Neighborhood	Census BGs Affected	Minority?	Low-Income?
1st St Bridge	Boyle Heights in Los Angeles and downtown Los Angeles	60372060541	Yes	Yes
4th St Bridge		60372060531	Yes	Yes
7th St Bridge		60372060501	Yes	Yes
Olympic Blvd Bridge		60372060501	Yes	Yes
Total	**N/A**	**N/A**	**100%**	**100%**

BG = block group; N/A = not applicable

AVQ-MM#1 requires areas disturbed by construction to be remediated and **AVQ-MM#3** would incorporate design aesthetic preferences into final design and construction of nonstation structures. **AVQ-MM#1** and **AVQ-MM#3** will partially alleviate visual impacts on the historic bridges. These mitigation measures would be implemented equally for communities.

During the 2020 scoping meetings, participants raised concerns about visual impacts of the HSR system and its potential changes to the character of the cities. Specific concerns included impacts on the Los Angeles River bridges. A conservative analysis assumes visual impacts on the bridges to be an important topic for the affected Boyle Heights and downtown Los Angeles communities. Therefore, the Authority will use community analysis–specific IAMFs to reduce the potential for DHAEs on communities (please refer to Section 5.8 for descriptions of community analysis–specific IAMFs). To further address visual impacts, Shared Passenger Track Alternative A includes **CA-IAMF#3, Community-Inclusive Development of Aesthetic Treatments and Community Cohesion Enhancements**. As part of **CA-IAMF#3**, the contractor's community liaison will work with the Authority community ombudsperson to hold community roundtables to seek input on locally desired aesthetic treatment preferences from the adversely affected communities, possibly developed by local artists. Usually, communities do not have direct input into these types of decisions. Ensuring the communities' involvement and giving communities the opportunity to provide direct feedback on aesthetic treatments would reduce the impacts on communities. Treatment options may include streetscape, vegetation screening, consideration of a community mural, and beautification tree plantings or plant plantings. Approved, locally desired aesthetic treatments shall be included in the final design plans.

With incorporation of **CA-IAMF#3** and implementation of **AVQ-MM#1** and **AVQ-MM#3**, construction-related effects on the visual environment would be reduced to a less-than-adverse level for communities, and concerns raised during the engagement process regarding visual and

[8] Protective railings are required on highway, roadway, freight, and pedestrian structures that cross over the Shared Passenger Track Alternatives. Providing a solid barrier on these structures where they cross over the electrified components of the system is critical for the safe operation of the train and the protection of both passengers and rail employees. Solid barriers on these overcrossings are required to extend to the edge of the rail right-of-way or 30 feet from the centerline of the outermost track, whichever is greater, at a minimum height of 8 feet.

community character impacts would be addressed to the extent practicable. Therefore, there would not be a DHAE as a result of visual changes during construction.

Shared Passenger Track Alternative B

Shared Passenger Track Alternative B impacts would be similar to those of Shared Passenger Track Alternative A, with the exception of the 15th Street LMF. Construction of the 15th Street LMF, which is in a nonminority and non-low-income community, would require that existing big-box warehouses be removed to accommodate the LMF. Visual disturbance during construction would be similar to that described for the 26th Street LMF. Construction would involve various equipment, including dump trucks, haul trucks, and cranes. These would be visible to viewers of the construction site. Generally, industrial and commercial workers have a lower awareness of visual changes in the environment and, therefore, lower sensitivity. Overall, given viewers' familiarity with the existing Los Angeles – San Diego – San Luis Obispo Rail Corridor, viewer sensitivity for the 15th Street LMF location would be predominantly low to moderate-low.

Other than effects related to the 15th Street LMF, effects on communities would be the same as those of Shared Passenger Track Alternative A. Therefore, effects will be alleviated through incorporation of **CA-IAMF#3**, **AVQ-IAMF#1**, and **AVQ-IAMF#2** to substantially avoid or address impacts on viewers, visual character, and visual quality in communities. The same mitigation measures as for Shared Passenger Track Alternative A would be implemented to reduce the effects on visual quality in the project section during construction (**AVQ-MM#1** and **AVQ-MM#3**). Therefore, the impact would not result in a DHAE from visual changes during construction.

High-Speed Rail Station Options

High-Speed Rail Station Option: Norwalk/Santa Fe Springs

With inclusion of the Norwalk/Santa Fe Springs HSR Station Option, which is in the minority community of east Norwalk/southwest Santa Fe Springs, impacts would be the same as those of the Shared Passenger Track Alternatives in the station area. The HSR station option would add an HSR platform on the elevated structure and additional HSR station facilities and parking in the area that is already being modified as part of Shared Passenger Track Alternative A. Effects of station construction will be alleviated through incorporation of **AVQ-IAMF#1** and **AVQ-IAMF#2** to substantially avoid or address impacts on visual quality. To further address visual impacts, the project includes **CA-IAMF#3**. As part of **CA-IAMF#3**, the contractor's community liaison will work with the Authority community ombudsperson to hold community roundtables to seek input on locally desired aesthetic treatment preferences from the adversely affected communities, possibly developed by local artists. **AVQ-MM#1** will address the effects on viewers, visual character, and visual quality for this HSR station option during construction. With incorporation of these IAMFs and implementation of this mitigation measure, there would be no adverse effect. Therefore, the impact would not result in a DHAE from visual changes during construction.

High-Speed Rail Station Option: Fullerton

With the inclusion of the Fullerton HSR Station Option, which is partially in minority and low-income BGs in downtown Fullerton, impacts would be the same as those of the Shared Passenger Track Alternatives in the station area. The Fullerton HSR Station Option would introduce additional elements at the site compared to the Shared Passenger Track Alternatives, including HSR station buildings, a facility power station, roadway modifications, and a parking structure, and the construction area under the Fullerton HSR Station Option would be larger than that identified for the Shared Passenger Track Alternatives. The visual changes in construction areas would affect communities near the station. Effects of station construction will be alleviated through incorporation of **AVQ-IAMF#1** and **AVQ-IAMF#2** to substantially avoid or address impacts on viewers, visual character, and visual quality. To further address visual impacts, the project includes **CA-IAMF#3**. As part of **CA-IAMF#3**, the contractor's community liaison will work with the Authority community ombudsperson to hold community roundtables to seek input on locally desired aesthetic treatment preferences from the adversely affected communities, possibly developed by local artists. **AVQ-MM#1** will address the effects on viewers, visual character, and visual quality for this station during construction. Because there would be no adverse impact, the impact would not result in a DHAE from visual changes during construction.

Operation

Shared Passenger Track Alternative A

As discussed in Section 3.16, built elements of the project would introduce visual changes for communities along the alignment that would result in an adverse effect on visual quality during operations in the Downtown Los Angeles Landscape Unit, Gateway Cities Landscape Unit, and Fullerton/Anaheim Landscape Unit (Impact AVQ-3).

Project train and maintenance facility operational activities would alter the existing visual environment. These alterations would include increased activity along the rail corridor, new and expanded stations with greater transit and commuter activity, and signal lights. Effects of the project will be partially alleviated through incorporation of **AVQ-IAMF#1** and **AVQ-IAMF#2** to substantially avoid or minimize impacts on viewers, visual character, and visual quality.

As presented in Table 5-8, the majority of the aesthetics and visual quality community analysis RSA is minority (83 percent) or low-income (57 percent). Therefore, adverse changes to visual quality along the alignment represent a potential DHAE prior to mitigation. Views of the alignments from specific “view corridors” along major arterials, channels or rivers, freeways, railways, or other transportation corridors were also addressed as appropriate throughout the analysis and were considered in the selection of representative key viewpoints (KVP) along the proposed alignment. Table 5-32 provides a summary of the changes in visual quality on KVPs and which mitigation measures apply (refer to Section 3.16 for additional information on KVPs). As presented in Table 5-32, the majority of KVPs identified along the project corridor are in minority and low-income communities. Therefore, the impacts at the KVPs can provide a general idea of the visual changes to be expected by communities along the corridor.

Table 5-32 Summary of Visual Quality Changes and Effects at Key Viewpoints

KVP # and Location	Community/ Neighborhood	Census BG	Mitigation Measures	Adverse Effect?	Minority?	Low-Income?
KVP 1: E Cesar Chavez Ave (facing southeast)	Chinatown in Los Angeles	60372060201	AVQ-MM#3, AVQ-MM#5, AVQ-MM#6, AVQ-MM#7, CUL-MM#12	No	Yes	No
KVP 2: Mozaic at Union Station Apartments (facing southeast)	Chinatown in Los Angeles	60372060201	AVQ-MM#3, AVQ-MM#5, AVQ-MM#6, AVQ-MM#7, CUL-MM#12	No	Yes	No
KVP 3: 1st St at the Los Angeles River (facing southwest)	Downtown Los Angeles	60372060521	AVQ-MM#3, AVQ-MM#5, AVQ-MM#6, AVQ-MM#7, CUL-MM#12	No	No	No
KVP 4: North of 4th St at the Los Angeles River (facing south)	Redondo Junction in Los Angeles	60372060512	AVQ-MM#3, AVQ-MM#5, AVQ-MM#6, AVQ-MM#7, CUL-MM#12	No	No	No

KVP # and Location	Community/ Neighborhood	Census BG	Mitigation Measures	Adverse Effect?	Minority?	Low-Income?
KVP 5: Downey Rd and E 26th St (facing northwest)	Hobart in Los Angeles	60379800161	AVQ-MM#3, AVQ-MM#4, AVQ-MM#5, AVQ-MM#6, AVQ-MM#7	No	Yes	No
KVP 6: 6185 Bandini Blvd (facing north)	Hobart/west Commerce	60375323042	AVQ-MM#3, AVQ-MM#4, AVQ-MM#5, AVQ-MM#6, AVQ-MM#7	No	Yes	Yes
KVP 7: Sycamore St and Supply Ave (facing southwest)	Bandini in Montebello	60375323033	AVQ-MM#3, AVQ-MM#4, AVQ-MM#5, AVQ-MM#6, AVQ-MM#7	No	Yes	Yes
KVP 8: S 4th St and Sycamore St (facing southeast)	Bandini in Montebello	60375322003	AVQ-MM#3, AVQ-MM#4, AVQ-MM#5, AVQ-MM#6, AVQ-MM#7	No	Yes	Yes
KVP 9: Rio Hondo Bike Path near Maynard Rd (facing northeast)	McCampbell in Pico Rivera	60375025002	AVQ-MM#3, AVQ-MM#4, AVQ-MM#5, AVQ-MM#6, AVQ-MM#7	No	Yes	No
KVP 10: San Gabriel River Bike Path south of Slauson Ave (facing northeast)	South Pico Rivera	60375026031	AVQ-MM#3, AVQ-MM#4, AVQ-MM#5, AVQ-MM#6, AVQ-MM#7	No	Yes	No
KVP 11: Metropolitan State Hospital/Bloomfield Ave (facing east)	Northeast Norwalk	60375553001	AVQ-MM#3, AVQ-MM#4, AVQ-MM#5, AVQ-MM#6, AVQ-MM#7	No	No	Yes
KVP 12: Norwalk/Santa Fe Springs Metrolink Station parking lot (facing east)	East Norwalk	60375523012	AVQ-MM#3, AVQ-MM#4, AVQ-MM#5, AVQ-MM#6, AVQ-MM#7	No	Yes	No
KVP 13: Facing Norwalk/Santa Fe Springs Metrolink Station from John Zimmerman Park (facing north/northwest)	East Norwalk	60375523012	AVQ-MM#3, AVQ-MM#4, AVQ-MM#5, AVQ-MM#6, AVQ-MM#7	No	Yes	No

KVP # and Location	Community/ Neighborhood	Census BG	Mitigation Measures	Adverse Effect?	Minority?	Low-Income?
KVP 14: Tulare Ave and Fullerton Ave (facing northwest)	North Buena Park	60591106061	AVQ-MM#3, AVQ-MM#4, AVQ-MM#5, AVQ-MM#6, AVQ-MM#7	No	Yes	Yes
KVP 15: Raymer Ave at Gilbert St (facing west)	Southwest Fullerton	60590110001	AVQ-MM#3, AVQ-MM#4	No	Yes	Yes
KVP 16: Fullerton Metrolink Station (from the southwest facing northeast)	South-central Fullerton	60590116016	AVQ-MM#3, AVQ-MM#4	No	Yes	Yes
KVP 17: Fullerton Metrolink Station (from the west facing east)	South-central Fullerton	60590112001	AVQ-MM#3, AVQ-MM#4	No	No	Yes
KVP 18: Fullerton Metrolink Station (from the east-southeast facing west-northwest)	South-central Fullerton	60590113001	AVQ-MM#3, AVQ-MM#4	No	Yes	Yes
KVP 19: Fullerton Metrolink Station from E Walnut Ave (facing east)	South-central Fullerton	60590112001	AVQ-MM#3, AVQ-MM#4	No	No	Yes
KVP 20: State College Blvd and E Katella Ave (facing east)	Platinum Triangle in Anaheim	60590761042	AVQ-MM#3, AVQ-MM#4	No	No	No
KVP 21: South State College Blvd (facing northeast)	Platinum Triangle in Anaheim	60590863034	AVQ-MM#3, AVQ-MM#4	No	No	No
KVP 22: Angel Stadium Parking Lot North (facing north)	Platinum Triangle in Anaheim	60590761043	AVQ-MM#3, AVQ-MM#4	No	No	No
Total	**N/A**	**N/A**	**N/A**	**N/A**	**63.6%**	**45.4%**

BG = block group; CDP = Census-Designated Place; KVP = key viewpoint; N/A = not applicable

As presented in Table 5-32 and discussed in Section 3.16, Shared Passenger Track Alternative A would not result in adverse effects on visual quality for the 22 KVPs. Operation would not reduce visual quality at the KVPs selected particularly because the project would be introduced into an existing rail corridor and would generally be compatible with the visual setting. The overall visual quality effect would be compatible and neutral in this landscape unit.

Although the changes in visual quality from the KVPs would not be adverse, substantial aesthetic degradation resulting from discordant operational view elements would occur from operational activities (train movement and maintenance facility operations) and the moving security features such as signal lights, which are inconsistent with the historic bridges, on four historic bridges:

First Street Bridge, Fourth Street Bridge, Seventh Street Bridge, and Olympic Boulevard Bridge. As discussed in the construction section above, these bridges are all in low-income and minority communities. **CUL-MM#12** seeks to reduce the effect by consulting with interested parties to achieve a barrier design that meets safety goals while introducing the minimum physical and visual effects on the historic property. Views of passing trains and infrastructure will be minimized with implementation of **AVQ-MM#3** that requires the contractor to work with the Authority and local jurisdictions to incorporate Authority-approved aesthetic preferences into final design and construction, which would partially alleviate aesthetic degradation of the existing character or quality of the four affected bridges and their surroundings by providing the opportunity for design input from the jurisdiction; **AVQ-MM#5**, which requires planting of vegetation in land acquired for Shared Passenger Track Alternative A (e.g., shifting roadways) that is not used for Shared Passenger Track Alternative A or related supporting infrastructure, or other higher or better use; **AVQ-MM#6**, which will screen from public view the traction power substations (at approximately 30-mile intervals along the HSR guideway), including radio towers where required, through the use of landscaping or solid walls/fences; and **AVQ-MM#7**, which requires incorporation of design criteria for elevated guideways and station elements that can adapt to local context. In addition, as part of **CA-IAMF#3**, the contractor's community liaison will work with the Authority community ombudsperson to hold community roundtables to seek input on locally desired aesthetic treatment preferences from the adversely affected communities, possibly developed by local artists. Usually, communities do not have direct input into these types of decisions. Ensuring the communities' involvement and giving communities the opportunity to provide direct feedback on aesthetic treatments would reduce the impacts on communities. Treatment options may include streetscape, vegetation screening, consideration of a community mural, and beautification tree plantings or plant plantings. These measures will limit the effects of the main visual changes anticipated (train movements, train lighting, activities at the LMF, security lighting, and signal lights) by blocking the changes from view and ensuring that the changes have been considered in the design criteria.

Although the majority of impacts on visual quality would be in minority communities, low-income communities, or both, with implementation of **AVQ-MM#3**, **AVQ-MM#4**, **AVQ-MM#5**, **AVQ-MM#6**, **AVQ-MM#7**, and **CUL-MM#12**, and incorporation of **CA-IAMF#3**, all operational effects would be reduced to have no adverse effects on visual quality in communities. Therefore, with mitigation, there would not be a DHAE related to visual quality during operations.

Shared Passenger Track Alternative B

As discussed in Section 3.16, impacts for Shared Passenger Track Alternative B would be similar to those described for Shared Passenger Track Alternative A, with the exception of the 15th Street LMF, which is not in a minority or low-income community. Therefore, effects on communities would be the same as those of Shared Passenger Track Alternative A. Considering the same IAMFs and mitigation measures as described for Shared Passenger Track Alternative A, adverse effects on visual quality from operation would not occur under Shared Passenger Track Alternative B. Therefore, operation-period effects on visual quality would not result in a DHAE related to visual quality during operations.

High-Speed Rail Station Options

High-Speed Rail Station Option: Norwalk/Santa Fe Springs

As discussed in Section 3.16, with inclusion of the Norwalk/Santa Fe Springs HSR Station Option, which is in the minority community of east Norwalk/southwest Santa Fe Springs, impacts would be the same as those of the Shared Passenger Track Alternatives in the station area. Adherence to **AVQ-IAMF#1** and **AVQ-IAMF#2** will reduce impacts on viewers, visual character, and visual quality associated with construction of the project's facilities and activities. The following mitigation measures would reduce impacts for communities: **AVQ-MM#4**, which requires vegetation screening at grade and at elevated guideways adjacent to residential areas; **AVQ-MM#5**, which requires replanting of unused portions of land acquired for the project; and **AVQ-MM#7**, which requires incorporation of design criteria for elevated guideways and station elements that can adapt to local context. Considering both the IAMFs incorporated into the

project and implementation of the above-mentioned mitigation measures, adverse effects on visual quality and nighttime lighting from operation would not occur with inclusion of the Norwalk/Santa Fe Springs HSR Station Option. Therefore, operation-period effects on visual quality and nighttime lighting would not result in a DHAE and are not discussed further in this chapter.

High-Speed Rail Station Option: Fullerton

As discussed in Section 3.16, with inclusion of the Fullerton HSR Station Option, which is partially in minority and low-income BGs in downtown Fullerton, impacts would be the same as those of the Shared Passenger Track Alternatives in the station area. Adherence to **AVQ-IAMF#1** and **AVQ-IAMF#2** will reduce impacts on viewers, visual character, and visual quality associated with construction of the project's facilities and activities. The following mitigation measures would reduce impacts for communities: **AVQ-MM#4**, which requires vegetation screening at grade and at elevated guideways adjacent to residential areas; **AVQ-MM#5**, which requires replanting of unused portions of land acquired for the project; and **AVQ-MM#7**, which requires incorporation of design criteria for elevated guideways and station elements that can adapt to local context. Considering both the IAMFs incorporated into the project and implementation of the above-mentioned mitigation measures, adverse effects on visual quality from operation would not occur with inclusion of the Fullerton HSR Station Option. Therefore, operation-period effects on visual quality would not result in a DHAE and are not discussed further in this chapter.

5.6.3.10 Cultural Resources

Construction

Shared Passenger Track Alternative A

As discussed in Section 3.17, construction would have adverse effects related to disturbance of known archaeological sites during construction (Impact CUL-1); permanent disturbance of unknown archaeological sites during construction (Impact CUL-2); and permanent demolition, destruction, relocation, or alteration of historic architectural resources or setting during construction (Impact CUL-3). Cultural resources were not raised as a community concern during engagement.

As discussed in Impact CUL-1 and Impact CUL-2, ground-disturbing activities associated with Shared Passenger Track Alternative A have the potential to affect five previously recorded archaeological resources as well as unknown archaeological resources. The incorporation of IAMFs as part of Shared Passenger Track Alternative A would include the use of geospatial tools to identify and map potential sites on construction documents for awareness of potential locations; the training of construction personnel to identify sites and take appropriate actions to protect resources if they are encountered; preconstruction cultural resource surveys; relocation of laydown sites if archaeological resources are discovered during surveys; and archaeological monitoring to reduce the potential for disturbance or destruction of archaeological resources (**CUL-IAMF#1**, **CUL-IAMF#2**, **CUL-IAMF#3**, **CUL-IAMF#4**, and **CUL-IAMF#5**). These actions would limit the potential for impact but would not avoid potential impacts entirely. Therefore, the Authority would implement **CUL-MM#1**, **CUL-MM#2**, and **CUL-MM#3**, which include implementation of stipulations in the programmatic agreement and memorandum of agreement, an order to stop work in the event of a discovery, and identification and treatment of resources in accordance with agreement documents to protect archaeological resources. Implementation of these measures would be applied equally to communities and will reduce impacts to a not adverse level. Therefore, project construction would not result in a DHAE from disturbance of known archaeological sites (Impact CUL-1) or permanent disturbance of unknown archaeological sites (Impact CUL-2).

As discussed in Impact CUL-3, construction of Shared Passenger Track Alternative A would have an impact related to permanent alteration of historic built resources for four bridges spanning the Los Angeles River. The bridges and census BGs affected are presented in Table 5-33. All four bridges connect the downtown Los Angeles and Boyle Heights neighborhoods in the city of

Los Angeles. Because both of these neighborhoods are low-income and minority communities, impacts represent a potential DHAE.

Table 5-33 Historic Built Resources in Minority and Low-Income Communities

Resource	Community/Neighborhood	Census BGs Affected	Minority?	Low-Income?
1st St Bridge	Boyle Heights in Los Angeles and downtown Los Angeles	60372060541	Yes	Yes
4th St Bridge		60372060531	Yes	Yes
7th St Bridge		60372060501	Yes	Yes
Olympic Blvd Bridge		60372060501	Yes	Yes
Total	**N/A**	**N/A**	**100%**	**100%**

BG = block group; N/A = not applicable

Project design elements with potential to physically affect the bridges include overhead contact system–associated wire that may be attached to each of the bridges' undersides and installation of protective barriers on top of the bridges to prevent objects and people from entering the right-of-way. The installation of overhead contact system wire would represent a minimal physical alteration that would not affect the bridges' integrity of design, workmanship, or materials. The protective barriers, however, would introduce a visual intrusion that is incompatible with the bridges' designs. The barriers would be so incompatible with the bridges' original designs that an impact would occur.

IAMFs incorporated as part of Shared Passenger Track Alternative A would address accidental damage to the four historic bridges through inclusion of a geospatial layer on construction drawings that identifies cultural resources (**CUL-IAMF#1**), mandatory training for the Authority to protect cultural resources during construction (**CUL-IAMF#2**), a preconstruction conditions assessment for protection and inadvertent damage (**CUL-IAMF#6**), preparation of a monitoring plan for ground-disturbing activities within 1,000 feet of a historic property (**CUL-IAMF#7**), and implementation of protection or stabilization measures (**CUL-IAMF#8**). However, the introduction of safety barriers would introduce a visual element that is incompatible with the design of these four affected historic bridges, resulting in a substantial adverse change to their significance. **CUL-MM#12** requires consultation with interested parties to achieve a barrier design that meets safety goals while minimizing physical and visual impacts on these resources.

Even with incorporation of IAMFs and implementation of **CUL-MM#12**, an incompatible visual element on the historic bridges would remain in the communities of Boyle Heights and downtown Los Angeles. To further address the incompatible visual elements on the historic bridges, the project includes **CA-IAMF#3**. As part of **CA-IAMF#3**, the contractor's community liaison will work with the Authority community ombudsperson to hold community roundtables to seek input on locally desired aesthetic treatment preferences from the adversely affected communities, possibly developed by local artists. Usually, communities do not have direct input into these types of decisions. Ensuring the communities' involvement and giving communities the opportunity to provide direct feedback on aesthetic treatments would reduce the impacts on communities. Treatment options may include streetscape, vegetation screening, consideration of a community mural, and beautification tree plantings or plant plantings. Locally desired aesthetic treatments for the historic bridges would be presented to, and subject to approval by, the State Historic Preservation Officer. If approved by the State Historic Preservation Officer, these shall be included in the final design plans. With incorporation of the IAMFs and implementation of the mitigation measures above, construction-related effects on the historic bridges would be reduced and there would not be an adverse impact in the Boyle Heights and downtown Los Angeles neighborhoods. Therefore, the impact would not result in DHAEs related to the disturbance or destruction of cultural resources during construction.

Shared Passenger Track Alternative B

As discussed in Impact CUL-1 and Impact CUL-2, ground-disturbing activities associated with Shared Passenger Track Alternative B have the potential to affect one additional previously recorded archaeological resource when compared to Shared Passenger Track Alternative A. Because the additional resource is not in a low-income or minority community, impacts on related to the disturbance of previously known and unknown archaeological resources would be the same as those of Shared Passenger Track Alternative A. Therefore, with incorporation of **CUL-IAMF#1**, **CUL-IAMF#2**, **CUL-IAMF#3**, **CUL-IAMF#4**, and **CUL-IAMF#5** and implementation of **CUL-MM#1**, **CUL-MM#2**, and **CUL-MM#3**, construction would not result in a DHAE from disturbance of known archaeological sites (Impact CUL-1) or permanent disturbance of unknown archaeological sites (Impact CUL-2).

As discussed in Impact CUL-3, the trenches required for the 15th Street LMF yard lead tracks have the potential to cause permanent damage, destruction, or alterations of the Olympic Boulevard Bridge, which is in a low-income and minority community. Shared Passenger Track Alternative B will incorporate **CUL-IAMF#1, CUL-IAMF#2**, **CUL-IAMF#6**, **CUL-IAMF#7**, and **CUL-IAMF#8**, and would implement **CUL-MM#12**, which will avoid or minimize destruction or damage to the bridge. As with Shared Passenger Track Alternative A, catenary lines may also be attached to the bridge and barriers would be placed atop the bridge; barriers would result in an adverse effect because of these incompatible visual elements. Therefore, even with incorporation and implementation of these IAMFs and mitigation measure, Shared Passenger Track Alternative B would result in an adverse effect on the Olympic Boulevard Bridge. To further address visual impacts, the project includes **CA-IAMF#3**. As for Shared Passenger Track Alternative A, with incorporation of the IAMFs and implementation of the mitigation measure above, construction-related effects on the historic bridges would be reduced and there would not be an adverse impact in the Boyle Heights and downtown Los Angeles neighborhoods. Therefore, the impact would not result in DHAEs related to the disturbance or destruction of cultural resources during construction.

High-Speed Rail Station Options

High-Speed Rail Station Option: Norwalk/Santa Fe Springs

With the Norwalk/Santa Fe Springs HSR Station Option, which is in the minority community of east Norwalk/southwest Santa Fe Springs, impacts related to disturbance or destruction of cultural resources during construction would be the same as those described for the Shared Passenger Track Alternatives. Therefore, impacts on low-income and minority communities would be the same as those described for the Shared Passenger Track Alternatives in the station area. With incorporation of **CUL-IAMF#1**, **CUL-IAMF#2**, **CUL-IAMF#3**, **CUL-IAMF#4**, **CUL-IAMF#5**, and **CA-IAMF#3** and implementation of **CUL-MM#1**, **CUL-MM#2**, and **CUL-MM#3**, construction would not result in a DHAE from disturbance of known archaeological sites (Impact CUL-1), permanent disturbance of unknown archaeological sites (Impact CUL-2), or permanent demolition, destruction, relocation, or alteration of historic architectural resources or setting during construction (Impact CUL-3).

High-Speed Rail Station Option: Fullerton

With the Fullerton HSR Station Option, which is partially in minority and low-income BGs in downtown Fullerton, impacts would be the same as those of the Shared Passenger Track Alternatives in the station area. Therefore, impacts on communities would be the same as those described for the Shared Passenger Track Alternatives in the station area. With incorporation of **CUL-IAMF#1**, **CUL-IAMF#2**, **CUL-IAMF#3**, **CUL-IAMF#4**, **CUL-IAMF#5**, and **CA-IAMF#3** and implementation of **CUL-MM#1**, **CUL-MM#2**, and **CUL-MM#3**, construction would not result in a DHAE from disturbance of known archaeological sites (Impact CUL-1), permanent disturbance of unknown archaeological sites (Impact CUL-2), or permanent demolition, destruction, relocation, or alteration of historic architectural resources or setting during construction (Impact CUL-3).

Operation

Shared Passenger Track Alternative A

As discussed in Section 3.17 (Impact CUL-6), none of the identified historic properties would be subject to adverse visual, noise-related, or vibratory effects from operation of Shared Passenger Track Alternative A. Because there would not be an adverse effect, there would not be a DHAE.

Shared Passenger Track Alternative B

As discussed in Section 3.17 (Impact CUL-6), Shared Passenger Track Alternative B would have the same effects from operation as Shared Passenger Track Alternative A. Because there would not be an adverse effect, there would not be a DHAE.

High-Speed Rail Station Options

High-Speed Rail Station Option: Norwalk/Santa Fe Springs

The Norwalk/Santa Fe Springs HSR station option is in the minority community of east Norwalk/ southwest Santa Fe Springs. As discussed in Section 3.17 (Impact CUL-6), with inclusion of the Norwalk/Santa Fe Springs HSR Station Option, impacts would be the same as those of the Shared Passenger Track Alternatives in the station area, where no historic properties are in the vicinity. Therefore, the Norwalk/Santa Fe Springs HSR Station Option would not have impacts on historic properties. Because the HSR station option would have no effect, there would not be a DHAE.

High-Speed Rail Station Option: Fullerton

As discussed in Section 3.17 (Impact CUL-6), with inclusion of the Fullerton HSR Station Option, which is partially in minority and low-income BGs in downtown Fullerton, impacts would be the same as those of the Shared Passenger Track Alternatives in the station area. The Fullerton HSR Station Option would not have an adverse visual, noise-related, or vibratory effect on any of the historic properties in the Fullerton portion of the area of potential effects. Because there is no adverse effect, there would not be a DHAE.

5.6.3.11 Cumulative Effects

Section 3.19, Cumulative Impacts, discusses the Shared Passenger Track Alternatives' contribution to any cumulative impact for each resource area discussed in Chapter 3.[9] The following discussion provides additional information on the cumulative impacts that could affect low-income populations and minority populations. As discussed in Section 3.19, there would be adverse cumulative effects related to air quality, noise and vibration, and hazardous materials and wastes.

Under the cumulative condition, other planned and committed projects would be built through HSR's planning horizon year of 2040. The cumulative condition includes the future development reported in the Southern California Association of Governments' Regional Transportation Plan/ Sustainable Communities Strategy; general plans of the cities and counties crossed by the project section, including both suburban expansion and development in existing urban areas; and transportation and infrastructure improvements. Planned projects that would be distributed throughout the reference communities of Los Angeles and Orange Counties include residential, commercial, industrial, and recreational land development; transportation; bridge maintenance; and utility and sewer projects.

Refer to Figure 3.19-1, which depicts reasonably foreseeable land development projects included in the cumulative project list as well as Appendices 3.19-A and 3.19-B, which identify proposed projects that could affect communities within the cumulative RSA.

[9] Section 3.19 did not consider business displacements as a potential cumulative impact because the section only considered topics under CEQA. Under CEQA, business displacements are not considered potentially significant effects on the environment. However, business displacements are considered here for potential cumulative impacts.

Construction

Business Displacements

Past, present, and reasonably foreseeable future projects may require business displacements in low-income or minority communities. These projects are dispersed along the corridor and unlikely to have compounding effects on one specific low-income or minority community. In addition, as discussed in Section 5.6.3.7, Socioeconomics and Communities, there are suitable replacement sites for displacements, even after displacements caused by the Shared Passenger Track Alternatives, in all cities except for Commerce and Vernon.

The majority of the Shared Passenger Track Alternatives' business displacements would be in the minority neighborhoods of Hobart in Vernon and west Commerce. As discussed in Section 5.6.3.7, these displacements occurring in these minority neighborhoods would be a DHAE because there is a lack of replacement sites in these communities. This DHAE has the potential to contribute considerably to an adverse cumulative effect on the minority neighborhoods in Hobart Yard and west Commerce.

As discussed in Section 3.19, there are no present or reasonably foreseeable projects in these neighborhoods. Past projects contributing to the industrial development of Hobart Yard and west Commerce have been driven by rail operators, including BNSF and Union Pacific Railroad. The historical expansion of these rail yards has contributed to the cumulative condition of scarce replacement sites in the Hobart and west Commerce neighborhoods as adjacent parcels were acquired and businesses were displaced.

The Shared Passenger Track Alternatives require 153 displacements in these neighborhoods and would contribute to the scarcity of replacement sites. Based on the number of displacements and contribution to the scarcity of replacement sites for future projects, the Shared Passenger Track Alternatives would have a considerable contribution to an adverse cumulative effect on the Hobart and west Commerce neighborhoods.

Hazardous Materials and Wastes

As discussed in Section 3.19, the project overlaps with two Superfund sites:

- The Orange County North Basin Superfund site, a groundwater plume covering approximately 8 square miles that overlaps with modifications to the Fullerton Metrolink/ Amtrak station and the Fullerton HSR Station Option (if the HSR station option is selected)
- The Exide site in Vernon (located where the 26th Street LMF and Hobart Yard modifications would be built)[10]

These two sites present potentially extensive impacts on the region because of the nature of their contamination, lack of full characterization, and complexity of remedial approaches. As discussed in Section 5.6.3.5, Hazardous Materials and Wastes, the Shared Passenger Track Alternatives and Fullerton HSR Station Option would have a DHAE on minority communities in the Hobart and south-central Fullerton neighborhoods related to construction near these Superfund sites and sites of potential environmental concern; therefore, there is the potential for the project to contribute to an adverse cumulative impact on minority communities in these neighborhoods.

As shown on Figures 3.19-1 and 3.19-2, there are no reasonably foreseeable projects in the Hobart or south-central Fullerton neighborhoods. Depending on the required depth of excavation, past construction and development in these neighborhoods have likely faced similar risks associated with construction near the Superfund sites and were required to adhere to federal, state, and local regulations to ensure development did not interfere with cleanup efforts or worsen contamination in these communities. These minority communities have also seen extensive investigation, remediation, and monitoring projects associated with contamination from the Superfund sites. Similar to past projects, the Shared Passenger Track Alternatives and Fullerton

[10] The Exide site's listing on the National Priorities List has been proposed and is pending.

HSR Station Option include the following measures to avoid and minimize impacts associated with construction near sites of potential environmental concern, including the Superfund sites: **HMW-IAMF#1**, **HMW-IAMF#3**, **HMW-IAMF#4**, **HMW-IAMF#6**, **HMW-IAMF#9**, and **GEO-IAMF#3**. In addition, with implementation of **HMW-MM#2**, ongoing U.S. Environmental Protection Agency remedial actions at a proposed or listed Superfund site would occur, and remediation may also need to be funded by the Authority to be accomplished in accordance with the requirements of the appropriate oversight agency. However, even after **HMW-MM#2**, the project would considerably contribute to cumulative impacts associated with construction near Superfund sites on minority communities in the Hobart and south-central Fullerton neighborhoods.

Operation

Operational Air Quality

Localized Air Quality

As discussed in Section 3.3, project operation would have an adverse effect on localized air quality from exposure to DPM emissions. Operational HRAs were conducted to evaluate the cancer risk and chronic noncancer risk from DPM emissions generated by the yard equipment activities at Hobart and Commerce Yards, and to determine the change in health risks caused by the reconfiguration of the yard. The HRAs demonstrated that cancer risks and noncancer risks would be less than SCAQMD thresholds. However, the results of the operational HRAs do not include activity data for the proposed 101,094 feet of storage and staging tracks near Hobart Yard. As discussed in Section 5.6.3.2, Air Quality, in the absence of certainty in the HRA, exposure of residential receptors to DPM emissions downwind from the storage and staging tracks would result in a DHAE in the low-income and minority communities of Hobart/west Commerce, east Commerce, and Hobart in Vernon for purposes of this Draft EIR/EIS. Therefore, there is the potential for the project to contribute to an adverse cumulative impact on minority and low-income communities in these neighborhoods.

Cumulative impacts would occur in the event that sensitive receptors in these minority and low-income communities are exposed to DPM emissions that would result in an exceedance of SCAQMD thresholds. To reduce project-level air quality impacts, the Authority would implement **AQ-MM#4**, but there would still be potential for nearby sensitive receptors in minority and low-income communities to be exposed to DPM emissions that would result in a health risk impact exceeding the SCAQMD project-level thresholds. Given the unknown level of activities at Hobart Yard, an adverse cumulative impact is conservatively anticipated, and the project would result in a considerable contribution to this cumulative impact on low-income and minority populations in Hobart/west Commerce, east Commerce, and Hobart in Vernon.

Regional Air Quality (Beneficial)

Regulatory agencies continue to pass more stringent greenhouse gas emission standards with the goal of reducing the amount of pollutant emissions in the atmosphere. Although many of these regulations have not yet been implemented, they are anticipated to be in effect prior to the project planning horizon of 2040. Even with these regulatory reductions, the expected growth in the region would result in significant cumulative increases in greenhouse gas emissions. However, operation of the Shared Passenger Track Alternatives would benefit regional air quality by reducing vehicle miles traveled and aircraft emissions, which would reduce regional levels of criteria pollutants and MSATs.

Operational Noise and Vibration

As discussed in Section 3.19, during operations, the Shared Passenger Track Alternatives would result in an adverse impact from severe noise and vibration impacts at noise-sensitive receptors. **N&V-MM#3** and **N&V-MM#4** would be implemented, but severe noise impacts would remain at 26 locations and vibration impacts would remain for 517 residences. As discussed in Section 5.6.3.3, Noise and Vibration, these operational noise and vibration impacts would result in a DHAE on minority communities in the McCampbell neighborhood in Pico Rivera, and minority and low-income communities in central Anaheim and northeast Buena Park. As a result, there is

the potential for the project to contribute to a cumulative impact on these minority and low-income communities.

As discussed in Section 3.19, noise and vibration emissions would combine with those of other planned rail transit projects to result in significant cumulative operational noise impacts because the combined noise and vibration exposure would exceed FRA criteria. The Shared Passenger Track Alternatives' contribution to the cumulative impact on the above minority and low-income communities would be cumulatively considerable because it would cause the largest change in the baseline ambient noise and vibration conditions among the many planned transportation projects in these communities. Therefore, the Shared Passenger Track Alternatives would contribute to disproportionate, adverse cumulative impacts related to operational noise and vibration on low-income and minority populations in the McCampbell neighborhood in Pico Rivera, and minority and low-income communities in central Anaheim and northeast Buena Park.

5.7 Summary of Disproportionately High and Adverse Effects Prior to Consideration of Measures to Minimize Harm

Table 5-34 summarizes the impacts of the Shared Passenger Track Alternatives before community analysis–specific measures, as defined in Section 5.8.

Table 5-34 Summary of Disproportionately High and Adverse Effects Prior to Community Analysis–Specific Measures

Resource	Disproportionately High and Adverse Community Effects?	Source of Effect
Transportation	No. With incorporation of IAMFs, and if the Authority implements mitigation measures, traffic conflicts including congestion and delays will be reduced but not eliminated during construction and operation. Access will be maintained during construction-related lane or road closures. As a result, changes to traffic and circulation patterns during construction and operation would not result in a DHAE.	All alternatives and options
Air quality	**Yes**. It is possible that project operation at Hobart Yard could pose health risk from exposure to DPM. However, the potential increase in activity and level of health risk at Hobart Yard is unknown. Without knowing if there is a potential health risk impact, or the level of this impact, the Authority is unable to implement feasible mitigation measures. In the absence of certainty, exposure to DPM emissions would result in a DHAE on the low-income and minority communities of Hobart/west Commerce, east Commerce, and Hobart in Vernon. Future operational HRAs may determine that impacts are below the SCAQMD project-level thresholds and no additional on-site or off-site mitigation measure would be required. In that case, there would not be a DHAE from exposure to DPM emissions. Additionally, this impact may be changed to not adverse based on new information or comments received during the public comment period.	All alternatives and options
Noise and vibration	**Yes**. The effect of severe noise impacts during operation is determined to be high and adverse and would be experienced disproportionately by minority communities in the McCampbell neighborhood in Pico Rivera and minority and low-income communities in central Anaheim. The effect of severe vibration impacts would be experienced disproportionately by minority and low-income communities in northeast Buena Park and central Anaheim and by minority communities in the McCampbell neighborhood in Pico Rivera.	Shared Passenger Track Alternatives A and B

Resource	Disproportionately High and Adverse Community Effects?	Source of Effect
EMF/EMI	No. With IAMFs and mitigation measures, all construction-period and operational effects would be reduced to have no adverse effects and there would not be DHAEs.	All alternatives and options
Hazardous materials and waste	**Yes**. Because completion of remediation activities at two Superfund sites is currently unknown, significant exposure to contaminants associated with these sites could occur during construction. Therefore, there would be a DHAE on minority communities in the Hobart and south-central Fullerton neighborhoods. Additionally, this impact may be changed to not adverse based on new information or comments received during the public comment period.	Shared Passenger Track Alternatives A and B, Fullerton HSR Station Option
Safety and security	No. With IAMFs and mitigation measures, all construction and operational impacts would be reduced to have no adverse effects and there would not be DHAEs.	All alternatives and options
Socioeconomics and communities	**Yes** (business displacements). Business displacements would disproportionately occur in minority communities in the Hobart neighborhood in Vernon and west Commerce.	All alternatives and options
Parks, recreation, and open space	No. Construction and operation would not have a DHAE on parks, recreation, and open space.	All alternatives and options
Aesthetics and visual quality	No. With IAMFs, visual changes from construction and operation would not have a DHAE.	All alternatives and options
Cultural resources	No. Potential impacts on cultural resources would be experienced by the population living and working in the RSA. Therefore, adverse impacts on cultural resources from project construction would not result in DHAEs.	All alternatives and options

DHAE = disproportionately high and adverse effect; DPM = diesel particulate matter; EMF/EMI = electromagnetic fields/electromagnetic interference; HRA = health risk assessment; HSR = high-speed rail; IAMF = impact avoidance and minimization feature; RSA = resource study area; SCAQMD = South Coast Air Quality Management District

A further summary of DHAEs by resource and alternative is presented in this section and in Table 5-35. Figure 5-7, sheets 1 and 2, depicts the BGs affected by DHAEs. This summary includes the consideration of the ameliorating effects of project features and identified mitigation, but it does not consider the potential ameliorating effects of additional measures to minimize harm, which are discussed in Section 5.8. A determination of whether the project will have a disproportionate effect on minority communities and low-income communities after consideration of measures to minimize harm and after consideration of project benefits will be provided in Section 5.9 in the Final EIR/EIS.

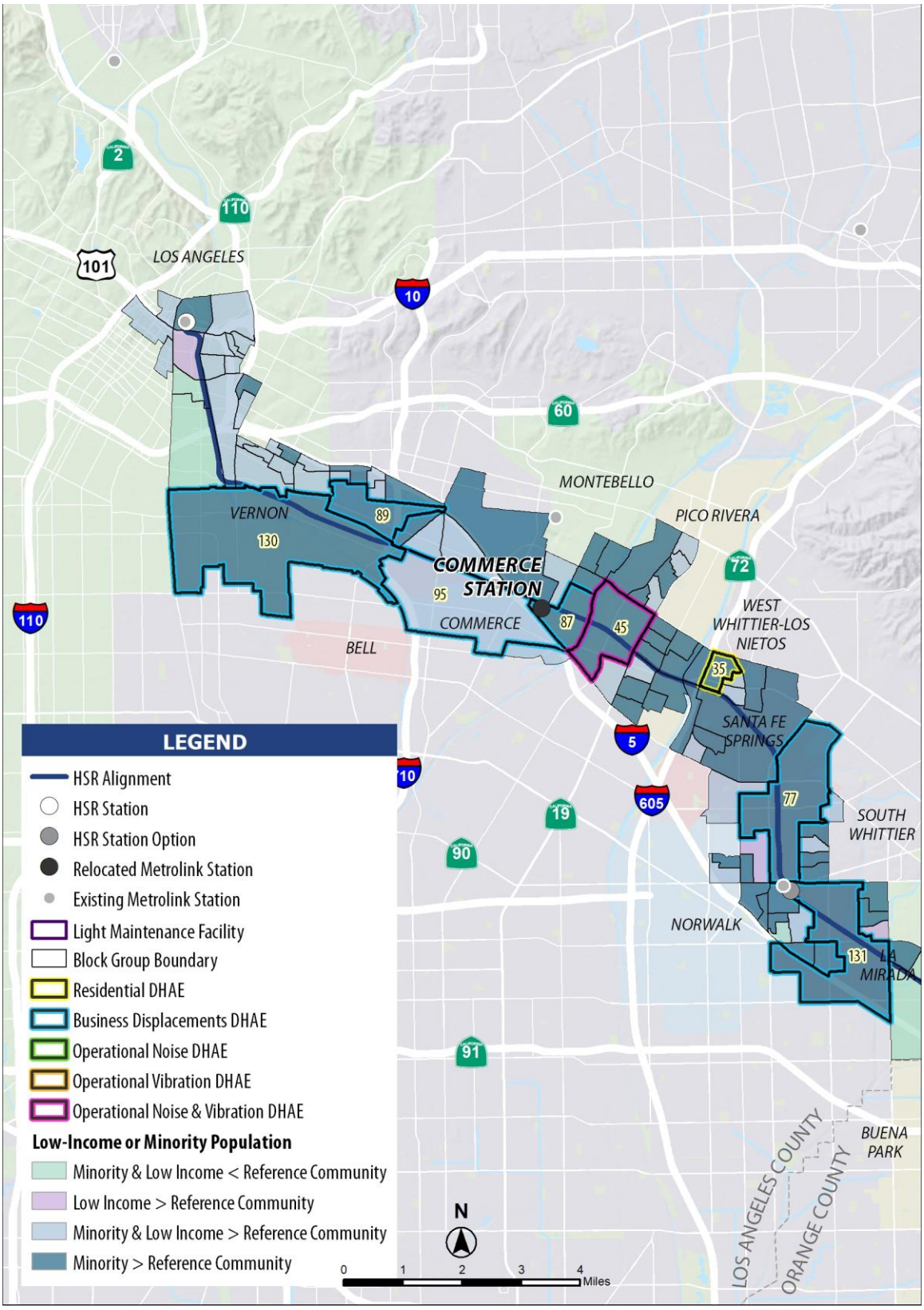


Figure 5-7 Disproportionately High and Adverse Effects Locations, Sheet 1 of 2

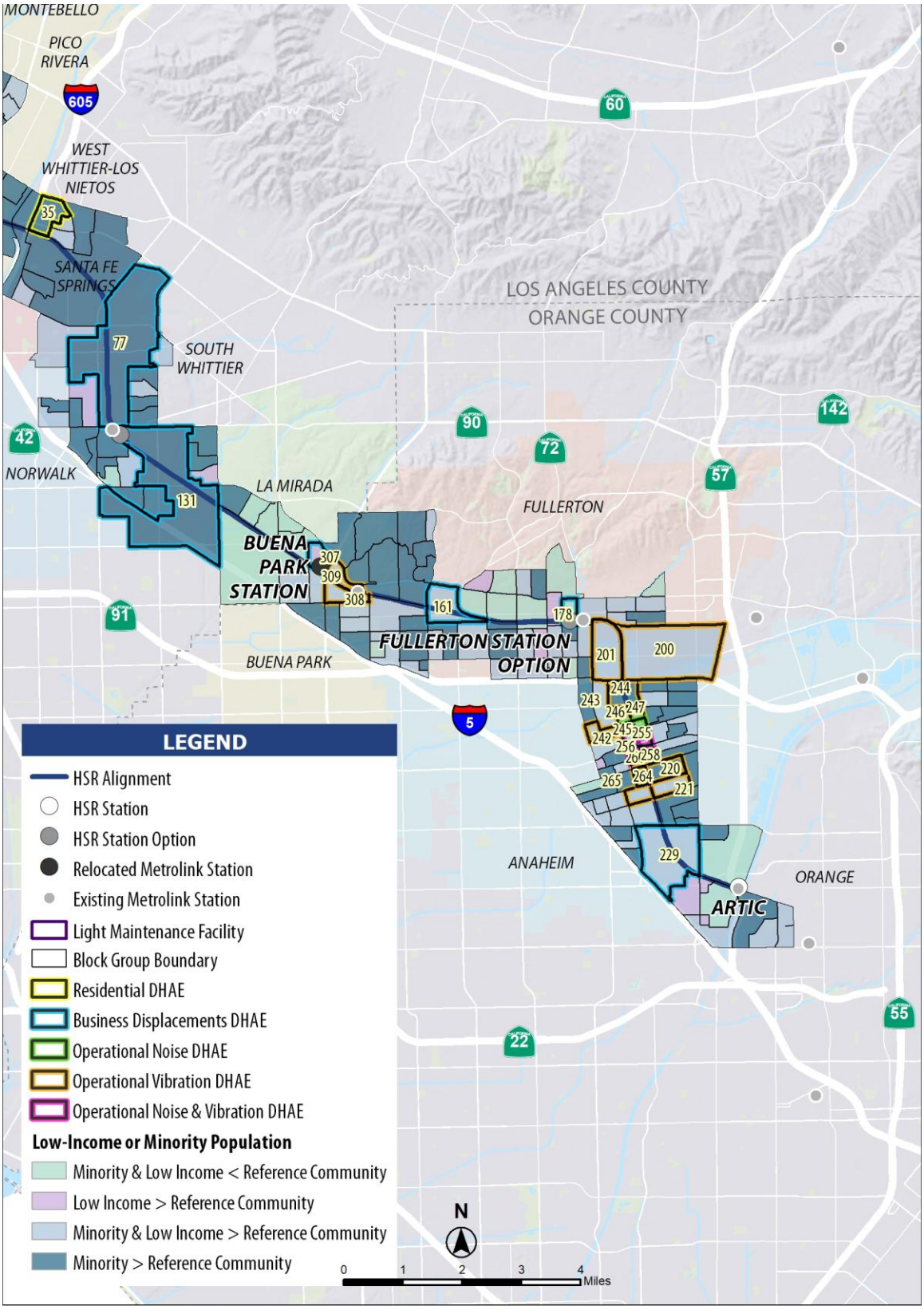


Figure 5-7 Disproportionately High and Adverse Effects Locations, Sheet 2 of 2

5.7.1 Operational Air Quality

Operations HRAs were conducted to evaluate the cancer risk and chronic noncancer risk from DPM emissions generated by the yard equipment activities at Hobart and Commerce Yards to determine the change in health risks caused by the reconfiguration of the yards.[11] Project operation at Hobart Yard would add about 101,094 feet of additional storage and staging tracks, spread across 14 new tracks. The BNSF mainline tracks would also be shifted along some locations in the project corridor. Future activity pertaining to the new tracks and BNSF mainline track shift is unknown and therefore cannot be analyzed in the HRA. Without clear activity data to analyze, it is possible that project operation at Hobart Yard could pose health risk from exposure to DPM. Because Hobart Yard is in the low-income and minority communities of Hobart/west Commerce, east Commerce, and Hobart in Vernon, there would be a potential DHAE from exposure to DPM emissions.

To help mitigate this impact, the Authority would implement **AQ-MM#4**, which requires that an operational HRA be conducted prior to the commencement of project operations. **AQ-MM#4** also requires the analysis and incorporation of additional feasible mitigation to reduce risks to the greatest extent practicable prior to project operations. However, because the potential increase in activity at Hobart Yard is unknown, the effectiveness of **AQ-MM#4** cannot be determined precisely. Without knowing if there is a potential health risk impact, or the level of this impact, the Authority is unable to implement other feasible mitigation measures. In the absence of certainty, exposure to DPM emissions from the Shared Passenger Track Alternatives would result in a DHAE for purposes of this EIR/EIS. However, the future operational HRA may determine that impacts are below the SCAQMD project-level thresholds and no additional on-site or off-site mitigation measure would be required. In that case, the Shared Passenger Track Alternatives would not have a DHAE from exposure to DPM emissions. This impact may be changed to not adverse based on new information or comments received during the public comment period.

5.7.2 Operational Noise and Vibration

Operation of HSR trains would result in operational noise levels exceeding the severe impact criteria at 59 residences. Installing a sound barrier in accordance with **N&V-MM#3** will provide effective noise mitigation for 33 of the 59 residences, but severe impacts would remain at 26 locations. Table 5-35 presents the locations. For these locations, other measures would be implemented, including noise abatement at receiver locations (for example, sound insulation of buildings) and easement acquisition. Even with implementation of **N&V-MM#3**, adverse effects would remain. Therefore, operational noise would result in a DHAE on minority communities in the McCampbell neighborhood in Pico Rivera and minority and low-income communities in central Anaheim.

Operational vibration would result in a permanent impact for 517 residences. Table 5-35 presents the locations. To reduce impacts, the Authority would implement **N&V-MM#4**, which includes vehicle suspension enhancements, special track support systems, building modifications, and other measures. Although **N&V-MM#4** will reduce vibration impacts, adverse effects would remain. Therefore, operational vibration from all alternatives and HSR station options would have a DHAE in minority communities in the McCampbell neighborhood in Pico Rivera and minority and low-income communities in northeast Buena Park and central Anaheim.

5.7.3 Hazardous Materials and Wastes

As discussed in Section 3.10, the project involves construction near potential environmental concern sites, including potential impacts associated with the Exide and Orange County North Basin Superfund sites. The Exide property at 2700 S Indiana Street is in the Hobart neighborhood of Vernon in BG 60379800161, a minority community. The Orange County North Basin site is a Superfund site (listed in September 2020) that features a contaminated groundwater plume that

[11] Acute (short-term) noncancer risk was not evaluated because no threshold (reference exposure level) for acute noncancer risk has been established for DPM.

extends to mixed residential, commercial, and industrial areas in Anaheim, Fullerton, and Placentia, and has affected the Orange County Groundwater Basin. This Superfund site is likely associated with Autonetics/Raytheon at 311 S Highland Avenue and Fullerton Manufacturing/ Raytheon at 310 E Walnut Avenue in the southeast and downtown neighborhoods of Fullerton. The site is in BG 60590112001 (low income) and BG 60590116022 (minority). Even with **HMW-IAMF#1**, **HMW-IAMF#3**, **HMW-IAMF#4**, **HMW-IAMF#6**, **HMW-IAMF#9**, and **GEO-IAMF#3**, risks associated with construction near the Superfund sites represent an adverse impact on minority communities in the Hobart and south-central Fullerton neighborhoods.

Because completion of remediation activities at each site is currently unknown, significant exposure to contaminants associated with these sites could occur during construction. The two Superfund sites are being monitored and remediated under the purview of the California Department of Toxic Substances Control and Regional Water Quality Control Board and, therefore, construction activities in areas affected by these sites would also require coordination with the applicable oversight agency. With implementation of **HMW-MM#2**, ongoing U.S. Environmental Protection Agency remedial actions at a proposed or listed Superfund site would occur, and remediation may also need to be funded by the Authority to be accomplished in accordance with the requirements of the appropriate oversight agency. This measure would be implemented for all communities equally and would reduce but not eliminate adverse effects. Therefore, after implementation of **HMW-MM#2**, the Shared Passenger Track Alternatives and Fullerton HSR Station Option would still have a DHAE on minority communities in the Hobart and south-central Fullerton neighborhoods. This impact may be changed to not adverse based on new information or comments received during the public comment period.

5.7.4 Business Displacements

As discussed in Section 5.6.3.7, business displacements required for project construction would result in DHAEs on low-income and minority communities. With incorporation of **SOCIO-IAMF#2**, **SOCIO-IAMF#3**, and **CA-IAMF#4**, it is expected that displaced businesses would relocate within relatively close proximity (e.g., in the same or adjacent community or city) to their current locations. No additional practicable mitigation measures are available or known at this time to further reduce this impact. Because there is a deficit of suitable replacement sites in Commerce and Vernon, the Shared Passenger Track Alternatives would have a DHAE on minority communities from business displacements in the Hobart neighborhood in Vernon and west Commerce. Displacements are presented in Table 5-35.

Table 5-35 Block Groups Affected by Preliminary Disproportionately High and Adverse Effect Findings

Location	Neighborhood	BG	Component
Operational Air Quality			
Hobart Yard	Hobart/west Commerce	60375323022	Shared Passenger Track Alternatives
	Hobart/west Commerce	60375323042	Shared Passenger Track Alternatives
	Hobart in Vernon	60379800161	Shared Passenger Track Alternatives
	Hobart/west Commerce	60375323023	Shared Passenger Track Alternatives
	Hobart/west Commerce	60375323031	Shared Passenger Track Alternatives

Location	Neighborhood	BG	Component
Operational Noise			
Rio Hondo Channel to Rosemead Blvd (Pico Rivera)	McCampbell in Pico Rivera	60375025002	Shared Passenger Track Alternatives
E Wilhelmina St to E Sycamore St (Anaheim)	Central Anaheim	60590865022	Shared Passenger Track Alternatives
E Sycamore St to Lincoln Ave (Anaheim)	Central Anaheim	60590873011	Shared Passenger Track Alternatives
		60590873012	Shared Passenger Track Alternatives
Lincoln Ave to E Santa Ana St (Anaheim)	Central Anaheim	60590873021	Shared Passenger Track Alternatives
		60590873023	Shared Passenger Track Alternatives
Lincoln Ave to E Santa Ana St (Anaheim)	Central Anaheim	60590873021	Shared Passenger Track Alternatives
Operational Vibration			
Rio Hondo Channel to Rosemead Blvd	McCampbell in Pico Rivera	60375025002	All alternatives and options
Brea Creek to Dale St	Northeast Buena Park	60591106072	All alternatives and options
		60591106073	All alternatives and options
E Orangethorpe Ave to E La Palma Ave	Central Anaheim	60590865021	All alternatives and options
		60590116021	All alternatives and options
		60590116022	All alternatives and options
E La Palma Ave to E Wilhelmina St	Central Anaheim	60590865023	All alternatives and options
		60590865024	All alternatives and options
E Wilhelmina St to Lincoln Ave	Central Anaheim	60590865012	All alternatives and options
		60590873013	All alternatives and options
Lincoln Ave to E Santa Ana St	Central Anaheim	60590873021	All alternatives and options
		60590873023	All alternatives and options
E Santa Ana St to Vermont Ave	Central Anaheim	60590863011	All alternatives and options
		60590863012	All alternatives and options
		60590874011	All alternatives and options
		60590874041	All alternatives and options
Hazardous Wastes and Materials			
Exide Property	Hobart in Vernon	60379800161	Shared Passenger Track Alternatives and Fullerton Station Option
Orange County North Basin Superfund Site	Downtown Fullerton	60590112001	Shared Passenger Track Alternatives and Fullerton Station Option
	Southeast Fullerton	60590116022	Shared Passenger Track Alternatives and Fullerton Station Option

Location	Neighborhood	BG	Component
Business Displacements			
Vernon	Hobart	60379800161	Shared Passenger Track Alternatives
Commerce	Hobart/west Commerce	60375323022	Shared Passenger Track Alternatives
	Hobart/west Commerce	60375323042	Shared Passenger Track Alternatives

Sources: U.S. Census Bureau 2021; Authority 2025b
BG = block group; CDP = Census-Designated Place; N/A = not applicable

5.7.5 Project Benefits

The need for an HSR system exists statewide, with densely populated regions of the state contributing to this need. The Los Angeles to Anaheim Project Section is an essential component of the California HSR System. The capacity of California's intercity transportation system, including transportation between Los Angeles and Anaheim, is insufficient to meet existing and future travel demand. The current and projected future transportation system congestion will continue to result in deteriorating air quality, reduced reliability, and increased travel times.

As described in Section 5.6.3, the Shared Passenger Track Alternatives would result in beneficial effects on communities by improving access to jobs and community amenities, providing new employment opportunities, reducing air quality-related emissions, improving bicycle and pedestrian facilities, and improving access and safety through grade separation of current at-grade crossings.

Project construction would stimulate short-term employment during construction and would create an estimated 31,950 additional direct, indirect, and induced job-years in Los Angeles and Orange Counties, which are composed mostly of low-income and minority communities. In addition, spending on construction equipment and materials during construction would result in a temporary sales tax revenue increase of roughly $1.5 million for the two-county region. Project operation would bring social benefits to communities and the region by improving access to job and community amenities. Ongoing operation and maintenance of the Shared Passenger Track Alternatives would add roughly 680 jobs to the two-county region by 2040. Over 4,900 additional jobs could be added by 2050 as a result of long-term economic effects associated with increased accessibility in areas surrounding HSR stations.

In addition, those who live or work in the general vicinity of ARTIC would benefit from improved access to new HSR facilities throughout the region and state. The HSR station would promote transit-oriented development on underused properties in the area, thus serving as a catalyst for planned growth in the area and revitalizing surrounding neighborhoods in Anaheim's Platinum Triangle. However, because ARTIC is already an existing transit hub and local development in the Platinum Triangle is guided by a master land use plan, new HSR facilities would not be the primary catalyst for growth in this neighborhood. The HSR station would likely encourage business and residential redevelopment, attract new businesses, and revitalize the general vicinity, resulting in primarily beneficial social impacts. Planned operation is anticipated to provide fast, frequent, and reliable service between the project section and suburban/exurban communities (Authority 2018), which would improve community connectivity.

As discussed in Section 5.6.3, project operation would result in a benefit to regional air quality through a regional decrease in vehicle miles traveled from a shift in modes of travel from vehicles and aircraft to HSR, which has fewer emissions relative to existing modes of transportation. Overall, project operation would result in a net regional decrease in emissions of criteria pollutants and MSAT emissions and a long-term net reduction in greenhouse gas emissions. The net regional decrease in emissions would provide long-term benefits to region as a whole, including communities along the alignment, from improvements in air quality during operations.

The Authority is committed to making sure that all benefits and services would be provided equitably without regard to race, color, religion, age, national origins, and disability as specified under Title VI of the Civil Rights Act of 1964 and the California High-Speed Rail Authority Title VI Plan. The Authority is committed to minimizing community effects by not disproportionately favoring or discriminating against any populations in the process of providing support to residences and businesses, such that there would not be the denial of, reduction in, or significant delay in the receipt of benefits of the project. Although these beneficial effects would offset some of the adverse effects, disproportionate adverse effects on low-income and minority communities would remain.

5.8 Community Analysis–Specific Measures to Minimize Harm

As described in Section 5.6 and summarized in Section 5.7, after application of mitigation from other sections of the EIR/EIS, there still remain some disproportionately high and adverse effects from project alternatives. The Authority would implement the mitigation measures described in Section 5.6.3 as appropriate to reduce effects related to other resources, which would reduce effects on communities identified in Section 5.4. For purposes of all community analysis-specific IAMFs, reference to eligible communities shall mean those communities identified in this community analysis. In addition, the Authority will implement the following community analysis–specific IAMFs:

- **CA-IAMF#1: Authority Community Ombudsperson and Contractor's Community Liaison:** Prior to final design, the Authority shall create an ombudsperson position to address the needs of adversely affected communities. The Authority will also make available resources developed for community analysis IAMFs to any other affected communities that are identified in Chapter 5 of the EIR/EIS along the alignment, if a specific community so requests. The Authority's final design plans and contract documents shall require the contractor to establish a full-time community liaison to serve as a multilingual single point of contact for the eligible communities. The scope of the Authority's community ombudsperson and contractor's community liaison responsibilities and duties include those articulated in the other community analysis–related IAMFs. These responsibilities include implementing programs (e.g., the Workforce Development Program, community air quality monitoring), holding community roundtables to obtain ideas for business spotlighting, developing appropriate aesthetic treatments, proposing potential intersection or safety improvements, and obtaining community-specific feedback on the following plans not typically reviewed by the general public:
  - Construction Management Plan (**SOCIO-IAMF#1**)
  - Relocation Mitigation Plan (**SOCIO-IAMF#3**)
  - Construction Safety Transportation Management Plan (**SS-IAMF#1**)
  - Safety and Security Management Plan (**SS-IAMF#2**)
  - Operations Noise and Vibration Technical Memorandum (**NV-IAMF#1**)

  The community ombudsperson and contractor's community liaison shall have stop-work authority in the event of safety concerns and may also apply stop-work authority for project-related concerns regarding fugitive dust, construction noise, and traffic (e.g., noncompliance with designated truck hauling routes and the California Transportation Plan). Beginning with final design and throughout the construction phase of the project, the contractor's community liaison shall submit reports (quarterly, at minimum) to the ombudsperson providing evidence of compliance with all community analysis IAMFs, maintenance of pedestrian access per **TR-IAMF#4**, communication of relocation mitigation plan, and relocation ombudsperson availability (**SOCIO-IAMF#3**). During construction, the contractor's community liaison shall provide multilingual notices (e.g., online information, e-blasts, text messaging, voice messaging, or mailers) to inform communities (specifically, communities identified in the first paragraph of this IAMF) of the Authority's hotline for reporting community concerns or complaints regarding construction noise and traffic effects and updates. These notices shall

be provided 2 weeks in advance of each planned instance of vehicle, pedestrian, bicycle, transit access, and utility service disruption. Notices shall continue, at a minimum, until the communities receive post-construction guidance with details of how to access and ride the HSR system. The community liaison's report to the ombudsperson shall include all concerns and complaints received from communities and measures taken by the Authority or its contractors to address those concerns and complaints. The Authority's construction contractor shall implement all corrective actions communicated by the community ombudsperson, or their community liaison, within a 24-hour period unless written authorization from the community ombudsperson provides the contractor with an alternate timeline. The Authority shall ensure the point of contact has access to the Authority's contract interpretation and translation services for substantial LEP languages in the affected area. Substantial shall be as defined in state LEP law (the Dymally Alatorre Bilingual Services Act). The Authority may also consider contracting with a community organization for substantial LEP communities to assist with outreach.

- **CA-IAMF#2: Business Spotlighting:** To minimize any potential access disruptions or inconveniences to businesses within adversely affected communities (as defined in **CA-IAMF#1**) during construction activities, the Authority shall provide assistance to those businesses to maintain visibility during construction, such as providing signage and targeted advertising and marketing campaigns, incentives for construction worker patronage (as applicable), or Authority-sponsored community events. Business spotlighting will include street vendors permitted by the City of Los Angeles.
- **CA-IAMF#3: Community-Inclusive Development of Aesthetic Treatments and Community Cohesion Enhancements:** In addition to the requirements in **AVQ-IAMF#1** and **AVQ-IAMF#2**, the contractor's community liaison shall work with the Authority community ombudsperson to hold community roundtables to seek input on locally desired aesthetic treatment preferences from the adversely affected communities (as defined in **CA-IAMF#1**), possibly developed by local artists. Treatment options may include streetscape, vegetation screening, consideration of a community mural, and beautification tree plantings or plant plantings (such as improvements to an existing community garden or establishment of a new community garden location). As appropriate, reuse of property purchased by the Authority that is within the communities (as defined in **CA-IAMF#1**) shall be considered for plant and tree plantings. Upon Authority review for compatibility with the Draft Design Opportunities for Local Jurisdictions and Aesthetic Requirements and approval, the identified locally desired aesthetic treatments shall be included in the final design plans. The Authority's contractor shall implement the aesthetic treatments in the construction of HSR infrastructure.
- **CA-IAMF#4: Business Relocation/Displacement Assistance:** Pursuant to **SOCIO-IAMF#3**, the Authority will develop a relocation mitigation plan. The plan will include a subsection dedicated to addressing adverse effects to businesses in the communities (as defined in **CA-IAMF#1**). This subsection shall include a description of measures taken or proposed to offset the adverse effects of business displacements and relocations in communities, including a description of measures to relocate displaced businesses in proximity to their same community. The Authority shall hold community roundtable meetings to seek and consider input from affected communities prior to finalizing the Authority's Relocation Mitigation Plan.

At this time, there are no further practicable community analysis–specific mitigation measures or enhancement measures to avoid or reduce DHAEs from operational noise and vibration, residential displacements, and business displacements. The Authority would coordinate with the public to develop enhancement measures if public input provided during the public review process suggests existing design and mitigation measures set forth in the EIR/EIS do not address the community's concerns.

5.9 Preliminary Conclusion

The Shared Passenger Track Alternatives would likely result in a limited set of DHAEs on low-income and minority communities residing or conducting business in the project section. Mitigation measures would be implemented to reduce effects, but effects from operational air quality, operational noise and vibration, and displacements would remain high and adverse.

The low-income and minority communities within the RSAs would experience beneficial effects resulting from the project, including transit improvements that would provide improved access to jobs and community amenities, new employment opportunities, reduced air quality-related emissions, improved bicycle and pedestrian facilities, and improved access and safety through grade separation of current at-grade crossings. Many of these benefits would be experienced more greatly than the rest of the general public because of the proximity of these low-income and minority communities to the proposed project corridor.

The FRA and the Authority have conducted targeted outreach activities for residents and business in the project section since 2015. Chapter 9 documents inclusive public engagement in project planning activities, including Appendix 9-A, which lists meetings held as a part of the Authority's outreach effort. In addition, Appendix 9-B includes the Inclusive Public Engagement Plan that documents the Authority's specific approach to outreach activities. Based on outreach conducted to date, concerns include impacts from construction, noise and vibration, business and residential displacements, and station connectivity.

When considering IAMFs, proposed mitigation measures, and benefits of the project, the Authority has preliminarily determined that the Shared Passenger Track Alternatives would result in disproportionately high and adverse environmental effects on minority and low-income communities related to operational air quality, operational noise and vibration, hazardous materials and wastes, and business displacements in the following communities: southwest West Whittier–Los Nietos CDP, Hobart in Vernon and Commerce, west Commerce, east Commerce, Downey and McCampbell in Pico Rivera, northeast Buena Park, southeast Santa Fe Springs, northern Santa Fe Springs, Almond in Fullerton, southeast Fullerton, downtown Fullerton, central Anaheim, and southeast Anaheim.

The Authority's community analysis is preliminary and is subject to change based on comments received during the public comment period on this document. In the Final EIR/EIS, the Authority will make its final determination concerning whether the project alternatives will have a DHAE on minority populations and low-income populations considering the project effects on these populations, measures to minimize harm, and project benefits. The Authority will take into account the input of minority populations and low-income populations during the ongoing and continuing engagement, including regarding measures to minimize harm as well as comments from minority populations and low-income populations on the Draft EIR/EIS.