18 STANDARD RESPONSES

18.1 Introduction

The California High-Speed Rail Authority (Authority) circulated the Draft Environmental Impact Report (EIR)/Environmental Impact Statement (EIS) to affected local jurisdictions, state and federal agencies, tribes, community organizations, other interest groups, interested individuals, and the public for public comment from December 5, 2025, to February 3, 2026. The Authority has prepared a Los Angeles to Anaheim Project Section (project section) Final EIR and Proposed Final EIS (hereafter referred to as the Final EIR/EIS) that includes responses to comments and clarifications and changes to the Draft EIR/EIS.

The Authority received 306 submissions, containing 1,443 individual comments, during the comment period. Following the close of the comment period on February 3, an additional three submissions containing seven comments were received. Although these submissions were received past the formal close of the comment period, these letters were processed and responses have been provided in Volume 4 of this Final EIR/EIS.

Many of the comments raised similar issues about the project and its environmental impacts. The Authority has, therefore, prepared a chapter of standard responses to address the most frequently raised issues in a consistent manner in one location. This reduces repetition of responses. When an individual comment raises an issue discussed in a standard response, the response to the individual comment includes a cross-reference to the appropriate standard response.

18.2 General Responses

18.2.1 LAA-Response-GENERAL-01: Not Used

No standard response was developed for this category.

18.2.2 LAA-Response-GENERAL-02: Consideration of Plans and Projects

18.2.2.1 Comment Summary

Commenters questioned how proposed and planned projects were considered in the design and environmental analysis, including Link Union Station, Fullerton Interlocker, OCVIBE, Pico Rivera Metrolink Station, and the State College Boulevard grade separation in Anaheim. Concerns were raised regarding the level of coordination between the Authority and other agencies, and the extent to which the high-speed rail (HSR) project integrates with or accommodates the proposed projects. Commenters also requested modifications to the HSR design to accommodate the proposed projects.

18.2.2.2 Response

The following proposed or planned projects are closely related to the project section, because they share rail infrastructure with HSR, are integrated into the HSR design, or have identified the same properties that would be needed to build project elements. Some of these related projects are proposed to advance on different timelines than HSR, with some potentially being implemented as early action projects to be completed prior to HSR construction. Other related projects are being considered through distinct and separate planning and environmental review processes. The Authority has continuously coordinated with the other agencies and project proponents to ensure that HSR design would not preclude implementation of these related projects. In some cases, the Authority has integrated the designs prepared by the project proponents into the project section Preliminary Engineering for Project Definition (PEPD), and conducted environmental analysis based on those designs. However, the Authority recognizes that some of the proposed and planned project plans have changed since preparation of the Draft EIR/EIS, which began in 2023. The Authority is committed to ongoing coordination with the project proponents to ensure that HSR and the related projects are compatible.

Link Union Station

The Los Angeles County Metropolitan Transportation Authority (Metro) Link Union Station project is described in Chapter 2, Alternatives, of the Draft EIR/EIS, including its relationship with the project

section. The Link Union Station project and the project section occupy the same geographic area between U.S. Highway 101 and First Street, but are separate and distinct projects with different environmental review processes, project sponsors, and implementation schedules.

The Link Union Station project would be completed prior to the project section, and would affect the northern end of the BNSF Railway (BNSF) Eighth Street Yard (also referred to as the West Bank Yard in the Link Union Station project environmental documents) around First Street, because it would build a viaduct and rail embankment from Los Angeles Union Station to First Street, thereby displacing approximately 5,500 feet of freight storage track (Metro 2026a). As mitigation for displacing 5,500 feet of storage track at the northern end of the Eighth Street Yard, Metro proposed improvements at Malabar Yard, including an approximately 1,000-foot connector track between two existing track segments on the south side of 46th Street and closure of 49th Street in Vernon. These improvements are proposed as mitigation for impacts on BNSF operations caused by the Link Union Station project, and are not included in the project section. Phase A of the Link Union Station project, which includes building the structure over U.S. Highway 101, is currently scheduled to be completed prior to HSR construction. Metro began preconstruction activities for Phase A of the project in 2025, and approved funding for early work construction packages in February 2026. Metro is continuing to seek funding for both Phases A and B, and anticipates that Phase A of the project would be completed by 2031 (Metro 2026b).

Separately, the project section would be built later, and would affect the southern end of the Eighth Street Yard from First Street to Interstate 10, because it would remove the existing tracks within this segment to build the new electrified tracks. The removed tracks would be relocated to the new consolidated storage and staging track area next to Hobart Yard, which would accommodate all of the relocated BNSF affected tracks throughout the entire project section. This track relocation and replacement in the new consolidated storage area are unrelated to Link Union Station or to Malabar Yard.

Fullerton Interlocker

The Fullerton Interlocker Project is a project being led by the Southern California Regional Rail Authority (Metrolink) and BNSF. The project aims to reduce rail congestion and improve coordination between passenger and freight services traveling through and stopping at the station, by adding a fourth mainline track and building a new center island platform west of the existing platforms. To date, Metrolink has not prepared a California Environmental Quality Act (CEQA)/National Environmental Policy Act (NEPA) environmental document for the Fullerton Interlocker Project. The Authority integrated the Fullerton Interlocker design into the HSR design, using a concept prepared by Metrolink and BNSF and provided to the Authority in June 2023. The Fullerton Interlocker components based on this June 2023 design are described in more detail in Chapter 2, Section 2.6.5, Early Action Projects, of the Draft EIR/EIS, on page 2-143.

As described in Section 2.6.5 of the Draft EIR/EIS, the Fullerton Interlocker Project could occur as an early action project and be implemented ahead of HSR by other agencies. Should Metrolink choose to maintain the June 2023 design and implement the Fullerton Interlocker Project as an early action project, Metrolink could rely on the project section EIR/EIS for environmental clearance. However, in the event that Metrolink does not advance its project separately, the Authority would build the Fullerton Interlocker components necessary for blended operations to occur within this corridor.

The Authority acknowledges that Metrolink and BNSF may choose to revise the final design of the Fullerton Interlocker Project. Given the difference in timing of the two projects, the uncertainty of funding for HSR, and the fact that Metrolink has not made a more recent design available to the Authority, the Authority has not made any changes to the HSR PEPD or environmental analysis in the Final EIR/EIS. The June 2023 design continues to be the best available information and a reasonable design assumption for the Authority's EIR/EIS, because it allows the Authority to establish an environmental footprint and construction parameters for impact analysis. Should Metrolink revise the Fullerton Interlocker design in the future, the Authority would collaborate with Metrolink and other relevant partners to ensure that the updated design is compatible with HSR, as well as to determine the best path for updating the environmental analysis.

OCVIBE

The City of Anaheim-approved OCVIBE is a 100-acre master planned campus that would surround the Honda Center and consist of shopping, dining, sports, entertainment, open space, apartments, offices, and parking. The Anaheim City Council originally approved Anaheim Real Estate Partners' OCVIBE Development Agreement in 2022 (City of Anaheim 2022). The Anaheim City Council approved an updated development agreement in October 2024 (City of Anaheim 2024). Phase I final site plans were approved in September 2022, and construction is under way for various OCVIBE components. As documented in the City of Anaheim Planning and Building Department's July 22, 2025, agenda report to the Anaheim City Council, construction of roadway infrastructure has been completed for River Road Phase I and Stanley Cup Way (City of Anaheim 2025). Construction is ongoing for Katella Avenue, Douglass Road, River Road Phase II, and River Road Phase III. Construction is also ongoing for the following OCVIBE site improvements: Market Hall, Security Hub, Concert Hall, Urban Park, Parking Deck A, Parking Deck B, Parking Deck C, and Parking Deck D.

As described in Section 3.13, Station Planning, Land Use, and Development, of the Draft EIR/EIS, the Authority acknowledges the City of Anaheim's planned development in the Platinum Triangle, and has coordinated regularly with the city on HSR implementation in this area. The Authority and the City of Anaheim executed a Memorandum of Understanding (MOU) in December 2020 specifically regarding the HSR station design at Anaheim Regional Transportation Intermodal Center (ARTIC). The 2020 MOU formalized the commitment by the Authority and City of Anaheim to work together to accommodate HSR passengers within the existing ARTIC facilities and parking supply and acknowledges that modifications to existing facilities and infrastructure may be needed in and around ARTIC, including parking facilities, vehicular circulation and access, passenger circulation and access, and any other necessary changes. The 2020 MOU also formalized the Authority's commitment to collaborate with other parties, in addition to the City of Anaheim, as it relates to planned development within the Platinum Triangle.

The Authority acknowledges OCVIBE's status as a planned project that has been approved and vested by the City of Anaheim, and that it is already under construction, with major components slated to be completed in 2027 and full buildout completed after 2030. Section 3.19, Cumulative Impacts, of the Draft EIR/EIS accounts for OCVIBE's status as a planned project. OCVIBE and its components are further discussed in Section 3.13 of the Draft EIR/EIS, specifically in Section 3.13.5.2, Zoning and Planned Uses, and Section 3.13.6.2, No Project Alternative. The Draft EIR/EIS's Section 3.13.5.2 discussion on OCVIBE has been revised in Chapter 16, Corrections and Additions to the Draft Report, Section 16.5.13, Section 3.13: Station Planning, Land Use, and Development, of the Final EIR/EIS to account for updates to the status of OCVIBE, current as of July 2026.

As detailed in Section 2.6.3.3, High-Speed Rail Station Facilities, of the Draft EIR/EIS, the Shared Passenger Track Alternatives would include installation of HSR station platforms and other facilities at ARTIC. The proposed HSR station facilities would conflict or interact with OCVIBE improvements in the following areas:

- The parcel immediately west of Douglass Road (identified by Assessor's Parcel Number 232-071-03), where construction is currently underway for OCVIBE's Parking Deck A. A new HSR/ Metrolink/National Railroad Passenger Corporation (Amtrak) parking structure is proposed in this location.
- The parcel containing ARTIC (Assessor's Parcel Number 232-072-06), the northern portion of which was approved by the City of Anaheim to be used for OCVIBE's Meadow Park and other outdoor amenities. HSR proposes to share the existing pick-up/drop-off area north of ARTIC with HSR riders. The pickup/drop-off area would be relocated by OCVIBE, and the Authority would coordinate with the city to share this new area.
- Parcel 5A/Lot B of the OCVIBE Master Site Plan (Assessor's Parcel Number 386-521-17), where an OCVIBE office building is planned. An HSR passenger terminal and a power substation are proposed in this location.

The Authority anticipates construction activities associated with the project section to commence in 2031 or later, at which point the majority of OCVIBE would already be completed. Consistent with the

2020 MOU, the Authority is committed to ongoing coordination with the City of Anaheim and Anaheim Real Estate Partners, because the Authority's goal is to integrate the HSR station facilities into the ARTIC and OCVIBE area in a mutually beneficial way so that the HSR station enhances the development, even if some OCVIBE elements would need to be modified in the future. Any property that needs to be acquired from Anaheim Real Estate Partners will be done so in accordance with SOCIO-IAMF#2, Compliance with Uniform Relocation Assistance and Real Property Acquisition Policies Act.

The Authority's coordination with the City of Anaheim and Anaheim Real Estate Partners on the ARTIC HSR station platform and passenger terminal design is an example of the Authority's commitment to coordinating with other parties associated with planned development within the Platinum Triangle. The Authority has shared the PEPD plans with the city and Anaheim Real Estate Partners and met several times to discuss potential conflicts in the designs. The Authority met with the City of Anaheim and OCVIBE on February 26, 2025, during which the parties committed to identifying solutions to allow for compatible development on Parcel 5A/Lot B of the OCVIBE Master Site Plan. A portion of the new ARTIC HSR facilities, including the HSR station platform, would extend into Parcel 5A/Lot B, which the OCVIBE Master Site Plan identifies as planned for a maximum 170,000-square-foot institutional office space. In a subsequent meeting between the Authority and the City of Anaheim on May 14, 2025, the city confirmed that development of the planned institutional office building on Parcel 5A/Lot B has been moved to a later stage of buildout of the OCVIBE campus, allowing for more flexibility in the building's design (Authority 2026). The City of Anaheim requested that the Authority define the ARTIC HSR track and platform envelope based on the currently proposed platform configuration. Through the Authority's coordination with OCVIBE, Parcel 5A/Lot B will be developed through a shared vision that supports the institutional office building and ARTIC HSR facilities, with shared access to both uses. The Authority will continue to coordinate with the City of Anaheim and Anaheim Real Estate Partners to ensure that HSR and office uses can satisfactorily fit together within Parcel 5A/Lot B and to establish technical criteria and clearances to enable private development consistent with the applicable HSR engineering and operational clearances.[1]

Future coordination would also occur with respect to the parcels planned for OCVIBE's under-construction Parking Deck A (Assessor's Parcel Number 232-071-02 and -03) to confirm that the parking requirements for both OCVIBE and HSR are accommodated. As described in Section 2.6.3.3 of the Draft EIR/EIS, the HSR station design reflects the maximum ridership forecast for the station and includes conservative assumptions for station area parking to capture the maximum potential environmental impacts of the upper range of parking needs. However, the Authority is committed to promoting transit-oriented development and expanding multimodal access to the HSR system. LU-IAMF#2, Station Area Planning and Local Agency Coordination, requires the Authority-designated contractor to document the Authority's coordination with local agencies and station area planning to prepare station areas for HSR operations. The Authority's coordination and station area planning would be conducted consistent with the Authority's *HST Station Area Development: General Principles and Guidelines*. These principles and guidelines establish the Authority's commitment to partner with local government authorities with development jurisdiction at and around HSR station areas to develop station area plans that include development strategies to promote bicycle and pedestrian connectivity and access to surrounding communities. The station area plans could take the form of a specific plan that sets forth land use development standards, including standards to ensure sufficient access and parking at and around HSR station areas (refer to Government Code Section 65450 et seq.). Therefore, consistent with LU-IAMF#2, the Authority is committed to coordinating with the City of Anaheim on access to ARTIC, which would include consideration of the final location, amount, and phasing of parking needed for HSR service at ARTIC. As the Authority

[1] On August 25, 2026, the Anaheim City Council (Item 22 re: OC VIBE and LOT B) approved the transfer of the Parcel 5A/Lot B property for use as the future site of an Immersive/Interactive Museum, contrary to the land use reflected in the OCVIBE Master Site Plan and past coordination with the Authority regarding the institutional office space. On learning of the proposed transfer and consistent with the MOU, the Authority submitted a letter to the City Council at the hearing on August 25 expressing its concern and commitment to working together per the terms of the MOU. Once the Authority obtains funding for the project section and plans for the museum are available, the Authority will evaluate whether any project changes are needed and any additional environmental review is necessary.

progresses toward commencing construction of the HSR components at ARTIC, the Authority will further evaluate parking to determine at that time what additional parking is needed to accommodate HSR.

Regarding the planned Meadow Park, the Authority has revised Section 3.15, Parks, Recreation, and Open Space; and Chapter 4, Section 4(f) and Section 6(f) Evaluations, of the Draft EIR/EIS to include this planned resource. Refer to Chapter 16 of the Final EIR/EIS for these revisions.

The HSR project is currently at a 15 percent design level and, as such, the Authority has not prepared specific construction approaches or quantification of construction impacts by phase, because this level of detail would be available in a later phase of design. Nonetheless, consistent with the 2020 MOU, the Authority is committed to coordination with Anaheim Real Estate Partners to support satisfactory implementation of both projects.

Pico Rivera Metrolink Station

As set forth in Draft EIR/EIS Section 2.6.3.5, Freight or Passenger Railroad Modifications, the Shared Passenger Track Alternatives would relocate the Commerce Metrolink Station to the southeast, near the boundary between Commerce and Montebello. The Authority initiated the Metrolink station relocation analysis after preparation of the 2016 Supplemental Alternatives Analysis (SAA) Report. A detailed description of the station relocation analysis is provided in Draft EIR/EIS Appendix 2-C, Buena Park Metrolink Station Relocation and Commerce Metrolink Station Relocation Analysis. The Authority evaluated five options close to the existing station location, because the Authority's practice is to replace infrastructure in kind near the same location to the greatest extent possible. The Maple Avenue site (the proposed site in the Draft EIR/EIS) was selected because it scored the highest overall in the relocation analysis, and it was incorporated into the 2018 Project Alternative PEPD. Relocating the Commerce Metrolink station to a more distant location along the corridor, instead of the currently proposed site in the Draft EIR/EIS, would require agreements from all parties, including the City of Commerce, Metrolink as the operator, BNSF as the host railroad, the city where the station property is sited, and possibly others.

In 2025, Metro completed a feasibility study to evaluate a new Metrolink Station in Pico Rivera (Metro 2025). Metro, along with the Cities of Pico Rivera, Commerce, and Montebello, submitted a joint comment letter on the Draft EIR/EIS, requesting that the Authority consider relocating the Commerce Metrolink Station to the site identified in the Pico Rivera Regional Rail Station Feasibility Study in lieu of the Maple Avenue location that was included in the project section. The feasibility study is the first step in the planning process for this project, which would be followed by an alternatives analysis and then environmental clearance with advanced design. As of March 2026, Metro began identifying funding sources to complete 30 percent design and environmental studies (Metro 2026c). There is currently no funding available to advance this project. Once funding is identified, it would still take several years for the additional design and studies to be completed, based on typical timeframes for similar projects. Therefore, the Authority did not assess the Pico Rivera Station as a feasible location in the Draft EIR/EIS, and has not made revisions to the Draft EIR/EIS in response to this comment. The Authority has been part of discussions with the various agencies studying the Pico Rivera Metrolink Station and is part of that project's Technical Advisory Committee. The Authority acknowledges the cities' preference for relocating the station to Pico Rivera instead of Commerce, but Metro and the Cities of Pico Rivera, Commerce, and Montebello would need to coordinate this decision with Metrolink, BNSF, and possibly other agencies and operators. To date, these agencies have not yet agreed to this change. Should these parties decide to relocate the Commerce Metrolink Station to Pico Rivera and provide an updated design, the Authority will continue to work closely with them to ensure that the updated design is compatible with HSR, as well as to determine the best path for updating the analysis.

City of Anaheim State College Boulevard Grade Separation

The City of Anaheim, in coordination with the Orange County Transportation Authority, prepared 35 percent design plans for the State College Boulevard undercrossing in 2013, but the city paused the project because of a lack of identified funding. In 2017, the city and the Authority entered into a

Memorandum of Agreement that incorporated the proposed grade separation into the project section (City of Anaheim 2017).

The city's 35 percent design plans included roadway and railroad designs that were prepared at a higher level of detail than those of the HSR project, and included some elements unrelated to HSR operations, such as a detour road and streetscape improvements. Consequently, the Authority included only the elements from the city's plans that were required for HSR operations, and that were consistent with the level of detail provided for the other proposed grade separations in the PEPD. These sheets are included in Volume 3.3A of the Draft EIR/EIS.

As an early action project, the grade separation would receive environmental clearance through the project section EIR/EIS, and could be built by other agencies ahead of HSR implementation. The Authority acknowledges that some elements of the city's 35 percent design plans extend beyond the HSR footprint. Should the City of Anaheim wish to advance these other elements of the grade separation or modify the design, the Authority would work with the city and the Orange County Transportation Authority to ensure that the updated design is compatible with HSR, as well as to determine the best path for completing the environmental review for any city-led elements beyond the scope of what was analyzed for the HSR improvements. In the event that the City of Anaheim and the Orange County Transportation Authority do not advance this project separately as an early action project, the Authority would build the elements of the State College Boulevard grade separation that are necessary to support the HSR project.

18.2.3 LAA-Response-GENERAL-03: Funding and Project Costs

18.2.3.1 Comment Summary

Commenters expressed concern regarding project costs, the availability of funding for construction and operation, and potential cost overruns.

18.2.3.2 Response

Cost

The capital and operations and maintenance (O&M) costs were updated in the Final EIR/EIS based on the 2026 Business Plan approved by the Authority Board of Directors on June 1, 2026. Refer to Final EIR/EIS Chapter 6, Project Costs and Operations; Appendix 6-A, High-Speed Rail Operating and Maintenance Cost for Use in Environmental Impact Report/Environmental Impact Statement Project-Level Analysis; and Appendix 6-B, 2026 Business Plan Technical Supporting Document: Capital Cost Basis of Estimate Report, for revisions related to changes in cost. Previous Business Plans had used a parametric and unit rate-based modeling techniques for cost estimates. In the 2026 Business Plan, the Authority transitioned to a more detailed "bottom-up" approach that brings with it transparency and estimating robustness. The "bottom-up" approach uses detailed quantities from the latest engineering drawings or design elements.

The Shared Passenger Track Alternatives' cost estimates include the costs of the ARTIC HSR facilities and the light maintenance facility (LMF). The cost estimates do not include costs associated with HSR track construction just north of U.S. Highway 101 to First Street, because this work is analyzed in the Link Union Station project environmental document. However, the cost estimates do include costs associated with installation of the overhead contact system (OCS) from just north of U.S. Highway 101 to First Street.

Pursuant to the 2026 Business Plan, $126.2 billion is needed to deliver Phase 1 service from San Francisco to Los Angeles/Anaheim, which is approximately $2 billion less than previous cost estimates as a result of a more streamlined delivery strategy. Regarding comments that assert HSR is a waste of money and that California should be investing in other means of transportation, the Authority's 2023 Fact Sheet on Capacity Analysis notes, "the state would need to construct approximately 4,200 new highway lane miles plus 2 new airport runways and 91 more airport gates to equal the people-carrying capacity of HSR," all of which is estimated to cost between $122 billion and $199 billion, not including O&M costs (Authority 2023a). This would be more expensive than the amount required for Phase 1 of the HSR system to provide this same level of capacity from San

Francisco to Los Angeles (Authority 2023a). Some commenters asserted that the Authority has made little progress in delivering the system, suggesting that overall project costs are inaccurate. As noted in the Authority's 2026 Business Plan, 119 miles of the Central Valley Segment are under construction, with passenger service on the Merced to Bakersfield early operating segment scheduled to open in 2033. Per the 2026 Draft Business Plan, rather than building a "full buildout" for initial service, the Authority's strategy is to right-size initial delivery to control costs and begin service sooner, and then expand infrastructure as demand grows. This initial segment will serve as a test track for HSR trains. Additionally, the Authority continues to make progress on construction of other critical components; in June 2026, the Board of Directors approved a track and systems construction contract, which will install the track, OCS, and train control and communications infrastructure needed to transform the 119 miles of guideway completed in the Central Valley into an electrified HSR system capable of speeds of up to 220 miles per hour.

Funding

The financial analysis of the California HSR System, described in the 2020 Business Plan (Authority 2020:143), the 2022 Business Plan (Authority 2022a:91), the 2024 Business Plan (Authority 2024, page 101), and the 2026 Business Plan (Authority 2026:49), demonstrates that the projected ridership and revenues for the Phase 1 HSR system will be able to cover the costs of operating the system, meaning that no operational subsidy for Phase 1 would be required. It is anticipated that construction of the HSR system will continue to be financed through a combination of federal, state, and private funds. To date, the Authority has secured funding through the Federal Railroad Administration's (FRA) High-Speed Intercity Passenger Rail Program, California Proposition 1A's Safe, Reliable High-Speed Passenger Train Bond Act adopted by state voters in November 2008 and proceeds from California's Cap-and-Trade Program. In 2014, the Legislature also established a continuous funding source for the HSR system from the state's Cap-and-Trade Program. In 2025, the Legislature extended the Cap-and-Invest Program, previously known as the Cap-and-Trade Program, through 2045. Through these funding sources, the Authority forecasts $39.3 billion in capital funding through 2045.

Pursuant to the 2026 Business Plan, delivering the full Phase 1 system will require a renewed effort to secure stable, predictable, long-term funding. The Merced to Bakersfield initial operating segment remains the Authority's primary focus of current construction and available funding, while the Northern California and Southern California segments will require substantial renewed effort to secure stable and predictable long-term funding. The 2026 Business Plan identifies opportunities for the State of California to enhance long-term financial sustainability by leveraging Authority assets, particularly right-of-way and linear infrastructure. These opportunities include generating ancillary revenue through energy and technology uses, which could be implemented prior to the start of passenger service. The 2026 Draft Business Plan recommends that the State of California make HSR a priority for future surplus funding to support completion of the system.

Potential for Cost Overruns

As discussed in Section 2.10.3, General Approach, of the Draft EIR/EIS, the Authority would begin implementing its construction plan for the project section after receiving the required environmental approvals and permits, securing funding, and acquiring the necessary right-of-way for the project. The general approach outlined below would help avoid potential cost overruns by waiting to begin implementation of the construction plan until after funds are secured and right-of-way is acquired. Given the size and complexity of the HSR project, the design and construction work could be divided into several procurement packages. In general, the procurement would address the following:

- Civil/structural infrastructure, including design and construction of passenger stations, maintenance facilities, wayside facilities, utility relocations, and roadway modifications
- Trackwork, including design and construction of direct fixation track and sub-ballast, ballast, ties and rail installation, switches, and special trackwork
- Core systems, such as traction power, train controls, communications, the operations center, and the procurement of trainsets

18.2.4 LAA-Response-GENERAL-04: General Opinions, Opposition, or Support

18.2.4.1 Comment Summary

Commenters expressed opinions about, opposition to, or support for the statewide HSR project, including the Los Angeles to Anaheim Project Section.

18.2.4.2 Response

CEQA and NEPA require a Final EIR and EIS, respectively, to evaluate environmental issues in comments on a Draft EIR/EIS and to respond to the comments received on significant environmental issues (refer to 14 California Code of Regulations 15088(a) and FRA Procedures for Considering Environmental Impacts, 64 *Federal Register* 28556, Section 14(s)). The comments express the commenters' views on, opposition to, or support of HSR generally or the project section, but do not relate to a specific environmental issue. Please note that opinion-based comments do not require a response under CEQA (State CEQA Guidelines, Section 15088(a)) because they do not raise significant environmental issues. However, a response is drafted for every public comment the Authority received and is included as part of the record for consideration by the Authority Board of Directors.

18.2.5 LAA-Response-GENERAL-05: Not Used

No standard response was developed for this category.

18.2.6 LAA-Response-GENERAL-06: Not Used

No standard response was developed for this category.

18.2.7 LAA-Response-GENERAL-07: Construction Schedule

18.2.7.1 Comment Summary

Commenters inquired about the construction schedule for the project section.

18.2.7.2 Response

The Draft EIR/EIS assumes that the project section would be divided into eight separate construction phases. Refer to Section 2.10.1, Project Delivery, in Section 2.10, Construction Plan and Phased Implementation Strategy, of the Draft EIR/EIS for further information on the estimated construction phasing. Refer to Table 2-19 of the Draft EIR/EIS for estimated construction timelines.

18.2.8 LAA-Response-GENERAL-08: Requests for Extension of the Comment Period

18.2.8.1 Comment Summary

Commenters requested an extension of the public comment period on the Draft EIR/EIS.

18.2.8.2 Response

The Authority is the CEQA and NEPA lead agency for the project section and this EIR/EIS. As such, public noticing of the availability of the Draft EIR/EIS for public review was conducted by the Authority. The Draft EIR/EIS was made available for review and comment for a 61-day public review beginning on December 5, 2025, and ending on February 3, 2026, a longer review period than required by CEQA. The State CEQA Guidelines provide the following:

> The public review period for a draft EIR shall not be less than 30 days nor should it be longer than 60 days except under unusual circumstances. When a draft EIR is submitted to the State Clearinghouse for review by state agencies, the public review period shall not be less than 45 days, unless a shorter period, not less than 30 days, is approved by the State Clearinghouse (14 California Code of Regulations 15105).

Likewise, the Authority, in its role as NEPA lead agency, circulated the Draft EIR/EIS consistent with Section 13(c)(9) of the FRA Procedures for Considering Environmental Impacts, which provide the following:

> The Draft EIS shall be made available for public and agency comment for at least 45 days from the Friday following the week the draft EIS was received by [the U.S. Environmental Protection Agency]. The time period for comments on the draft EIS shall be specified in a prominent place in the document, but comments received after the stated time period expires should be considered to the extent possible (64 *Federal Register* 28553, May 26, 1999).

The Authority believes the time provided was sufficient for the public to review and provide comments on the project section Draft EIR/EIS.

18.3 Chapter 1: Project Purpose, Need, and Objectives

18.3.1 LAA-Response-Chapter 1 P&N-01: Project Benefits

18.3.1.1 Comment Summary

Commenters raised questions about the benefits of the project. Concerns included high costs, the train not providing travel time savings compared to existing passenger rail services, and duplication of service within the corridor.

18.3.1.2 Response

Although Metrolink and Amtrak provide passenger rail service within the project section, they serve different markets and fulfill different purposes. Metrolink and Amtrak primarily provide commuter rail service within Southern California, while HSR would be an intrastate system that connects Northern and Southern California. Section 1.2.2, Purpose of the Los Angeles to Anaheim Project Section, states that the purpose of the project section is to increase connectivity to airports, mass transit, and major urban centers with predictable and consistent travel times. This alignment would increase accessibility to Orange County, the second-most populated county in the state, and would provide a one-seat ride from the Los Angeles/Orange County area to the rest of the state.

The urban nature of this corridor means that HSR trains would travel at speeds similar to those of existing Metrolink and Amtrak trains, regardless of whether an intermediate HSR station is included. Relying on slower speeds and reduced service levels in the project section does not undermine the purpose of the statewide HSR system or provide redundant passenger service. Although HSR trains in this project section would not operate at as high of speeds as HSR trains in the less-urban areas of the HSR system, the project section still would provide multiple benefits to the region as well as to the entire state. Investments in the early action projects would deliver near-term mobility and vehicle emissions benefits. As described in the Authority 2026 Business Plan, completing the connection to Los Angeles/Anaheim would make Phase 1 strongly revenue-positive in its first full year (2040), with net proceeds and an O&M recovery ratio well over 100 percent, delivering over $183 billion in projected 40-year net operating profit (Authority 2026).

The project would facilitate multiple improvements for all operators within the corridor, including Metrolink and Amtrak. Overall, the blended system design allows for more efficient operations and minimizes potential conflicts between freight and passenger trains.

18.4 Chapter 2: Alternatives

18.4.1 LAA-Response-Chapter 2 Alt-01: Alternatives Selection and Evaluation Process and Identification of the Preferred Alternative

18.4.1.1 Comment Summary

Commenters inquired about the range of alternatives studied in the Draft EIR/EIS. Commenters also raised concerns regarding the alternative development process, including alternatives considered and reasons they were not carried forward. Commenters additionally inquired about how the preferred alternative was identified.

18.4.1.2 Response

Alternatives Development

An EIR/EIS is required to analyze the potential impacts of a range of reasonable alternatives (California Code of Regulations, Title 14, Section 15126.6; 64 *Federal Register* 28554, Section 14). As discussed in Section 2.5.1.2, Summary of Project-Level Alternatives Development Process, of the Draft EIR/EIS, CEQA requires that the alternatives include a No Project Alternative and a range of potentially feasible alternatives that would (1) meet most of the project's basic objectives, and (2) avoid or substantially lessen one or more of the project's significant adverse impacts (California Code of Regulations, Title 14, Section 15126.6(c)). In determining the range of alternatives, the lead agency must describe its reasons for excluding other potential alternatives. There is no ironclad rule governing the range of alternatives to be studied in an EIR other than the "rule of reason." Under the "rule of reason," an EIR is required to study a sufficient range of alternatives to permit a reasoned choice (California Code of Regulations, Title 14, Section 15126.6(f)). It is not required that all possible alternatives be studied.

NEPA requires an EIS to analyze reasonable alternatives to the proposed action, including the no action alternative (64 *Federal Register* 28546, Section 14(l)). Pursuant to Section 14(l) of the FRA's Procedures for Considering Environmental Impacts, these include "all reasonable alternative courses of action that could satisfy the [project's] purpose and need" (64 *Federal Register* 28554). The range of alternatives should include those that are technically and economically practical and feasible.

The range of alternatives was developed using a tiered approach, which began with the 2005 *Final Program Environmental Impact Report/Environmental Impact Statement for the Proposed California High-Speed Train System* (Statewide Program EIR/EIS) (Authority and FRA 2005). The Los Angeles – San Diego – San Luis Obispo (LOSSAN) Rail Corridor (LOSSAN Corridor) was identified as the preferred route in the Statewide Program EIR/EIS. The Authority evaluated an alternative of expanding highways and airports, which would not have achieved the same benefits as a high-speed train, and other alignments including following freeway corridors, which would have substantially greater impacts on surrounding communities. The Authority also studied various alternatives other than Los Angeles to Anaheim, and found there were constraints to continuing to San Diego, the Inland Empire, or Irvine, including high costs and complexities with cost and right-of-way. HSR service south of Anaheim is planned to be evaluated as part of Phase 2 of the HSR system, with additional studies in the future, when funding is available.

Following adoption of the 2005 Statewide Program EIR/EIS, the Authority, in cooperation with the FRA, began the environmental review process for the project section, which included scoping to solicit public and agency comments, as well as interagency coordination meetings. Since 2009, the Authority has developed numerous alternatives through several alternatives analysis reports and additional design refinement reports, which are discussed in more detail below.

2009 Alternatives Analysis Report

The 2009 Alternatives Analysis built on the 2005 Statewide Program EIR/EIS, which identified alignment alternatives and station options between Los Angeles and Anaheim. The 2009 Alternatives Analysis examined the 2005 Program Level Shared-Track Alternative, Expanded Shared-Track Alternative, and Dedicated High-Speed Train Alternative, with considerations for stations and track configurations. Of these alternatives, the Dedicated High-Speed Train Alternative was identified as the most suitable for meeting Phase 1 Service Plan requirements and accommodating future freight and passenger traffic. The Dedicated High-Speed Train Alternative would have run on two dedicated passenger rail tracks and allowed for at least six main tracks in the Hobart Yard to Fullerton section of the corridor, plus four main tracks from Fullerton to Anaheim. The Dedicated High-Speed Train Alternative assumed a mostly at-grade alignment, except in constrained areas where an aerial alignment option was considered to minimize right-of-way takes. From Hobart Yard to Fullerton, short tunnels and trenches were considered to account for special geographic or right-of-way constraints. The Expanded Shared-Track and Program Level Shared-Track Alternatives were dismissed because of uncertainties regarding operational compatibility with other trains.

2010 Supplemental Alternatives Analysis Report

The 2010 SAA Report analyzed a Consolidated Shared-Track Alternative, where freight and passenger rail would share tracks, and a refined Dedicated High-Speed Train Alternative, along with various alignment, station, and maintenance facility options. The main design objective of the Consolidated Shared-Track Alternative was to accommodate all LOSSAN Corridor operators on a footprint smaller than the Dedicated High-Speed Train Alternative footprint, while maximizing the utility of the tracks for all corridor operators. The report also included updates to account for refinements in design criteria. Both the Consolidated Shared-Track Alternative and the Dedicated High-Speed Train Alternative were recommended for advancement.

2016 Supplemental Alternatives Analysis Report

The 2016 SAA Report presented changes that had been made in response to comments received on prior versions of the SAA Report from stakeholders. The changes were also due to new technical developments, such as phased implementation of the HSR system and implementation of a blended system meeting the goal of providing a one-seat ride from San Francisco to Los Angeles and Anaheim, as first established in the Revised 2012 Business Plan (Authority 2012). The 2016 SAA Report renamed the 2010 Dedicated High-Speed Train Alternative as Alternative 1 and the 2010 Consolidated Shared-Track Alternative as Alternative 2. Because of higher capital costs, right-of-way impacts, and potential impacts on sensitive resources, the FRA and Authority eliminated Alternative 1 from further consideration and Alternative 2 was identified to be evaluated in the EIR/EIS.

2016 Refinement Report

The 2016 Refinement Report evaluated refinements to Alternative 2 that were advanced from the 2016 SAA Report and recommended advancing the refined project alternative, Alternative 2R, for further evaluation in the project section EIR/EIS. The refinements sought to further take advantage of the blended system concept and reduced right-of-way impacts by consolidating passenger service on HSR tracks, removing passenger service from freight tracks, and allowing freight trains to use HSR tracks when necessary. These refinements provided two electrified tracks for HSR service and reduced the total number of mainline tracks needed to introduce HSR service within the LOSSAN Corridor.

2018 High-Speed Rail Project Alternative

In 2017 and 2018, BNSF provided operational modeling that illustrated the need for additional capacity during construction and operations for the project section. Authority modelers then independently verified the modeling results, which established the need for a BNSF Colton Intermodal Facility (IMF) and staging tracks in Lenwood, referred to as the Colton and Lenwood Components, respectively. The Lenwood Component would have staged freight trains outside the corridor to allow freight rail activity to continue during HSR construction and to avoid congestion along the project corridor in peak passenger rail periods during project operation. The Colton Component was required because HSR operations would have reduced the available corridor capacity. With the addition of the Colton and Lenwood Components, Alternative 2R was renamed the 2018 HSR Project Alternative, and additional scoping to obtain public and other stakeholder feedback and information for the environmental review process became necessary. On November 15, 2018, the Authority Board of Directors identified the 2018 HSR Project Alternative as the preferred alternative for the project section (Authority 2018). Revised scoping occurred in 2020 to solicit public input on the Colton and Lenwood Components.

2023 Supplemental Alternatives Analysis Report

Following the Authority's revised scoping in 2020, stakeholders raised substantial opposition to and concern for introducing a new IMF far outside the project corridor. Interested parties in the Inland Empire expressed concerns about the Colton Component's environmental impacts, as well as reservations that the benefits of HSR and its associated improvements would not reach them. For these reasons, the Authority considered additional alternatives that could eliminate the need to redirect trains to a new IMF in San Bernardino County. The 2023 SAA Report introduced the following three new build alternatives to address the project's purpose and need and respond to concerns

regarding the 2018 HSR Project Alternative: the Shared Passenger Track Alternative, the 3A – Freeway Tunnel Alternative, and the 3B – Union Pacific Railroad (UPRR) Alignment Alternative. The 2023 SAA Report determined that the 2018 HSR Project Alternative would no longer be evaluated in the environmental analysis and identified the Shared Passenger Track Alternative to be evaluated further in the Draft EIR/EIS.

The Shared Passenger Track Alternative would follow the same alignment as the 2018 HSR Project Alternative, but without the Colton or Lenwood Components and would operate fewer trains in the project corridor. Operationally, the Shared Passenger Track Alternative would reduce the peak level of HSR trains to two trains per hour per direction, with up to two trains per hour during off-peak service. Additionally, up to 10 freight trains per day could operate on the passenger tracks, eliminating the need for the Colton Component. Staging tracks would have still been necessary to mitigate congestion within the corridor because of the introduction of HSR service and shared operations; two potential sites for staging tracks were identified in Victorville and Hesperia. Unlike the 2018 HSR Project Alternative, these proposed staging tracks outside the project corridor were not considered a component of the Shared Passenger Track Alternative; rather, they would have been provided as mitigation for freight rail performance impacts resulting from HSR construction and operations.

2024 Preliminary Impacts Assessment Report, Selection of Preferred Alternative, and Subsequent Design Refinements

Additional design refinements and outreach occurred subsequent to the 2023 SAA Report, and the Preliminary Impacts Assessment Report was presented to the Authority Board in May 2024. The Preliminary Impacts Assessment Report further defined elements of the Shared Passenger Track Alternative, including the option for an HSR station in either Norwalk/Santa Fe Springs or Fullerton, consideration of an LMF at either 26th Street in Vernon or 15th Street in Los Angeles, and leaving eight crossings at grade in Anaheim to minimize environmental impacts and cost. The Preliminary Impacts Assessment Report recommended the Shared Passenger Track Alternative be split into Shared Passenger Track Alternatives A and B, which would be similar in all aspects, except for the LMF size and location.

In fall of 2024, the staging tracks mitigation sites in Hesperia and Victorville, San Bernardino County, were removed from the build alternatives. Because the California Department of Transportation (Caltrans) would complete a separate project, the High Desert Operational Efficiency Project, prior to HSR implementation, that fulfills the same function as the Authority's proposed staging tracks, it is considered as part of the No Project Alternative.

Draft EIR/EIS Preferred Alternative: Shared Passenger Track Alternative A

As discussed in Section 8.4, Preferred Alternative, of the Draft EIR/EIS, the Authority identified Shared Passenger Track Alternative A as the Preferred Alternative for the project section, because it best meets the project's purpose and need by serving the most potential passengers in the most cost-effective manner while also reducing impacts on the environment, existing rail operations, and communities. The Authority identified the Preferred Alternative by balancing the adverse and beneficial impacts of the project on the human and natural environments. Taking this holistic approach means that no single issue was dispositive in identifying the Preferred Alternative in any given geographic area. The Authority weighed all issues, including natural resource and community impacts, the input of the communities along the route, the views of federal and state resource agencies, project costs, and constructability, to identify what the agency believes is the best alternative to achieve the project's purpose and need. There was no single determining factor in identifying the Preferred Alternative because of the multitude of issues considered and the varied input received from interested parties on each of the two build alternatives. Furthermore, many impacts on the natural environment and community resources would be the same, or very similar, across both of the build alternatives, and therefore do not always provide enough meaningful information to distinguish between the relative merits of the alternatives. Because of the similarity of both build alternatives, specific criteria were used to identify a Preferred Alternative based on interested party, agency, and community input. Factored into this assessment are the additional impacts related to Shared Passenger Track Alternative B, which includes a larger area of construction

for the LMF, which would result in additional construction impacts (e.g., additional air quality emissions, additional number of displacements).

18.4.2 LAA-Response-Chapter 2 Alt-02: Changes to Passenger Rail Station Facilities

18.4.2.1 Comment Summary

Commenters expressed concern on how HSR would affect Metrolink stations and their accessibility and benefits and impacts of the HSR stations.

18.4.2.2 Response

Shared Passenger Track Alternatives A and B would not stop at the Norwalk/Santa Fe Springs Metrolink Station and the Fullerton Metrolink/Amtrak Station. However, both alternatives require modifications to these existing passenger rail stations to accommodate the trackwork changes needed to support HSR service. Additionally, the Shared Passenger Track Alternatives' Commerce Flyover would require the Commerce Metrolink Station to be relocated, and the Buena Park Metrolink Station would require relocation because of new and realigned tracks through the existing station. The Shared Passenger Track Alternatives would also include installation of new HSR station platforms and other HSR facilities at ARTIC, which provides Metrolink service.

Of the foregoing stations, HSR trains would only stop at ARTIC as part of operation of the Shared Passenger Track Alternatives. The Draft EIR/EIS separately considers and evaluates an option for a full-stop HSR station at either Norwalk/Santa Fe Springs or Fullerton, which would require installation of HSR facilities, in addition to the modifications referenced above. The project components at each of the stations are detailed further below.

Shared Passenger Track Alternatives A and B

The Metrolink platforms at the Norwalk/Santa Fe Springs Metrolink Station would be moved to allow service from the shared HSR and Metrolink tracks on a new elevated structure, approximately 350 feet to the east of the existing alignment (at their farthest points) (refer to Figure 2-64 of the Draft EIR/EIS). The modified station would be elevated and include two 680-foot side platforms, capable of future extension to 1,000 feet. A new lower-level Metrolink station plaza would be added, as would a total of 608 surface parking spaces to replace existing parking spaces displaced by the project. The existing Metrolink parking lot and parking structure west of the existing railroad corridor would remain, along with the pedestrian overpass. The station's design would not preclude extension of the Metro C (Green) Line to the Norwalk/Santa Fe Springs Metrolink Station.

The modified Fullerton Metrolink/Amtrak Station would add a fourth mainline track on the southern side of the corridor, outside of the existing railroad right-of-way (refer to Figure 2-65 of the Draft EIR/EIS). A new railroad bridge over Highland Avenue would require realignment of Walnut Avenue to the south and reconfiguration of the Walnut Avenue/Highland Avenue intersection. The two existing Metrolink/Amtrak station platforms on the southern side would be removed, and a new 800-foot center platform would be added over Harbor Boulevard. The existing pedestrian bridge east of Harbor Boulevard would be replaced with a new pedestrian underpass, which would be accessible via ramps and stairs. Walnut Avenue would be slightly narrowed south of the new platform. Sidewalk improvements and crosswalks would be added east of Harbor Boulevard.

The relocated Commerce Metrolink Station would be moved to an area northeast of the Telegraph Road/Maple Avenue intersection, approximately 0.75 mile to the east of its current location. The relocated station would have a center platform along the southern side of the rail corridor, accessible from the north via Sycamore Street by a new pedestrian underpass and from the south via Maple Avenue (refer to Figure 2-66 in the Draft EIR/EIS). The Sycamore Street/Supply Avenue intersection would be modified with pedestrian crosswalks. The Telegraph Road/Maple Avenue intersection would have a new signal and crosswalks. All existing station facilities (e.g., bus transit plaza, bicycle parking, vehicle parking, pick-up/drop-off area for motorists) would be replaced south of the corridor and accessible via Maple Avenue. The relocated station would provide 140 parking spaces, consistent with the existing station's parking spaces.

The Buena Park Metrolink Station would be relocated to an area between South Coyote Creek and Beach Boulevard, approximately 0.75 mile northwest of its current location (refer to Figure 2-67 in the Draft EIR/EIS). The relocated station would feature a center platform along the northern side of the existing rail corridor, which would be accessible from the north via Stage Road. A new signal would be installed at the Coyote Creek/Stage Road intersection. All existing station facilities (e.g., bus transit plaza, bicycle parking, vehicle parking, pick-up/drop-off area for motorists) would be replaced south of the corridor and accessible via Maple Avenue. The relocated station would provide 140 parking spaces, consistent with the existing station's parking spaces.

Finally, the proposed HSR platform and station facilities at the existing ARTIC station would be at grade, with two new HSR tracks and a single 1,410-foot center platform for HSR, south of and parallel to the existing Metrolink/Amtrak tracks and platforms (refer to Figure 2-59 of the Draft EIR/EIS). The HSR platform would be accessed through an extension of ARTIC's existing pedestrian bridge from the northeast and through an extension of two existing pedestrian tunnels on the western end of the existing ARTIC platforms. Initially, the Authority would work with the City of Anaheim to share the passenger amenities inside ARTIC. Once ridership increases necessitate new amenities, the Authority would build a separate HSR passenger terminal at the southern end of the pedestrian bridge. The existing Metrolink/Amtrak parking lot north of Angel Stadium would be reconfigured into a pick-up/drop-off area and connected to the existing access road from Katella Avenue. The two existing access points between the Santa Ana River Trail and ARTIC would be maintained. The existing pick-up/drop-off area and bus bays around the outside of the existing ARTIC building would be shared with HSR passengers. A new parking structure adjacent to State Route 57 and Katella Avenue would be built, consisting of 1,350 HSR parking spaces and 626 replacement parking spaces to account for the displacement of existing ARTIC parking spaces, for a total of 1,976 parking spaces.

The potential for the Shared Passenger Track Alternatives to disrupt passenger rail operations at the above stations is evaluated in the Draft EIR/EIS under Impact TR-8. As detailed therein, modifications to the Norwalk/Santa Fe Springs Metrolink Station would not affect the existing station during project construction, because construction would occur at the new reconfigured site location (where the Metrolink platforms and parking would be shifted), while the existing tracks and station would remain open and operational. Modifications to the Fullerton Metrolink/Amtrak Station would require a portion of the southernmost platform to be closed to build the new Metrolink/Amtrak center platform. However, the existing tracks would remain in place and operational during construction, and Metrolink would continue to serve the remaining eastern portion of the platform. Construction of the relocated Commerce and Buena Park Metrolink Stations would not affect existing passenger rail operations or parking at the existing stations, because the stations would remain open and operational until the relocated stations are fully operational.

Furthermore, construction of the HSR platforms and station facilities at ARTIC would not affect existing passenger rail operations. Construction of the new platforms and tracks would occur south of the existing platforms and tracks, which would remain open and operational during construction. When construction of the HSR platforms and tracks is complete, a short-term closure would be required to connect the new tracks to the existing tracks. Portions of the surface parking lots immediately south of the existing Metrolink tracks and to the west and east of State Route 57 would be displaced as a result of construction activities. However, construction would be staged such that the new parking structure would be completed and opened prior to the closure and removal of existing surface parking areas to minimize disruptions to the existing surface parking lots. Additionally, the Authority will incorporate TR-IAMF#13, Stakeholder Coordination with Transportation Agencies, which requires the Authority to work closely with all agencies that provide freight and passenger rail services or bus services or maintain operating rights within the corridor to prevent the design, construction, and operation of the project section from adversely affecting existing and planned rail services.

Inclusion of an Intermediate High-Speed Rail Station Option

If the Norwalk/Santa Fe Springs HSR Station Option is selected in conjunction with Shared Passenger Track Alternative A or B, two more electrified passenger rail tracks would be added, for a total of four tracks through the station (refer to Figure 2-78 of the Draft EIR/EIS). The two tracks

added as part of the HSR station option would serve an HSR center platform in between the modified Metrolink side platforms. The HSR platform would be 1,000 feet long, capable of future extension to 1,410 feet. The HSR station option would provide 640 more parking spaces beyond the parking spaces provided under Shared Passenger Track Alternative A or B, for a total of 1,248 parking spaces. A new access road would be provided from Imperial Highway, along the eastern side of the site, to the Shoemaker Avenue/Adler Drive intersection, with new signalized intersections.

If the Fullerton HSR Station Option is selected in conjunction with Shared Passenger Track Alternative A or B, the overall track configuration would be the same as the configuration described above for the Shared Passenger Track Alternatives' modifications to the Fullerton Metrolink/Amtrak Station (refer to Figure 2-80 of the Draft EIR/EIS). Two shared tracks would proceed on the southern side of the corridor and four BNSF tracks on the northern side; however, inclusion of the HSR station option would place the southernmost shared track slightly farther south to allow room for a center HSR platform. The HSR platform would extend approximately 1,000 feet west over Highland Avenue and would be built with a height of 48 inches above the top of rail to accommodate the HSR train boarding height. New HSR station buildings and a new multilevel parking structure providing a total of 570 HSR parking spaces would be added south of Walnut Avenue, between Highland Avenue and Harbor Boulevard. Two new pedestrian bridges would be installed to connect existing Metrolink facilities with new HSR facilities. The first bridge would be west of Harbor Boulevard. The second bridge would be just east of Malden Avenue. Installation of a new signalized intersection on Harbor Boulevard, just south of the tracks, would be needed to facilitate access to the new HSR parking garage entrance.

The Authority would implement the same impact avoidance and minimization features (IAMF) as those discussed above if the Norwalk/Santa Fe Springs or Fullerton HSR Station Option is included. Inclusion of either HSR station option would result in the same impacts in the station area as the Shared Passenger Track Alternatives (absent the HSR station option) with respect to temporary impacts on freight and passenger rail operations during construction (Impact TR-8 of the Final EIR/EIS).

18.4.3 LAA-Response-Chapter 2 Alt-03: High-Speed Rail Station Options

18.4.3.1 Comment Summary

Commenters expressed concern over the selection, inclusion, benefits, and impacts of the intermediate station options. Commenters advocated for the inclusion of the Norwalk Santa/Fe Springs HSR Station Option in order to provide a connection to the Los Angeles International Airport via a planned light rail extension. Commenters advocated for the inclusion of either HSR station option, to allow a more convenient connection to HSR via Metrolink or Amtrak. Commenters inquired if additional HSR stations could be added at a later date.

18.4.3.2 Response

Although the Preferred Alternative does not include an intermediate station, the Authority Board could approve an intermediate station as part of its approval of the project. The 2024 Preliminary Impacts Assessment Report provided that the Authority Board would maintain the option of selecting and adding an HSR station in either Norwalk/Santa Fe Springs or Fullerton to one of the build alternatives. The project components described and evaluated in the Draft EIR/EIS are consistent with the foregoing elements defined by the 2024 Preliminary Impacts Assessment Report.

Inclusion of the Norwalk/Santa Fe Springs HSR Station Option would not result in expansions to the Shared Passenger Track Alternatives' footprints, whereas inclusion of the Fullerton HSR Station Option would necessitate a larger area of disturbance than would otherwise occur. Both of the HSR station options would result in increased construction activities relative to the Shared Passenger Track Alternatives and, therefore, a potential for increased impacts such as traffic in construction areas and air pollutant and greenhouse gas (GHG) emissions, which are influenced by the duration of construction. Refer to Table 8-2 of the Draft EIR/EIS for a summary of potential impacts on community and natural environment issue areas that differentiate the Shared Passenger Track Alternatives and HSR station options. Additionally, refer to Table S-5 and Table S-6 of the Draft

EIR/EIS for a full summary of how the HSR station options compare to the Shared Passenger Track Alternatives with respect to the Draft EIR/EIS's evaluation of environmental topics.

Pursuant to Section 8.4.2, Identification of the Preferred Alternative, of the Draft EIR/EIS, neither of the HSR station options would result in substantially increased benefits related to transit-oriented development, because passenger rail stations already exist at Norwalk/Santa Fe Springs and Fullerton. Approval of either HSR station option would provide additional transfer points to HSR service from Metrolink or Amtrak lines, but it would result in duplicative passenger rail service at an increased cost. Los Angeles Union Station and ARTIC are only 30 miles apart, and existing Amtrak and Metrolink passenger rail service already provides connections among ARTIC, Fullerton, Norwalk/Santa Fe Springs, and Los Angeles Union Station. Additionally, by not including the Fullerton HSR Station Option, the Shared Passenger Track Alternatives would result in fewer impacts on the Fullerton community and would better align with the City of Fullerton's Transportation Specific Plan. For these reasons, no HSR station option is included in the Draft EIR/EIS's Preferred Alternative. If the Authority Board chooses to include an HSR station option after the approval of the Final EIR/EIS and issuance of the Record of Decision, the Authority would be required to demonstrate that the addition of an intermediate HSR station option would conform with the Draft EIR/EIS's environmental analyses and conclusions.

Regarding a connection to Los Angeles International Airport, this connection could be possible via an extension of the Metro C Line eastward to Norwalk, which would indirectly link the airport with the HSR system. However, this light rail extension has only undergone a feasibility study, and no additional studies are currently planned. Based on Metro's programmed funding, the extension has a projected completion date of 2052. If the Authority Board chooses to include the Norwalk/Santa Fe Springs HSR Station Option, the Authority would coordinate with Metro to ensure the station design does not preclude the planned Metro extension, and that strong transit connections would be provided at the HSR station option to enhance regional connectivity.

18.4.4 LAA-Response-Chapter 2 Alt-04: Not Used

No standard response was developed for this category.

18.4.5 LAA-Response-Chapter 2 Alt-05: Grade Separations

18.4.5.1 Comment Summary

Commenters stated that the entire HSR alignment should be grade separated as part of the project to avoid/address project effects on at-grade crossing safety. Concerns were raised about the justifications for maintaining the existing at-grade crossings in Anaheim, and the extent to which the HSR project accommodates potential future grade separations of those crossings. Commenters also advocated for the Authority to pursue these additional grade separations in Anaheim as early action projects.

18.4.5.2 Response

In general, the typical benefits of grade separations are that they eliminate the potential for train collisions with vehicles, pedestrians, and bicyclists; provide time and fuel savings for motorists; reduce pollution from idling of queued vehicles; and improve emergency access. Grade separations also improve reliability for freight and passenger rail operators. However, implementing grade separations also includes many potential impacts on surrounding communities, because they require a heavy level of construction activity and a large construction footprint that extends beyond the existing railroad corridor. Some of the potential construction impacts include right-of-way acquisitions, road closures, and traffic disruptions. The project components of the Shared Passenger Track Alternatives are proposed on the basis of balancing the adverse and beneficial impacts of the project on the human and natural environments, with additional consideration of the views of federal and state resource agencies, project costs, and constructability. The project section would fully grade separate five crossings at Pioneer Boulevard, Norwalk Boulevard, Los Nietos Road, Cerritos Avenue, and State College Boulevard, and partially grade separate Lakeland Avenue (freight tracks would remain at grade). As discussed in Section 2.6.5, the Authority has committed to making early investments in collaboration with local and regional agencies so that these grade separations could

be implemented as early action projects, delivering benefits to the region ahead of full HSR implementation.

Eight existing at-grade crossings in Anaheim would remain at grade. Since the beginning of the project, the Authority has worked closely with the City of Anaheim to evaluate the at-grade crossings and feasibility of grade separations, taking into account the city's and community's concerns. Previous project alternatives included alignments that were mostly grade separated throughout Anaheim and also included street closures, but the design was refined over time to reduce impacts on surrounding communities. As described in the 2024 Los Angeles to Anaheim Project Section Preliminary Impacts Assessment, the 2018 HSR Project Alternative had proposed nine grade separations as well as two street closures in Anaheim. However, the Authority considered alternative approaches in response to concerns such as:

- Impacts on historic neighborhoods and resources
- Impacts on established communities, including a "challenged" neighborhood
- Residential and business displacements and property impacts

Draft EIR/EIS Section 2.5.2, Range of Potential Alternatives Considered and Findings, summarizes how the Authority developed the Shared Passenger Track Alternatives, which maintains eight at-grade crossings in Anaheim at Orangethorpe Avenue, La Palma Avenue, Sycamore Street, Broadway, Santa Ana Street, Sixth Street, Vermont Avenue, and Ball Road. The Authority met with the city in December 2023 and held a public meeting in Anaheim on December 7, 2023, to inform the public of the proposed treatments of the grade crossings in the document. These crossings have already been upgraded by Orange County Transportation Authority with safety infrastructure and they operate as quiet zones. All trains within the corridor, including HSR, would not exceed speeds of 90 miles per hour and, therefore, are not required to be grade separated per FRA regulations. By maintaining these at-grade crossings and reducing the project footprint, the Authority responded to community concerns and avoided impacts associated with previously studied alternatives.

The Authority acknowledges that the *City of Anaheim General Plan* includes planned grade separations for Orangethorpe Avenue, La Palma Avenue, and Ball Road. In the Final EIR/EIS, Table 3.2-2 was revised to acknowledge that these planned grade separations are in the city's general plan, and Appendix 3.1-A, Regional and Local Policy Inventory and Consistency Analysis, was revised to analyze plan consistency. Please refer to Chapter 16, Section 16.5.2, Section 3.2: Transportation, of the Final EIR/EIS for these revisions. The Authority also acknowledges the city has prepared a Project Study Report Equivalent for Orangethorpe Avenue in 2012; however, the city has not prepared additional studies or plans beyond this. Although these grade separations are no longer a part of the project section for the reasons stated above, the design does not preclude future grade separations at these crossings, should the City of Anaheim choose to pursue them separately in the future. As described in Section 2.6.3.6, State Highway or Local Roadway Modifications, of the Draft EIR/EIS, HSR would add OCS infrastructure along the existing tracks, but otherwise would maintain the existing conditions at all the crossings. Because the roadways and tracks would remain the same, HSR would not preclude future grade separation construction.

18.4.6 LAA-Response-Chapter 2 Alt-06: Future Rail Operator Coordination and Agreements

18.4.6.1 Comment Summary

Commenters expressed the need for an amended shared use agreement or other new agreements to govern the operations of the new future shared corridor. Commenters' concerns included operating rights, accommodation of existing and future capacity, cost sharing, maintenance responsibilities, dispatching responsibilities, effects on planned fiber optic utilities, and right-of-way needs. Some commenters suggested that contractual agreements with detailed operating plan elements are needed in order to adequately analyze impacts on rail in the Draft EIR/EIS. Additionally, some commenters expressed concerns about impacts from electrification of the corridor related to the ability for operators to perform rail corridor maintenance, including of the OCS.

18.4.6.2 Response

Section 3.2, Transportation, includes TR-IAMF#13, which provides for the future coordination with passenger and freight operators to define the roles and responsibilities of the shared corridor between Los Angeles Union Station and ARTIC. In response to commenters' concerns, the Authority has revised TR-IAMF#13 in the Final EIR/EIS to clarify the outcomes of the future agreements described above. Refer to Chapter 16, Section 16.19, Appendix 2-A: Impact Avoidance and Minimization Features, of the Final EIR/EIS for these revisions.

TR-IAMF#13 specifies that as design of the project section progresses, the Authority will coordinate with agencies who provide existing or planned rail services within the corridor, including BNSF, Metrolink, LOSSAN Rail Corridor Agency, Amtrak, Orange County Transportation Authority, and Riverside County Transportation Commission. The Authority, the California State Transportation Agency, or both will lead this coordination, which will take place when funding for advanced design is identified. The objective of the coordination is to identify and agree upon an operating plan that is acceptable to all operators, and that includes new provisions to allow for operations within the shared corridor that includes OCS and electrified tracks. This plan will include elements such as, but not limited to, train counts (current and future), dispatching rules and responsibilities, operating slots, protections for planned utilities, and maintenance responsibilities (including of the OCS). As was done for the 2018 California State Rail Plan, the Authority will ensure that the proposed operating plan is modeled for the corridor, including operations to the east of Fullerton. Future agreements also include plans for shared capital and O&M costs for the corridor, as well as plans for right-of-way needs and adjustments in ownership. The parties would then adopt appropriate new or modified existing agreements to implement the new operating plan as well as cost allocations for the corridor. In addition, the parties will coordinate with the other passenger rail operators about possible fare integration.

In response to commenters' concerns, the Authority has revised TR-IAMF#13 in the Final EIR/EIS to clarify the outcomes of the future agreements described above. Refer to Chapter 16, Section 16.5.2, of the Final EIR/EIS for these revisions.

The stakeholder coordination and precise details of resulting agreements for shared operations are not necessary for completing the Draft EIR/EIS's evaluation of the Shared Passenger Track Alternatives' potential to have adverse effects on freight and passenger rail. Refer to Standard Response LAA-Response Chapter 2 Alt-07 for more information on why the Draft EIR/EIS analysis was adequate for corridor capacity impacts. Detailed information related to who will dispatch specific trains, rail corridor maintenance, the exact maintenance protocols, work windows, and coordination procedures are not required to conduct the environmental analysis, because these are all related to establishing new protocols and schedules agreed upon by all parties. The project section design includes adequate physical space for O&M activities to occur.

18.4.7 LAA-Response-Chapter 2 Alt-07: Corridor Capacity

18.4.7.1 Comment Summary

Commenters stated that the Draft EIR/EIS does not clearly disclose the freight volumes that are assumed for BNSF operations. Commenters also raised concerns about adverse effects on existing and passenger rail volumes along the project corridor with introduction of HSR service and asserted that the Draft EIR/EIS deferred analysis of this topic or required modeling to confirm the operational viability of the proposed designs.

18.4.7.2 Response

Section 3.2.6, Environmental Consequences, of the Draft EIR/EIS describes how operational analysis was conducted to describe that existing and planned freight and passenger rail volumes could be maintained with shared operations within the corridor. The Authority conducted operational analysis in 2023, which took into account the projected passenger rail and freight volumes in 2040, as provided in the 2018 California State Rail Plan (Authority 2023b). These included the projected passenger rail train volumes of Metrolink, Amtrak, the LOSSAN Rail Corridor Agency, and Riverside County Transportation Commission's proposed Coachella Valley service. In addition, freight train volumes

are based on data received from BNSF and included a 2 percent annual growth rate (Authority 2019). This is consistent with the 2018 California State Rail Plan, which anticipated growth to compound annually at a rate of 1.7 percent and 2.9 percent for carload and intermodal services, respectively.

Based on the results of the operational analysis, the Authority developed the Shared Passenger Track Alternatives, which would consist of two HSR trains per hour per direction during peak periods and would not put any constraints on the current passenger operator agreements within the corridor or preclude plans for growth identified in the 2018 California State Rail Plan. Additionally, the Shared Passenger Track Alternatives eliminated the need to redirect trains and trucks eastward to a new IMF in San Bernardino County, which had previously been considered as part of the 2018 HSR Project Alternative (refer to Section 2.5.2 of the Draft EIR/EIS). Freight trains could operate one train per hour in each direction on the electrified tracks, with no effect on overall operations within the corridor. The 2023 SAA Report includes further details on the operational analysis, which is incorporated into the analysis in Section 3.2 of the Draft EIR/EIS, under Impact TR-15. Additionally, as stated in Section 3.2.6.2, No Project Alternative, of the Draft EIR/EIS under the “Conventional Passenger Rail” heading, there are contractual operating agreements between BNSF and other rail operators that govern operating rights and train volumes within the project corridor. Changes to train volumes because of HSR service would require that the agreements be renegotiated, with the Authority included as a participant; refer to Standard Response LAA-Response Chapter 2 Alt-06 for more information on future agreements.

The project would improve overall efficiency along the corridor, in part by building five new full grade separations (refer to Section 2.6.3.6 of Chapter 2 of the Draft EIR/EIS) and by modifying tracks at Commerce Yard and Fullerton Junction to separate freight and passenger train operations. As detailed under Impact TR-15, the adopted FRA rules concerning the sharing of HSR with conventional freight and passenger services (FRA 2018) allow for blending of HSR with heavier freight rail. Although freight train windows on the shared tracks may be constrained compared to existing conditions, existing and forecasted 2040 freight levels could be accommodated in the areas where HSR, Metrolink, and freight rail would share tracks, because adequate durations of track access would be available to complete track moves to serve freight customers, based on review of data on freight operations in the corridor. Furthermore, as described in detail in Section 2.6.1.5, Planned Local and Regional Fixed Guideway Transit Rail and Bus Improvements, of Chapter 2 and in Section 3.2.6.2, Caltrans’ High Desert Operational Efficiency Project is expected to be completed in 2029, which will provide staging capacity for freight during HSR project construction and operation. Freight trains held on the High Desert Operational Efficiency tracks would be scheduled so they are in the correct operating window when they reach Fullerton Junction, minimizing delay for all passenger and freight rail operators in the corridor during project operation.

The Authority has incorporated TR-IAMF#13, which requires the Authority to work closely with all agencies that provide freight or passenger rail services or maintain operating rights within the corridor to ensure that the design, construction, and operation of the project section does not adversely affect existing and planned freight or other passenger rail service. The Draft EIR/EIS concludes that based on the Authority’s operational analysis, the proposed components that would improve overall efficiency along the corridor, and with incorporation of TR-IAMF#13, continuous permanent impacts on freight and passenger rail operations during operation would not occur. However, in response to commenters’ concerns regarding current and future capacity, the Authority has revised TR-IAMF#13 in the Final EIR/EIS to clarify the outcomes of the future agreements to be developed among the operators within the corridor, which includes updated modeling of corridor operations. Refer to Chapter 16, Section 16.5.2, of the Final EIR/EIS for these revisions.

Finally, with respect to potential expansion of capacity for freight rail services, as discussed under Impact RG-2 in Section 3.18, Regional Growth, of the Draft EIR/EIS, the project components, including, but not limited to, the new fourth mainline track and other freight and passenger rail improvements, have been designed to accommodate existing operations and planned operations already anticipated by the Authority and other operators and agencies and, as such, will not constrain growth targets or future planning. The project would include removal of existing BNSF storage and support tracks throughout the project corridor, which would be replaced adjacent to the existing BNSF Los Angeles IMF. However, none of the proposed storage and support tracks would be used for

loading or unloading at the IMF. The latter activities are conducted in a different part of the IMF, and the affected intermodal container parking is being replaced with a similar acreage for parking. During project operation, the project corridor would accommodate existing and planned train volumes from the BNSF Los Angeles IMF and BNSF San Bernardino IMF as it currently does and would not reallocate existing and planned freight train origins and destinations to other locations. Accordingly, additional intermodal freight activity is not anticipated because of these changes. Therefore, the project components would not induce freight growth or truck traffic in Los Angeles and Orange Counties or adjacent counties.

Overall, the Draft EIR/EIS appropriately addresses the potential for the Shared Passenger Track Alternatives to have adverse effects on rail corridor capacity through its evaluation of potential impacts on freight and passenger rail operations during project operation, as summarized above. The analysis accounts for future HSR maintenance needs, as generally described in Draft EIR/EIS Section 2.8.3, Maintenance Activities. Standard Response LAA-Response Chapter 2 Alt-06 provides information and context regarding the future coordination that will occur to develop agreements between the Authority, BNSF, and other rail operators. The development and finalization of new agreements were not necessary for completing the Draft EIR/EIS's evaluation of adverse effects on rail corridor capacity, because this analysis was based on reasonable assumptions about existing and future freight, passenger, and HSR O&M, supported by the Authority's operational analysis.

18.5 Section 3.2: Transportation

18.5.1 LAA-Response-Section 3.2 TRAN-01: Freight and Passenger Rail Operations During Construction

18.5.1.1 Comment Summary

Commenters requested clarification on how construction would affect freight and passenger rail service, as well as transit service and access at passenger rail stations. Commenters also requested additional details on construction assumptions, such as detailed staging plans for various project elements.

18.5.1.2 Response

Impact TR-8 of the Draft EIR/EIS describes the project's potential construction impacts on freight and passenger rail operations, including potential effects at passenger rail stations. Several IAMFs would be incorporated to avoid and minimize potential effects on freight and passenger rail operators. Incorporation of TR-IAMF#9, Protection of Freight and Passenger Rail During Construction, requires the project contractor to repair any structural damage to freight or public railways that may occur during the construction period and return any damaged sections to their original structural condition. TR-IAMF#11, Maintenance of Transit Access, requires the preparation of a specific Construction Management Plan to maintain transit access during the construction period. TR-IAMF#13 requires the Authority to work closely with all agencies that provide freight and passenger rail services or bus services, or maintain operating rights within the corridor, to ensure that the design, construction, and operation of the project section do not adversely affect existing and planned rail service or bus routes that serve existing and relocated/modified rail stations.

As stated in Impact TR-8, project 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. Track construction activities would require temporary closures, which could range from a few hours to 1 or 2 days, depending on the scope of work. During track closures, freight and passenger rail services could be temporarily rerouted onto one of the other open tracks within the corridor, if needed. In some areas with heavy construction activities, such as for the new grade separations, shoofly tracks would be built, which would allow existing freight and passenger trains to bypass the construction areas entirely. Work windows would be defined through coordination with freight and passenger rail agencies during subsequent phases of or following project design to minimize potential disruptions to service. However, the Authority acknowledges that specific work windows for track construction activities have not yet been defined. Therefore, the Authority will

implement TRAN-MM#6, Prepare Track Construction Work Window Plan, which requires the Authority to coordinate with freight and passenger rail agencies and operators to identify specific work windows for track construction activities that minimize disruption to freight and passenger rail services within the project corridor to the maximum extent feasible. TRAN-MM#6 also requires the identification of shoofly track locations in areas where heavy construction is anticipated, restrictions on concurrent or adjacent track construction activities, and speed restriction. With incorporation of these IAMFs and adherence to the mitigation measure, the project would reduce adverse effects on freight and passenger rail services during project construction.

Regarding requests for more detailed construction information, the Authority developed construction assumptions as well as an estimated construction phasing plan to support the environmental analysis, which is described in more detail in Section 2.10.1 of the Draft EIR/EIS. High-level construction staging concepts for the braced trench and grade separations are included in Volumes 3.2 and 3.3, respectively. Impact TR-8 also describes how construction activities would be staged at passenger rail stations to minimize disruptions to parking and station access. Impact SO-1 in Section 3.12, Socioeconomics and Communities, describes how grade separation construction would be phased to minimize disruptions. This level of detail is appropriate for the current 15 percent design phase of the project, and more detailed staging plans would be developed in later phases of design, in coordination with the freight and rail operators. Section 2.10.4, Preconstruction Activities, of the Draft EIR/EIS describes how the Authority and contractor would conduct preconstruction activities during final design to determine how construction should be staged and managed.

18.5.2 LAA-Response-Section 3.2 TRAN-02: Design of Traffic Mitigation Measures

18.5.2.1 Comment Summary

Commenters expressed concern about the proposed traffic mitigation measures and potential secondary impacts. Some commenters questioned the overall need for the measures and their compatibility with existing conditions in locations where cities had made recent intersection improvements. Other commenters requested more detailed designs or local permitting approvals.

18.5.2.2 Response

As described in Section 3.2.2.2, State, of the Draft EIR/EIS, under Senate Bill 743, and the related changes to the State CEQA Guidelines in December 2018, traffic congestion or delay can no longer be considered a significant environmental impact under CEQA, because these metrics have been replaced with a focus on reducing vehicle miles traveled and GHG emissions. However, traffic congestion or delay remains an environmental impact under NEPA.

The Draft EIR/EIS analyzes traffic congestion/delay relevant to NEPA requirements, including potential mitigation for any adverse effects identified. Section 3.2.7, Mitigation Measures, of the Draft EIR/EIS describes the proposed mitigation measures to be applied at affected intersections, roadway segments, and a freeway on-ramp to reduce the delay to below the adverse effect criteria. The Authority has determined that these mitigation measures would be feasible to implement, based on the current 15 percent level of design. Table 3.2-37 lists the potential secondary impacts from implementation of these measures, which could include construction disruption and right-of-way acquisition. Detailed design for the measures would occur in the future at the 30 percent design level. The timing of this will depend on when the Authority secures funding for construction of the project section.

NEPA requires a federal lead agency to consider potential mitigation but does not require a federal lead agency to adopt mitigation. As such, the Authority, acting in its delegated role as the federal lead agency for this project section, can decide whether to adopt the mitigation identified for NEPA traffic effects. These proposed mitigation measures in the Final EIR/EIS would be part of the project section NEPA approvals by the Authority. However, as stated above, when funding for the project section is secured and the design plans advance, the Authority will coordinate with the local jurisdictions, and Caltrans where applicable, where the mitigation measures are proposed to develop the mitigation measure designs in more detail.

18.6 Section 3.3: Air Quality and Global Climate Change

18.6.1 LAA-Response-Section 3.3 AQ-01: Construction Emission Impacts

18.6.1.1 Comment Summary

Commenters expressed concern about construction emission impacts and inquired about proposed mitigation measures.

18.6.1.2 Response

Construction emission impacts are discussed in Draft EIR/EIS Section 3.3.6, Environmental Consequences. Air quality effects associated with construction of the HSR project were evaluated for regional emissions as well as localized emissions and the potential effects of construction on sensitive receptors in proximity to the HSR project. As noted in the Draft EIR/EIS Section 3.3.4.3, Impact Avoidance and Minimization Features, the HSR project incorporates five air quality-specific IAMFs during project construction that are designed to avoid or minimize impacts. The Authority-designated contractor 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 a minimum of three times daily, limiting vehicle travel speed on unpaved roads to 15 miles per hour, and suspending dust-generating activities when wind speed is greater than 25 miles per hour (AQ-IAMF#1, Fugitive Dust Emissions). The Authority-designated contractor will use paint low in volatile organic compounds that complies with South Coast Air Quality Management District (SCAQMD) Rule 1113 to limit volatile organic compound emissions (AQ-IAMF#2, Selection of Coatings). The Authority-designated contractor will use renewable diesel fuel in heavy-duty construction equipment and on-road diesel vehicles to reduce exhaust emissions of criteria pollutants and toxic air contaminants (TAC) (AQ-IAMF#3, Renewable Diesel). 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 TACs (AQ-IAMF#4, Reduce Criteria Exhaust Emissions from Construction Equipment). All heavy-duty on-road construction trucks will be model year 2020 or newer to reduce exhaust emissions of criteria pollutants and TACs (AQ-IAMF#5, Reduce Criteria Exhaust Emissions from On-Road Construction Equipment). To further reduce construction-related emissions (including nitrogen oxides [NO_X]), AQ-MM#1, Offset Project Construction Emissions in the South Coast Air Basin through SCAQMD Emissions Offsets Program, has been identified. The analysis indicates that, without mitigation, temporary construction activities would result in exceedances of SCAQMD's applicable construction significance thresholds for emissions of NO_X. As described in Draft EIR/EIS Section 3.3.7.1, AQ-MM#1: Offset Project Construction Emissions in the South Coast Air Basin through SCAQMD Emissions Offsets Program, the measure would require the purchase of emission offsets through an anticipated contractual agreement between the Authority and SCAQMD. Emission reduction credits are anticipated to be obtained from SCAQMD to offset emissions associated with construction of the HSR project.

As stated in the Draft EIR/EIS Section 3.3.7.1, construction emissions that cannot be reduced by IAMFs and any other mitigation measures will be offset through a SCAQMD rule or contractual agreement to fund equivalent emissions reductions that achieve reductions in the same years (to the extent same-year offsets are available) as construction emissions occur, thus offsetting project-related air quality impacts in real time as required by the General Conformity Rule. However, construction emissions of NO_X would still be considered to be significant and unavoidable after mitigation, because there would be no additional feasible mitigation measures that would help reduce NO_X emissions from construction activities. AQ-MM#1 has been revised to clarify what is required for the offsets to comply with the General Conformity Rule. Please refer to Chapter 16, Section 16.5.3, Section 3.3: Air Quality and Global Climate Change, of the Final EIR/EIS for these changes. Furthermore, as highlighted in Table 3.3-33 in Draft EIR/EIS Section 3.3.6.3, Project Impacts, project operations would result in a significant yearly decrease in NO_X emissions of approximately 54 to 56 tons per year, depending on the Shared Passenger Track Alternative. The project's construction would result in approximately 105 tons of total NO_X emissions. Therefore, within 2 years of being operational, the project would result in a net air quality benefit. Accordingly, although construction

would result in a short-term significant and unavoidable NO_X impact, the project would provide a long-term improvement in regional air quality, including NO_X emissions.

Construction activities associated with the Shared Passenger Track Alternatives would result in criteria pollutant emissions, but these emissions would not degrade air quality because they would be either less than the General Conformity *de minimis* levels (carbon monoxide, particulate matter less than or equal to 10 microns and 2.5 microns in diameter, and sulfur dioxide) or will be offset through AQ-MM#1 to below the General Conformity *de minimis* levels (NO_X). With implementation of AQ-MM#2, Requirements for Use of Zero-Emission or Near-Zero-Emission Vehicles and Off-Road Equipment to Reduce Construction Emissions; and AQ-MM#3, Reduce the Potential Impact of Stationary Sources, construction emissions will be minimized. However, even with implementation of mitigation measures, the impact under NEPA would be adverse because the NO_X emission exceedances would delay SCAQMD from achieving its attainment goals listed in the 2022 Air Quality Management Plan.

18.6.2 LAA-Response-Section 3.3 AQ-02: Health Risks and Emission Impacts

18.6.2.1 Comment Summary

Commenters raised concerns about air quality and health impacts (for example, respiratory diseases) caused by fugitive dust emissions from operation of the project section.

18.6.2.2 Response

As discussed in Draft EIR/EIS Section 3.3.6, Impact AQ-4, the operation of California HSR System trains creates an aerodynamic wake behind the train that results in airflow in the general direction of the moving train, which can generate fugitive dust. A detailed analysis of existing credible scientific evidence related to evaluating impacts from induced winds from California HSR System trains is included in Appendix D of the *Los Angeles to Anaheim Project Section Air Quality and Global Climate Change Technical Report* (Authority 2025a). The analysis found that the amount of fugitive dust suspended beyond 10 feet from the HSR tracks would be negligible. Therefore, because the closest sensitive receptors to the proposed tracks are at a distance of 40 to 50 feet, project-generated dust-related impacts on receptors would be minimal and would not expose sensitive receptors to substantial particulate matter concentrations.

As discussed in Draft EIR/EIS Section 3.3.6, Impact AQ-4, the California HSR System would be electrically powered. Therefore, the HSR locomotives will not generate direct combustion emissions along the railways that would contribute to particulate matter emissions or result in substantial health concerns, such as asthma or other respiratory diseases. Additionally, because the HSR system would provide an alternative mode of transportation that would reduce the number of vehicles traveling on highways and local roads, emissions generated by vehicles would decrease proportional to the vehicle miles traveled reductions. Therefore, the Shared Passenger Track Alternatives would not expose sensitive receptors to substantial pollutant concentrations during operation.

As discussed in Draft EIR/EIS Section 3.3.6, Impact AQ-15, although project operations (HSR trains and LMF) would not emit diesel particulate matter (DPM) emissions and the removal of commercial and industrial uses to the north of Hobart Yard would likely reduce TACs compared to existing conditions for those land use types, the modifications to Hobart Yard as part of the project could have the potential to result in additional DPM emissions during operations that would expose sensitive receptors to additional DPM emissions. Because of the current uncertainty surrounding emissions and activity associated with BNSF modifications at Hobart Yard, there is a potential that the resulting health risks could have significant impacts on nearby off-site sensitive receptors and workers.

To help mitigate this impact, the Authority would implement AQ-MM#4, Requirement of a Future Operational Health Risk Assessment, when information regarding BNSF's revised operations at Hobart Yard is available. AQ-MM#4 requires that an operational health risk assessment be conducted at Hobart Yard prior to the commencement of project operations. The measure also requires that additional feasible on- and off-site mitigation be analyzed and incorporated to reduce risks to the greatest extent practicable prior to project operations. AQ-MM#4 has been revised to state that the Authority will complete additional CEQA, NEPA, or both, review, as necessary, if the supplemental

health risk assessment demonstrates that health risks would exceed the health risk exposure levels identified in the Draft EIR/EIS. Please refer to Chapter 16, Section 16.5.3, of the Final EIR/EIS for these changes.

18.6.3 LAA-Response-Section 3.3 AQ-03: Localized Health Risk Assessment from Construction Emissions

18.6.3.1 Comment Summary

Commenters expressed concern about the health impacts associated with criteria pollutants and TAC emissions from construction activities.

18.6.3.2 Response

As discussed in the Draft EIR/EIS Section 3.3.6.3, construction activities associated with each of the Shared Passenger Track Alternatives would result in criteria pollutant emissions from construction equipment, on-road vehicles, and fugitive dust in the South Coast Air Basin, which is under the jurisdiction of SCAQMD; Mojave Desert Air Basin, which is under the jurisdiction of the Mojave Desert Air Quality Management District; and San Joaquin Valley Air Basin, which is under the jurisdiction of the San Joaquin Valley Air Pollution Control District. Construction activities associated with the Shared Passenger Track Alternatives would increase TAC concentrations at certain receptor locations because of the operation of diesel-fueled off-road construction equipment and heavy-duty trucks. AQ-IAMF#3, AQ-IAMF#4, and AQ-IAMF#5 would be incorporated to control construction exhaust emissions from all heavy-duty diesel-fueled construction equipment and diesel trucks by requiring the use of renewable diesel fuel, requiring all heavy-duty equipment used during construction meet Tier 4 final engine requirements, and requiring on-road trucks used for hauling be model year 2020 or newer. More details on these IAMFs can be found in Draft EIR/EIS Section 3.3.4.3 and Appendix 2-A, Impact Avoidance and Minimization Features. AQ-IAMF#2 has been revised to clarify that the coatings used will be consistent with SCAQMD Rule 1113. AQ-IAMF#5 has been revised to replace the California Air Resources Board's Emission Factors 2017 with the latest U.S. Environmental Protection Agency–approved Emission Factors. Please refer to Chapter 16, Section 16.5.3, of the Final EIR/EIS for these changes.

Although the IAMFs will reduce emissions, construction emissions in exceedance of the daily SCAQMD CEQA threshold would still occur for NO_X. Where a project exceeds an air district's regional thresholds, there is the potential for adverse health effects to occur. However, because adverse health effects resulting from regional criteria pollutants depend on many variables (e.g., concentrations, local atmospheric conditions, number of exposed individuals), and because some pollutants are transported over long distances before resulting in adverse health effects, the specific health effects resulting from regional pollutants generated by a single project are difficult to determine. AQ-MM#1 and AQ-MM#2, both of which are discussed in detail in Draft EIR/EIS Section 3.3.7, Mitigation Measures, would be implemented to reduce and offset emissions. AQ-MM#1 has been revised to clarify what is required for the offsets to comply with the General Conformity Rule. AQ-MM#2 has been revised to clarify that the emissions will be offset to conform with 40 Code of Federal Regulations Part 93.158(a). Please refer to Chapter 16, Section 16.5.3, of the Final EIR/EIS for these changes. Furthermore, as discussed under Impact AQ-7 and presented in Table 3.3-34, construction of the project section and its Shared Passenger Track Alternatives would not result in localized criteria pollutant emissions during construction that would exceed the respective California Ambient Air Quality Standards or National Ambient Air Quality Standards. The California and National Ambient Air Quality Standards are set to protect public health, define clean air, and represent the maximum amount of pollution that can be present in outdoor air without any harmful effects on people and the environment. Therefore, the temporary impact under CEQA on localized air quality during project construction would be less than significant.

As discussed under Impact AQ-8 of Draft EIR/EIS Section 3.3.6, construction activities associated with the Shared Passenger Track Alternatives would increase TAC concentrations at certain receptor locations because of the operation of diesel-fueled off-road construction equipment and heavy-duty trucks. DPM is the primary TAC released from construction activities. Because DPM emissions from diesel-fueled equipment and vehicles can present increased cancer risk and other health hazards, a

health risk assessment was performed (Section 6.9 of the *Los Angeles to Anaheim Project Section Air Quality and Global Climate Change Technical Report* [Authority 2025a]). The health risk assessment considers both acute (short-term) and chronic (long-term) noncancer health hazards and increased cancer risk resulting from exposure of sensitive receptors (e.g., schools, residences, workers, hospitals) to DPM concentrations associated with the construction activities.

Six discrete segments (or cases) were chosen to represent the worst-case scenarios for construction-related air quality and health risk impacts on the maximum number of sensitive receptors (residential and workers) along the Shared Passenger Track Alternatives. The worst-case scenarios are those that have a large amount of construction activity with emissions near the most concentrated sensitive receptors along the Shared Passenger Track Alternatives. The locations of the six segments are presented on Figure 3.3-2 of the Draft EIR/EIS.

Draft EIR/EIS Table 3.3-37 indicates that none of the cases would result in exceedances of applicable SCAQMD thresholds for cancer risk and for chronic and acute noncancer health impacts for nearby sensitive receptors.

AQ-IAMF#1, AQ-IAMF#2, AQ-IAMF#4, and AQ-IAMF#5 implement Tier 4 Final construction equipment engines and adopt best management practices to minimize emissions during construction. As stated in AQ-MM#3, the Authority-designated contractors will use renewable diesel fuel to address and control exhaust emissions from all heavy-duty diesel-fueled construction equipment and on-road diesel trucks. All feasible DPM control measures (i.e., renewable diesel, Tier 4-compliant construction equipment, and 2020 or newer truck fleet) will be incorporated as IAMFs. Project construction emissions would not exceed applicable thresholds for cancer risk and for chronic and acute noncancer health impacts.

18.6.4 LAA-Response-Section 3.3 AQ-04: Greenhouse Gas Impacts

18.6.4.1 Comment Summary

Commenters expressed concern regarding the payback period for GHG emissions generated from construction. The commenters requested more information regarding GHG emissions generated from project operation.

18.6.4.2 Response

As presented in Table 3.3-27 in Draft EIR/EIS Section 3.3.6, total construction GHG emissions for the project section would range from 66,302 metric tons to 69,854 metric tons of carbon dioxide equivalent, depending on the Shared Passenger Track Alternative. However, as indicated in Table 3.3-31 in Section 3.3, Air Quality and Global Climate Change, operation of the project would reduce the regional emissions by approximately 616,807 to 633,617 metric tons of carbon dioxide equivalent per year in the opening year, depending on the Shared Passenger Track Alternative, primarily through the diversion of trips from air and auto travel. The payback period for each Shared Passenger Track Alternative was estimated by dividing the total GHG emissions during construction years by the annual GHG emission reduction during project operation. As presented in Table 3.3-27, the total increase in construction GHG emissions for each Shared Passenger Track Alternative would be offset in fewer than 2 months of project operations. After a maximum of 2 months, operation of the Shared Passenger Track Alternatives would result in net GHG emissions reductions and a GHG benefit.

18.7 Section 3.4: Noise and Vibration

18.7.1 LAA-Response-Section 3.4 N&V-01: Noise Impacts During Operation

18.7.1.1 Comment Summary

Commenters expressed concern about noise and vibration impacts during operation and inquired about sensitive receptors. Some commenters suggested the methods used to evaluate noise impacts were inappropriate, and questioned why the Authority did not use local noise standards or methodologies used by local agencies.

18.7.1.2 Response

Operational Noise Methodology

As discussed in Section 3.4.4, Methods for Evaluating Impacts, of the Draft EIR/EIS, the Authority used both current FRA and Federal Transit Administration (FTA) manuals to assess the potential noise impacts and necessary mitigation measures for the HSR project. The Authority used the *High-Speed Ground Transportation Noise and Vibration Impact Assessment* document (FRA 2012) as the methodology for analyzing HSR operations related to noise in the Draft EIR/EIS. For evaluation of non-HSR noise, such as from stations, maintenance facilities, and construction, methodology from the FTA *Transit Noise and Vibration Impact Assessment Manual* (FTA 2018) was used. The FRA criteria (and FTA criteria, which are identical) used for the Authority's analysis have been used for 30 years on projects throughout the country. The criteria were developed over many years, with input and review by the FRA from both a technical and policy perspective by consulting a myriad of technical resource documents, "for the assessment of potential noise and vibration impacts resulting from proposed high-speed ground transportation (HSGT) projects, including high-speed trains..." (FRA 2012:1-1; also refer to footnotes throughout the manual with references to resource documents). The criteria are based on the best available data on human response to both absolute noise levels and changes in noise levels, and are appropriate for urban, suburban, and rural areas.

As discussed in Section 3.4.4.4, Methods for Impact Analysis, of the Draft EIR/EIS, the FTA and FRA guidance define noise impacts according to three potential classifications: severe impact, moderate impact, or no impact. A severe noise impact occurs when there is a change in noise level (existing level without project noise versus existing level with project noise) that would be noticeable to most people and likely to generate strong, adverse reactions. A moderate noise impact occurs when there is a change in noise level that would be noticeable to most people but may not be sufficient to generate strong, adverse reactions. Figure 3.4-4 and Figure 3.4-5 in Section 3.4.4.4 of the Draft EIR/EIS illustrate these impact classifications.

The criteria use a sliding scale (as depicted on Figure 3.4-5 of the Draft EIR/EIS) that determines noise impacts based on the existing noise levels and increases resulting from project noise levels. The sliding scale indicates that communities with higher existing noise levels (i.e., suburban and urban areas) would be potentially less affected as a result of a smaller increase in the overall noise level because of potential annoyance from an already elevated noise environment. The justification is that people in communities who are already exposed to high levels of noise would tolerate smaller increases in noise, and a larger noise increase would be required to result in an impact. On the other hand, the sliding scale indicates that communities with lower existing noise levels (i.e., rural areas) would require less change in the overall noise level to result in an impact.

In the analysis, noise-sensitive land uses were identified within a 700-foot screening distance or resource study area (RSA) to evaluate potential noise impacts. This screening distance has been established by the FRA for noise impact analysis in suburban and nonsuburban areas with an unobstructed view of the tracks (refer to Draft EIR/EIS Table 3.4-4; and FRA 2012:4-2–4-4). Noise-sensitive land is categorized according to FTA guidelines, as described in Section 3.4.4.4 of the Draft EIR/EIS. Noise-sensitive areas along the project corridor and within the established screening distances were determined based on existing land use and noise levels. In total, 46 noise-sensitive areas were identified throughout the noise RSA along the proposed alignment in the project section.

Existing noise levels were determined throughout the project section by taking field noise measurements at certain noise-sensitive receptors following the FRA methodology (refer to FRA 2012, Chapter 4). Noise measurements were taken at specific noise-sensitive locations near the alignment in the RSA that were considered representative of conditions throughout the RSA, and which the Authority had permission to access (refer to Figure 3.4-7 of the Draft EIR/EIS). The quantity of noise measurements gathered was dependent on various factors. For example, in an area with many different existing noise sources and multiple rows of shielding between potential receptors and sources of noise, a higher concentration of measurements was gathered. Similarly, an area with few existing noise sources or less shielding would require fewer noise measurements to accurately represent the existing noise environment. Specific measurement locations were selected based on their land use category and physical location along the project section within the noise RSA. Noise

levels measured at these locations are representative of certain existing noise conditions. Section 3.4.5, Affected Environment, of the Draft EIR/EIS provides details on the noise measurement locations.

Local Noise Policies and Regulations

The project is being undertaken by a state agency (the Authority) and will require several federal approvals. The project must conform to the policies and objectives of the statutes and regulations under which the Authority and FRA operate. Because an agency of the State of California is the project proponent, the project is not subject to local government general plan policies or zoning regulations. The state's immunity from local regulations is an extension of the concept of sovereign immunity. The Authority, as the proponent of a "sovereign activity of the State," is not subject to local land use regulations (refer to, e.g., *Town of Atherton v. Superior Court* [1958] 159 Cal.App.2d 417, 428, citing to *Hall v. Taft* [1956] 47 Cal.2d 177, 183; *Lawler v. City of Redding* [1992] 7 Cal.App.4th 778, 784.) Unless the Legislature expressly waives this immunity in a statute, which it has not done here, the general rule is that a local agency cannot regulate State activities (refer to *Del Norte Disposal, Inc. v. Department of Corrections* (1994) 26 Cal.App.4th 1009, 1013). Moreover, although CEQA requires that EIRs discuss inconsistencies with applicable plans, even then, an inconsistency by itself is not considered an environmental impact.

Nevertheless, the Authority recognizes that the project can be most successful if designed in a manner that is as sensitive as possible to the local environment through which it must travel, while still meeting the unique design constraints of HSR service. Through meetings with local agency staff and direct discussions with individual local government officials and staff, the Authority has endeavored to develop a project design that minimizes local impacts and is made as consistent with local plans as possible. Consistent with CEQA and NEPA requirements, the project's consistency with local general plans and zoning regulations as it pertains to noise and vibration is discussed in Draft EIR/EIS in Section 3.4.3, Consistency with Plans and Laws. As noted in the Draft EIR/EIS, the project section would be inconsistent with certain provisions of local and regional plans and policies that include local noise standards and limits (refer to Table 3.4-3). Mitigation measures outlined in Section 3.4.7, Mitigation Measures, of the Draft EIR/EIS would ensure that construction effects associated with the Shared Passenger Track Alternatives would be reduced to the extent feasible.

As discussed previously, the Authority used both current FRA and FTA manuals to assess the potential impacts and necessary mitigation measures for the HSR project. The FRA and FTA criteria used for the Authority's analysis have been used for 30 years on projects throughout the country. The criteria were developed over many years, with input and review from both a technical and policy perspective by the FRA. The criteria are based on the best available data on human response to both absolute noise levels and changes in noise levels. The Authority applied this methodology because it has been used for 30 years and is widely accepted.

Operational Vibration

As discussed in Section 3.4.4 of the Draft EIR/EIS, the Authority used both current FRA and FTA manuals to assess the potential vibration impacts and necessary mitigation measures for the HSR project. The Authority used the *High-Speed Ground Transportation Noise and Vibration Impact Assessment* document (FRA 2012) as the methodology for analyzing HSR operations related to vibration in the Draft EIR/EIS. For evaluation of non-HSR vibration, such as from construction, methodology from the FTA *Transit Noise and Vibration Impact Assessment Manual* (FTA 2018) was used. The FRA criteria (and FTA criteria, which are identical) used for the Authority's analysis have been used for 30 years on projects throughout the country. The criteria were developed over many years, with input and review by the FRA from both a technical and policy perspective by consulting a myriad of technical resource documents, "for the assessment of potential noise and vibration impacts resulting from proposed high-speed ground transportation (HSGT) projects, including high-speed trains..." (FRA 2012:1-1; also refer to footnotes throughout the manual with references to resource documents). The criteria are based on the best available data on the response of humans and sensitive equipment to ground-borne vibration and on the susceptibility of buildings to damage from ground-borne vibration.

As discussed in Section 3.4.4.4 of the Draft EIR/EIS, the FTA and FRA guidance define vibration impacts according to land use category (e.g., buildings with residential, institutional, or sensitive equipment use), and vibration event frequency (i.e., the number of train operations per day). Table 3.4-9, Table 3.4.10, Table 3.4-11, and Figure 3.4-6 describe the operational vibration impact criteria.

In the analysis, vibration-sensitive land uses were identified within a 275-foot screening distance or RSA to evaluate potential vibration impacts. This screening distance has been established by the FRA for operational vibration impact analysis (refer to Draft EIR/EIS, Table 3.4-4; also refer to FRA 2012:8-2–8-3). Vibration-sensitive areas along the project corridor and within the established screening distances were determined based on existing land use. A total of 46 vibration-sensitive areas were identified throughout the vibration RSA along the proposed alignment in the project section.

Vibration propagation measurements were conducted at 11 sites throughout the vibration RSA along the proposed project alignment, as described in the *Los Angeles to Anaheim Project Section Noise and Vibration Technical Report* (Authority 2025b). The measurement results at these locations were used to characterize the transmission of vibration through the ground at particular vibration-sensitive areas following the FRA methodology (refer to FRA 2012, Chapter 9). Vibration propagation measurements were taken at specific locations near the alignment in the RSA that were considered representative of conditions in vibration-sensitive areas along the proposed project alignment (refer to Figure 5-5 of the *Los Angeles to Anaheim Project Section Noise and Vibration Technical Report*). The measurement locations were selected based on their land use category and physical location along the project section within the vibration RSA. The results of the vibration propagation measurements at these locations were used to predict vibration levels from HSR train operations using FRA methodology (refer to FRA 2012, Chapter 9). An analysis of vibratory impacts using the FTA and FRA's widely accepted methodology can be found in Section 3.4 of the Draft EIR/EIS. No revisions to the Draft EIR/EIS were made in response to this series of comments unless otherwise specified in individual responses to comments.

18.7.2 LAA-Response-Section 3.4 N&V-02: Sound Barriers and Other Noise Abatement

18.7.2.1 Comment Summary

Commenters inquired about proposed sound barrier locations and how other abatement/mitigation was determined, and how it will be implemented.

18.7.2.2 Response

The Authority has identified measures to mitigate noise impacts under NEPA and significant impacts under CEQA that cannot be avoided or minimized. Section 3.4.7.3, N&V-MM#3: Implement California High-Speed Rail Project Noise Mitigation Guidelines, of the Draft EIR/EIS describes how mitigation measures were evaluated for reasonableness for areas of potential severe noise impact, based on N&V-MM#3. These guidelines require consideration of all mitigation measures that are reasonable, physically feasible, practical, and cost effective to reduce severe noise impacts (i.e., impacts where a significant percentage of people would be highly annoyed by the HSR project's noise according to FRA impact thresholds). For sound barriers to be considered reasonable and feasible for implementation, pursuant to the Noise and Vibration Mitigation Guidelines, they must achieve a minimum of 5 decibels of noise reduction, benefit a minimum number of 10 sites, be at least 800 feet in length, and be cost effective. These criteria would ensure that a substantial noise reduction would be achieved using existing and available materials while minimizing visual impacts and ensuring cost effectiveness (refer to Draft EIR/EIS Appendix 3.4-A, Noise & Vibration Mitigation Guidelines). Refer to Section 3.4.7.3 of the Draft EIR/EIS for a discussion of additional types of noise impact mitigation measures that the Authority would consider to reduce "severe" noise impacts in addition to sound barriers, and the circumstances when those additional measures would be considered.

The Draft EIR/EIS proposes a sound barrier in one location, because the barrier meets the cost-effectiveness criteria consistent with the Authority's Noise and Vibration Mitigation Guidelines. The location of the proposed sound barrier is depicted on Figure 3.4-10 of the Draft EIR/EIS. Per N&V-

MM#3, the Authority will conduct additional noise modeling during final design to determine the exact extent of this sound barrier and its location relative to noise-sensitive receptors. This modeling will incorporate final vehicle specifications and existing concrete wall structures that have the potential to affect noise attenuation. If the noise modeling effort triggers changes to the noise impacts or recommendations for mitigation, additional environmental documentation will be prepared, as required by NEPA and CEQA.

In addition to the potential use of sound barriers, other forms of noise impact mitigation may include improvements to the building structure itself to reduce the levels by at least 5 A-weighted decibels. Such mitigation could include installing acoustically treated windows, extra insulation, and mechanical ventilation as detailed in Section 3.4.7.3 of the Draft EIR/EIS. The Authority would refine mitigation for individual homes with residual severe noise impacts (i.e., severe impacts that remain after provision of sound barriers) and address them on a case-by-case basis. These types of measures would not reduce exterior noise levels, but would be effective at reducing interior noise.

If the Authority certifies this Final EIR/EIS and approves the project, the Authority would proceed with construction of the project and implement all mitigation measures as construction occurs. Noise mitigation measures that address impacts from HSR operations would be adopted and committed to in conjunction with project approval, but they would be implemented closer in time to the commencement of project operations and in consultation with affected property owners.

18.8 Section 3.6: Public Utilities and Energy

18.8.1 LAA-Response-Section 3.6 PUE-01: Utility Conflicts

18.8.1.1 Comment Summary

Commenters expressed concern about the impacts on existing utilities and infrastructure.

18.8.1.2 Response

The Authority has made reasonable efforts to identify the locations of all utilities within the project footprint as part of the PEPD design drawings. The PEPD design drawings provide the basis for the environmental analysis and are at a level of design sufficient for disclosing the environmental impacts of the project section. Major utility and high-risk utility data were compiled by the engineering team to inform the designs, which were prepared using available data from as-built plans, utility company records, and city records. Utilities were incorporated into Volume 3 of the Draft EIR/EIS, in accordance with the Authority's guidelines.

Section 3.6.6.3, Project Impacts, of the Draft EIR/EIS evaluates the potential for construction of the project section to result in conflicts with existing utilities during construction (refer to Impact PU&E-6). Specifically, Table 3.6-16 and Table 3.6-17 in the analysis identify 263 potential conflicts between existing major and high-risk utilities and Shared Passenger Track Alternative A. In total, 978 points of potential conflict exist between Shared Passenger Track Alternative A and existing utility infrastructure.

Compared to Shared Passenger Track Alternative A, Shared Passenger Track Alternative B would result in five additional major and high-risk utility conflicts in Los Angeles, and 24 additional utility conflicts that would require protection in place. Inclusion of the Norwalk/Santa Fe Springs HSR Station Option would not result in additional conflicts; however, inclusion of the Fullerton HSR Station Option would result in an additional five conflicts with utilities that would need to be protected in place. The locations of all potential utility conflicts are illustrated in engineering drawings contained in the PEPD design drawings.

Many of the specific utility connection issues and relocation sites cannot be known until the Authority is engaged in final design, and the utility or municipal services providers share information on the impact of the selected alternative on their existing facilities. During development of the final design, the Authority will coordinate with utility owners and local districts and agencies to refine this information. Additional utilities and facilities will be identified and evaluated during the final design phase.

The project section includes a commitment to minimize or avoid utility service interruptions. Several IAMFs are incorporated into the project section to avoid and minimize conflicts with existing utilities. PUE-IAMF#3, Public Notifications, requires the contractor to notify the public of utility interruptions no fewer than 7 days prior to outage, and to coordinate construction to avoid interruptions of utility service to hospitals and other critical users. PUE-IAMF#4, Utilities and Energy, requires preparation of a technical memorandum documenting how construction activities will be coordinated with utility service providers to minimize or avoid planned and accidental temporary interruptions. The Authority will use industry standard practices for addressing local government and utility company facilities and utilities. The Authority generally ensures that overall local government/utility company facilities and utilities function in a manner materially equivalent to that prior to the relocations, modifications, or impact. The Authority also generally ensures that the design of the relocations or modifications of facilities and utilities meets the local government entity's or utility company's (as applicable) published (or, if not published, established) design standards in place (usually at the time of agreement execution or the time of final design). The Authority's response is subject to the Authority's evaluation of whether the relocations or modifications will result in beneficial results for the community or some level of cost sharing. Given the standard precautions that would be instituted prior to and during construction, the project section would be unlikely to result in accidental disruption of utility systems.

18.9 Section 3.11: Safety and Security

18.9.1 LAA-Response-Section 3.11 S&S-01: At-Grade Crossing Safety

18.9.1.1 Comment Summary

Commenters expressed concern that the increased number of trains transiting through at-grade crossings would result in a safety impact on vehicles, bicycles, and pedestrians using those at-grade crossings.

18.9.1.2 Response

Existing safety conditions, existing safety regulations, and the safety impacts of the HSR project are analyzed in Section 3.11, Safety and Security, of the Draft EIR/EIS. The specific potential impacts related to the proposed addition of HSR trains transiting through existing at-grade crossings are discussed in Impact SS-13.

Eight at-grade crossings would be retained in Anaheim, at Orangethorpe Avenue, La Palma Avenue, Sycamore Street, Broadway Street, Santa Ana Street, South Street, Vermont Avenue, and Ball Road. The Authority acknowledges that operation of HSR trains through the at-grade crossings in Anaheim could increase the potential for rail-related incidents involving vehicles, bicycles, or pedestrians crossing the right-of-way at the at-grade crossings. As described in Section 3.11.6.3, Project Impacts, of the Draft EIR/EIS, these existing at-grade crossings have already been upgraded with quiet zone infrastructure by the City of Anaheim and Orange County Transportation Authority, meaning they have safety improvements such as quadrant gates and medians. HSR would not modify the crossing infrastructure. The Authority would also incorporate SS-IAMF#2, Safety and Security Management Plan; and SS-IAMF#3, Hazard Analyses, to prevent potential impacts associated with collision risk at at-grade crossings. SS-IAMF#2 requires preparation of documentation that specifies how HSR will protect users of the HSR within the track right-of-way, on board trains, and within stations. SS-IAMF#3 requires that safety considerations related to the proximity of the HSR line to other transportation facilities, including railroads and highways, be incorporated into project design. During design and construction, the Authority will prepare a site-specific preliminary hazard analysis and threat and vulnerability assessment. The Authority will apply recommended control measures to reduce risk to an acceptable level prior to project operation. Further detail on SS-IAMF#2 and SS-IAMF#3 can be found in Appendix 2-A.

With incorporation of the IAMFs, the Draft EIR/EIS concludes that the safety impact relative to at-grade crossing operations would be less than significant under CEQA and that the project would not have a substantial adverse effect under NEPA.

18.9.2 LAA-Response-Section 3.11 S&S-02: Train Derailment

18.9.2.1 Comment Summary

Commenters expressed concern on train derailment safety hazards.

18.9.2.2 Response

As discussed in Section 3.11 of the Draft EIR/EIS, although safety incidents along the LOSSAN Corridor have included injuries and fatalities from incidents at at-grade crossings, trespassing on railroad property, train collisions, and derailment, the U.S. Rail Safety Improvement Act of 2008 required the deployment of positive train control (PTC) technology across most railroad systems, including the LOSSAN Corridor, by December 31, 2018. PTC is a predictive collision-avoidance technology designed to increase safety by stopping a train in motion where the continued movement may result in an accident. Consistent with the U.S. Rail Safety Improvement Act of 2008, PTC equipment has been installed along the LOSSAN Corridor by Amtrak, Metrolink, BNSF, and Pacific Surfliner trains. As described in Section 2.4, High-Speed Rail System Infrastructure, of the Draft EIR/EIS, in this project section, the Authority committed to meeting the PTC requirements and partnering with current railroad operators and right-of-way owners to assess whether the system can be updated to include automatic train control or other traffic management solutions.

The Draft EIR/EIS evaluates the potential for construction and operation of the Shared Passenger Track Alternatives to result in train derailments under Impact SS-13 (refer to Section 3.11.6.3 of the Draft EIR/EIS). Overall, the Draft EIR/EIS concludes that the Shared Passenger Track Alternatives would not result in safety impacts related to derailment, including those caused by train-to-train collisions and collisions between an HSR train and objects entering the HSR corridor. HSR and other passenger trains would operate in a shared-track system composed of shared tracks, an electromotive power system, and a signal control system. Freight rail would generally not operate on the shared-track alignment, but would have the ability to do so if necessary. Changes to operational patterns may be required of freight operators because of new and realigned tracks in the LOSSAN Corridor. Project operations would add up to two HSR trains (top speed 90 miles per hour) per hour per direction during operating hours in a portion of the LOSSAN Corridor. Because the project would add HSR trains to the already busy corridor, project operations could increase potential for railroad-related accidents, posing safety hazards to passengers, crew, residences, and other properties. The types of accidents that could be associated with the HSR system are separated into train-to-train collisions; collisions between an HSR train and objects entering the HSR corridor, such as vehicles from adjacent highways or trains from adjacent freight lines; and HSR derailments. Derailment could result in an HSR train, locomotives or passenger railcars, or debris leaving the project section guideway and affecting publicly accessible areas outside of the right-of-way. Train-to-train collisions or other collisions could result in casualties to HSR passengers and employees.

With respect to HSR derailments, Impact SS-13 provides that derailments could result in safety impacts, including injuries and casualties, on HSR passengers and crew. Derailments could also result in debris leaving the project section guideway and affecting nearby buildings and residences. However, the potential for such impacts to occur would be reduced because project design would incorporate safety systems, including PTC systems, to reduce the potential for derailments. The safety systems would be designed to contain HSR trains in the guideway in the event of a derailment or collision. Strategies to ensure containment would include O&M plan elements, such as high-quality tracks and vehicle maintenance, to reduce the risk of derailment. Also, physical elements, such as containment parapets, check rails, guard rails, and derailment walls, would be used in specific areas with a high risk of or high impact from derailment. With respect to derailment walls, these concrete walls would run close to the train wheels. In the event of a derailment, they would keep the train upright and within the right-of-way. In addition, all existing roadway overcrossings that would span the shared tracks would be modified to have protective barriers on the top to prevent people or objects from entering the HSR right-of-way from the bridge. Detailed plans of barrier type and installation details will be determined during the Preliminary Engineering for Procurement design phase and through coordination with the corridor stakeholders.

During project operation, HSR trains would operate adjacent to BNSF, Amtrak, and Metrolink tracks, which would create potential for derailment of a conventional passenger or freight train, and obstructions and other effects on the HSR system. The Authority has incorporated the following IAMF during design of the project section to prevent potential impacts associated with derailment:

- SS-IAMF#3 requires incorporation of safety considerations regarding proximity of the HSR line to other transportation facilities, including other railroads or highways, into the project design. During design and construction, the Authority-designated contractor will prepare a site-specific preliminary hazard analysis and threat and vulnerability assessment. The Authority will apply the recommendations and control measures to reduce the risk to an acceptable level prior to O&M of the project.

With incorporation of the above IAMF, the Draft EIR/EIS concludes that the Shared Passenger Track Alternatives would not result in safety impacts related to derailment.

With respect to other hazards that could increase the potential for train derailment, Impact SS-13 also evaluates the potential for train-to-train collisions. With regard to train-to-train collisions, the project corridor includes 10 railroad-to-railroad crossings where different train services would operate alongside each other (not necessarily where tracks physically intersect). Four crossings would be in Los Angeles, three in Vernon, two in Santa Fe Springs, and one in Anaheim. Potential collisions between HSR trains and other trains operating along the project corridor would be avoided through dispatching and temporally separating HSR trains and other trains through train control systems, such as PTC. Temporal separation would avoid other trains and HSR trains operating at the same time on the shared tracks, thereby reducing the potential for train-to-train collisions. Top train speeds would be below 90 miles per hour, further reducing the risk of train-to-train collisions.

In addition to SS-IAMF#3, the Authority has also incorporated the following IAMF to prevent potential impacts associated with train-to-train collisions:

- SS-IAMF#2 requires the Authority-designated contractor to prepare a safety and security management plan that complies with applicable requirements to protect public safety and security. Project operation will be managed by the safety and security management plan, which will include a maintenance, inspection, and repair program for the dedicated HSR facilities; a rules compliance and procedures review program; and an employee and contractor training program that will maintain system safety. As part of the safety and security management plan, the HSR system would be required to comply with FRA requirements for tracks, equipment, railroad operating rules and practices, passenger safety, emergency response, and passenger equipment safety standards set forth in 49 Code of Federal Regulations Parts 200–299.

With incorporation of the above IAMFs, the Draft EIR/EIS concludes that the Shared Passenger Track Alternatives would not result in safety impacts related to train-to-train collisions, further reducing the potential for train derailment.

With respect to collisions between an HSR train and objects entering the HSR corridor, the HSR system would include appropriate barriers (fences and walls) and state-of-the-art communication, access control, and monitoring and detection systems, and would conform to the latest federal requirements regarding transportation security. Highway overpasses would be equipped with a combination of rigid traffic barrier and access-restricting fencing to prevent the intrusion of both vehicles and persons. Access-restricting fences at highway overpasses would have a curved top section to deter the throwing of objects onto the trainway. Solid barriers would be installed directly above the trainway to prevent contact with the OCS wires. Additionally, the project's hazard detection system would alert the systemwide Operations Control Center of natural events such as seismic activity, excessive wind speeds, high water levels, and excessive ambient temperature levels that could result in hazards and objects entering and obstructing or colliding with the trains and other objects that could cause an accident. The hazard detection system would also include systems for detection of trespassers. Therefore, the Draft EIR/EIS concludes the Shared Passenger Track Alternatives would not result in safety impacts related to objects entering the HSR corridor, further reducing the potential for train derailment.

18.10 Section 3.12: Socioeconomics and Communities

18.10.1 LAA-Response-Section 3.12 SOCIO-01: Relocations, Right-of-Way Process, Eminent Domain

18.10.1.1 Comment Summary

Commenters expressed concern about relocations, the right-of-way process, and eminent domain.

18.10.1.2 Response

Property Impacts

The Authority has worked closely with government agencies, businesses, individuals, and nonprofit organizations to design the HSR project to avoid and minimize impacts, including property acquisitions, to the greatest extent feasible. These efforts would continue throughout final design for the selected alternative. The HSR tracks would be built mostly within the existing railroad right-of-way, adjacent to residential, commercial, and industrial communities, and it would not permanently create a new physical barrier, bisect, or isolate established communities. As described in Section 3.12.6.3, Project Impacts, of the Draft EIR/EIS, Shared Passenger Track Alternative A would displace 256 businesses (Table 3.12-24) and Shared Passenger Track Alternative B would displace 274 businesses (Table 3.12-29). 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 all of the cities, except for Vernon and Commerce. As described in Chapter 5, Community Analysis, of the Draft EIR/EIS, these displacements would occur in minority and low-income communities and would result in a disproportionately high and adverse effect.

Both alternatives would displace three residential properties in the neighborhood of West Whittier–Los Nietos (Table 3.12-22). All residential displacements would occur in a minority and low-income block group. A surplus of suitable replacement residential sites exists, and all displaced residents would be accommodated

As part of the project, the Authority would incorporate several IAMFs to avoid and minimize impacts. SOCIO-IAMF#2 will provide relocation assistance for persons displaced through right-of-way acquisition. SOCIO-IAMF#3 (Relocation Implementation Plan) requires the Authority to develop a plan that establishes an appraisal, acquisition, and relocation process to minimize economic disruption related to relocation in consultation with affected property owners. In addition, SO-MM#1, Implement Measures to Reduce Impacts Associated with the Division of Residential Neighborhoods, 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. To address concerns regarding business displacements, the Authority would incorporate CA-IAMF#4, Business Relocation/Displacement Assistance, which would require the Authority to hold community roundtable meetings to seek and consider input from affected communities prior to finalizing the Authority's Relocation Mitigation Plan. 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.

Right-of-Way Acquisition Process

The Authority has prepared informational pamphlets describing the right-of-way acquisition process. Specifically, "Private Property and High-Speed Rail: Your Questions Answered" describes the process and general timeline by which an appraiser and right-of-way agent will coordinate with property owners of parcels affected by the HSR alignment and is available on the Authority's website (https://hsr.ca.gov/wp-content/uploads/docs/programs/private_property/ROW-Private-Property-Questions-Factsheet.pdf) [Authority 2022b]). This pamphlet also offers guidance for property owners of parcels that would not require acquisition but for which the property owner believes their property value has been affected. In those cases, property owners who believe they have suffered a loss may

file a claim with the State of California Government Claims Program. The Authority's acquisition and relocation assistance and advisory services would include, but not be limited to, measures, facilities, or services that may be necessary or appropriate to determine the needs and preferences of each household, business, and nonprofit organization to be displaced. The Authority would provide current information on the availability, purchase prices, and rental costs of comparable replacement residential units. Other benefits and compensation may include payment of residential moving expenses and replacement housing payments, nonresidential moving expenses, and reestablishment expenses. The Authority's acquisition and relocation assistance documents in Appendix 3.12-A, Relocation Assistance Benefits, of the Draft EIR/EIS describe compensation and acquisition procedures in detail. For any properties acquired for the project, the Authority would comply with appropriate provisions of the federal Uniform Relocation Assistance and Real Property Acquisition Policies Act (42 U.S. Code 4601 et seq.) (Uniform Act) and implementing regulations (49 Code of Federal Regulations Part 24). Property owners whose entire or partial property would be acquired by the Authority would receive compensation for their land and improvements. The California Relocation Assistance Act essentially mirrors the Uniform Act and also ensures consistent and fair treatment of owners, expedited acquisition of property by agreement to avoid litigation, and promotion of confidence in the public land acquisitions process. However, if there is federal funding on the project, as there is for the HSR project, the Uniform Act takes precedence. The Authority would acquire the land of property owners whose land is directly affected by the project in accordance with the Uniform Act. The Uniform Act establishes minimum standards for treatment and compensation of individuals whose property is acquired for a federally funded project. For all acquisition of real property, the Uniform Act requirements include the following:

- Appraisal of the property before negotiation begins
- Invitation to the property owner to be present when the appraiser visits the property
- Preparation of a written offer of compensation and a summary of what is being acquired
- Payment for the property before taking possession of the property
- Offer to acquire uneconomic remnant parcels
- Reimbursement for expenses resulting from the transfer of title

The Authority would negotiate property acquisitions on a case-by-case basis with the property owner(s). The Authority would acquire the property at fair market value, as determined by the process described above. In the event that the Authority and a property owner cannot reach an agreement, then the Authority also has the power of eminent domain, which allows it to condemn the property of unwilling sellers, with payment of just compensation (i.e., fair market value) to the property owner. Eminent domain would be viewed as a last resort to acquire land for the public purpose of developing the statewide HSR system. Information on the eminent domain process is available on the Authority's website (https://hsr.ca.gov/wp-content/uploads/docs/programs/private_property/Your-Property-Your-HSR-Project-Factsheet.pdf [Authority 2022c]). Just compensation is an amount paid to a property owner for property acquired for public purposes that is not less than the fair market value of the property acquired, including damages or benefits to the remaining property. Compensation also would include any measurable loss in value to the remaining property as a result of a partial acquisition.

Refer to Section 2.10.1 of the Draft EIR/EIS for further information on the estimated construction phasing and right-of-way acquisition timing.

Relocation Process

When displacement results from the acquisition of residential or nonresidential properties, such as businesses, the Uniform Act's provisions for relocation assistance include:

- Relocation advisory services, including referrals to replacement properties, help in filing payment claims, and other necessary assistance to help the displaced person successfully relocate.
- A minimum 90-day written notice to vacate the property before the Authority would take possession.

- Reimbursement for moving and reestablishment expenses. The Uniform Act requires the Authority to provide fair and equitable treatment of all persons affected by relocation and real property acquisition.

The Uniform Act provides benefits to displaced individuals to assist them financially and with advisory services related to relocating their residence or business operation. Benefits are available to both owner-occupants and tenants of either residential or business properties. A property owner may also claim a loss of business goodwill under California Code of Civil Procedure 1263.510 et seq. *Goodwill* is defined as the benefits that accrue to a business because of its location; reputation for dependability, skill, or quality; and any other circumstances resulting in probable retention of old or acquisition of new patronage. Loss of goodwill is paid as an acquisition expense, but some of the items considered in calculating loss of goodwill may also be covered as a relocation expense. Consistent with the requirements of the Uniform Act and California Relocation Assistance Act, the Authority is committed to working closely and proactively with residents and businesses to help them plan ahead for relocation, find a new home or business site, and solve problems related to acquisitions and relocation.

Additional information about acquisition, compensation, and relocation assistance and the Uniform Act is also available in Appendix 3.12-A of the Draft EIR/EIS, as well as on the Authority's website.

18.10.2 LAA-Response-Section 3.12 SOCIO-02: Impacts on Businesses

18.10.2.1 Comment Summary

Multiple commenters expressed concern about business impacts and maintaining business access during construction.

18.10.2.2 Response

During construction, business impacts could include noise, vibration, dust, loss of parking, and traffic congestion in the areas of construction activities. Depending on the location and nature of construction activities, impacts on businesses would vary. Business-related impacts are more likely to occur near surface construction activities where local roadway modifications may temporarily disrupt circulation patterns. Businesses that tend to rely on drive-by traffic to attract customers would experience the greatest impacts; however, some of these businesses may experience beneficial impacts from construction and operation of the HSR project. As described in Section 3.12.6.3 of the Draft EIR/EIS, the Authority would develop and incorporate SOCIO-IAMF#1, Construction Management Plan, which would minimize the impacts on businesses during construction by providing signage and maintaining access to affected businesses through roadway modifications or detours. Section 3.11 of the Draft EIR/EIS identifies safety measures to maintain truck and delivery traffic to businesses along and below the guideway during construction and operation of the HSR. In addition, other sections of the Draft EIR/EIS identify mitigation measures related to construction-period traffic (Section 3.2.7), air quality (Section 3.3.7), and noise (Section 3.4.7).

Section 3.12.6.3 of the Draft EIR/EIS details how the project-related purchases made locally at the construction sites would result in increased sales tax revenues for cities and counties in the project area. Unless exempted, all transactions for tangible assets related to the project would be subject to sales tax. This includes materials such as gasoline, oil, parts, and light bulbs that would be purchased locally. Additionally, new or existing businesses in the project area that supply goods and services to construction workers (e.g., retail stores, gas stations, banks, restaurants, service companies) could benefit from increased patronage.

18.10.3 LAA-Response-Section 3.12 SOCIO-03: Property Values

18.10.3.1 Comment Summary

Commenters expressed concern that the HSR project would devalue their properties.

18.10.3.2 Response

Section 6.6.2.3, Long-term Effects on Property Values, in the *Los Angeles to Anaheim Project Section Community Impact Assessment* summarizes the potential property value impacts of the HSR project (this report can be provided upon request to the Authority). The analysis included a literature review of studies related to both conventional rail and HSR stations. Studies on the impact of railway stations on property value indicate that residential and commercial property values near transportation system stations typically increase and are valued higher than similar properties not in the vicinity of such stations because of improved accessibility (both of residents to regional jobs and of employers to a larger labor pool). These studies that have been conducted to date offer no clear consensus on findings because of the limited availability of existing literature. While good data exist on such outcomes as shifts in travel modes resulting from the introduction of new HSR service, economic development effects "are less clear, harder to observe and quantify, and therefore are more controversial" (Givoni 2006). Successful HSR station area development (and presumably related real estate price effects) appears to be linked to a number of factors, including robust local economic conditions, strong travel demand, and excellent links to other forms of transit. It also is difficult to extrapolate from studies conducted in high-density urbanized areas of Japan, Korea, and Europe to predict property value effects in U.S. communities that are much more dispersed. For example, Japan's Tokaido line connects Tokyo and Osaka, cities with approximately 37 million and 19 million inhabitants in their larger metropolitan areas, respectively.

The studies illustrate that the potential exists for the values of residential and commercial properties to appreciate as a result of HSR projects. Property value increases can result from both new access to an HSR transportation system and the associated intensification of development that can occur around station locations. However, given the potential for nuisance effects (e.g., noise and visual effects) resulting from operation of HSR trains, it is possible that some properties could experience a decrease in value. This potential for a decrease in property value may be particularly true for residences and businesses in locations considerably removed from train stations but exposed to nuisance effects of the HSR project. These nonstation residences and businesses would enjoy relatively few benefits (mainly those deriving from improved accessibility) to offset the nuisance effects. This balance between the amount of benefit enjoyed compared to the nuisance effects would be unique for each property and would be only one of the many factors influencing the ultimate market value of any particular property. A major reason for locating the Shared Passenger Track Alternatives in an existing railroad corridor was to reduce impacts on existing land uses. Properties adjacent to the Shared Passenger Track Alternatives already experience nuisance effects associated with railroad corridors such as noise. As detailed throughout the Draft EIR/EIS, the project incorporates standardized HSR features to avoid or minimize impacts. These features are referred to as IAMFs and will be incorporated during project design and construction, as relevant to the HSR project section, to avoid or reduce impacts. These features are considered part of the project and the EIR/EIS explains how they will work and describes their effectiveness. If significant impacts are determined to occur even with incorporation of IAMFs, then feasible mitigation measures are identified and implemented as required under CEQA. The Authority, in coordination with the property owners, will incorporate IAMFs during project design, construction, and operation. These IAMFs include NV-IAMF#1, Noise and Vibration, which would avoid noise and vibration impacts; TR-IAMF#2, Construction Transportation Plan, through TR-IAMF#8, Construction During Special Events, TR-IAMF#11, and TR-IAMF#12, Pedestrian and Bicycle Safety, which would avoid and minimize impacts related to temporary disruptions to community circulation patterns and parking from construction; and SS-IAMF#1, Construction Safety Transportation Management Plan, which would minimize the Shared Passenger Track Alternatives' temporary impacts on emergency response times during construction. In addition, as described in Section 5.6.3.3, Noise and Vibration, of the Draft EIR/EIS, the Authority will incorporate CA-IAMF#1, Authority Community Ombudsperson and Contractor's Community Liaison, which creates an ombudsman position to address the needs of low-income and minority communities adversely affected by construction impacts such as street closures and detours. The position will act as a single point of contact for property owners, residents, and tenants in these communities with potential adverse construction impacts. Mitigation measures N&V-MM#1, Construction Noise Mitigation Measures; and AVQ-MM#1, Minimize Visual Disruption from Construction Activities, would minimize impacts from temporary noise and visual changes. N&V-

MM#3; and N&V-MM#4, Implement Operational Vibration Mitigation Measures, would be implemented to address operational noise impacts. AVQ-IAMF#1, Aesthetic Options; AVQ-IAMF#2, Aesthetic Review Process; AVQ-MM#3, Incorporate Design Aesthetic Preferences into Final Design and Construction of Nonstation Structures; and AVQ-MM#4, Provide Vegetation Screening Along At-Grade and Elevated Guideways Adjacent to Residential Areas, would minimize and mitigate permanent visual changes. Some measures such as the sound barriers proposed under N&V-MM#3 will benefit adjacent properties by reducing noise from existing trains as well as HSR trains. In summary, nuisance impacts on any properties affected by the HSR project that could have an effect on property values would be avoided, minimized, or mitigated as appropriate. However, as described above, nuisance effects would be only one of the many factors influencing the ultimate market value of any particular property.

Owners who believe they have suffered a loss of property value as a result of the project may file a claim with the State of California's Government Claims Program. More information on filing a claim may be obtained online at the following link: https://www.dgs.ca.gov/en/ORIM/File-A-Claim. Claims may be mailed to the following address: Office of Risk and Insurance Management Department of General Services, P.O. Box 989052, MS-414, West Sacramento, CA 95798-9052. For assistance from the Government Claims Program, call (800) 955-3634.

18.11 Section 3.16: Aesthetics and Visual Quality

18.11.1 LAA-Response-Section 3.16 AVQ-01: Impacts on Visual Quality During Construction and Operation

18.11.1.1 Comment Summary

Commenters expressed concern on aesthetics impacts and changes from construction and operation of the HSR project.

18.11.1.2 Response

Section 3.16, Aesthetics and Visual Quality, of the Draft EIR/EIS evaluates the potential for the Shared Passenger Track Alternatives, including HSR station options, to introduce visual changes that could result in impacts on aesthetics and visual quality under NEPA and CEQA. New infrastructure that would be added to the visual landscape include elements such as such OCS wires and poles, communications towers, HSR vehicles, a maintenance facility, grade separations, traction power substations, and stations.

As detailed in Section 3.16.6, Environmental Consequences, of the Draft EIR/EIS, the evaluation included consideration of potential visual quality and nighttime lighting impacts during both construction and operation of the Shared Passenger Track Alternatives, organized by landscape unit. Impact AVQ-1 details that construction activities would result in temporary impacts, as well as permanent changes to aesthetics and visual quality that would originate during the construction period, particularly in the first 5 years of construction. Under NEPA, Impact AVQ-1 would result in adverse effects, and under CEQA would result in significant impacts prior to incorporation of IAMFs and implementation of mitigation measures; adverse effects under NEPA and significant and unavoidable impacts under CEQA would remain on the four historic bridges in the Downtown Los Angeles Landscape Unit because of changes in visual quality to the historic bridges. Impacts from lighting that would be used during construction are considered in Impact AVQ-2, which details that introduction of light and glare from construction activities would lead to substantial but temporary impacts on viewers, visual character, and visual quality, as well as aesthetic degradation of four historic bridges. Impact AVQ-2 would result in adverse effects under NEPA and significant impacts prior to mitigation under CEQA; however, incorporation of IAMFs and implementation of mitigation measures would reduce impacts to not-adverse levels under NEPA and less-than-significant levels under CEQA. Impact AVQ-3 finds that visual quality effects include increased activity along the rail corridor, new and expanded stations with greater transit and commuter activity, and signal lights. The Shared Passenger Track Alternatives would also result in aesthetic degradation effects during operation on four historic bridges in the Downtown Los Angeles Landscape Unit because of the introduction of new visual elements and moving security features, such as signal lights. As a result,

Impact AVQ-3 would result in adverse effects under NEPA and significant impacts prior to mitigation under CEQA; adverse effects and significant and unavoidable impacts would remain in the Downtown Los Angeles Landscape Unit because of visual effects on four historic bridges even with incorporation of IAMFs and implementation of mitigation measures. Impact AVQ-4 concludes that no adverse effects under NEPA or significant impacts under CEQA would occur from train operations or security lighting associated with operations.

The Authority would incorporate the following IAMFs to avoid and minimize aesthetics and visual quality and nighttime lighting impacts during project construction and operation:

- AVQ-IAMF#1: Prior to construction, the Authority-designated contractor shall document, through issuance of a technical memorandum, how the Authority's aesthetic guidelines have been employed to minimize visual effects. The Authority seeks to balance providing a consistent, project-wide aesthetic with the local context for the numerous HSR nonstation structures across the state. Examples of aesthetic options will be provided to local jurisdictions that can be applied to nonstandard structures in the HSR system.
- AVQ-IAMF#2: Prior to construction, the Authority-designated contractor will document that the Authority's aesthetic review process has been followed to guide the development of nonstation area structures. Documentation will be through issuance of a technical memorandum to the Authority. The Authority will identify key nonstation structures recommended for aesthetic treatment, consult with local jurisdictions on how best to involve the community in the process, solicit input from local jurisdictions on their aesthetic preferences, and evaluate aesthetic preferences for potential cost, schedule, and operational impacts. The Authority will also evaluate compatibility with project-wide aesthetic goals, include recommended aesthetic approaches in the construction procurement documents, and work with the Authority-designated contractor and local jurisdictions to review designs and local aesthetic preferences and incorporate them into final design and construction.

Other resource IAMFs applicable to impacts on aesthetics and visual quality during project construction include:

- AQ-IAMF#1, which includes multiple construction measures and best management practices to reduce fugitive dust that could also affect visual quality during construction
- BIO-IAMF#11, Maintain Construction Sites and Best Management Practice Training, which would be incorporated to ensure staging areas are kept clean and orderly and that construction debris is removed from public rights-of-way and adjacent properties to reduce visual impacts during construction

The Draft EIR/EIS sets forth the following mitigation measures to address aesthetics and visual quality impacts under NEPA and significant impacts under CEQA that cannot be adequately avoided or minimized by IAMFs:

- 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#12: Design Review for Intrusion-Protection Barriers

With incorporation of IAMFs and implementation of mitigation measures above, the Draft EIR/EIS concludes that the majority of the visual quality and nighttime lighting impacts associated with the Shared Passenger Track Alternatives, with inclusion of either HSR station option, would be reduced to no adverse effect under NEPA or less-than-significant impacts under CEQA. However, Impact AVQ-1 and Impact AVQ-3 would continue to result in adverse effects under NEPA and significant and unavoidable impacts under CEQA within the Downtown Los Angeles Landscape Unit because of visual impacts on the four historic bridges. Impacts associated with nighttime lighting during construction under Impact AVQ-2 and operation under Impact AVQ-4 would not result in adverse effects under NEPA or significant impacts under CEQA following implementation of applicable mitigation measures and incorporation of IAMFs.

18.12 Chapter 5: Community Analysis

18.12.1 LAA-Response-Chapter 5 COMMUNITY-01: Need for Analysis of Impacts on Minority and Low-Income Communities

18.12.1.1 Comment Summary

Commenters asked why, following the early 2025 revocation of underlying U.S. Presidential Executive Orders (USEO), the Draft EIR/EIS includes a chapter analyzing impacts on minority and low-income communities. Commenters also sought reassurance that the Authority is committed to addressing the needs of minority and low-income communities, and requested that the Authority include an analysis of impacts on disadvantaged communities.

18.12.1.2 Response

The Authority remains committed to ensuring equal access to its services and benefits and to understanding and addressing impacts on the communities the project travels through. The Authority adopted its Title VI and Limited English Proficiency Policies in 2012. The Authority's Title VI Policy is still in effect; the Limited English Proficiency Policy supplements the Title VI Policy. The adoption of these policies formalized the Authority's long-standing efforts to ensure that no person in the state of California is excluded from participation in, or denied the benefits of, its programs, activities, and services on the basis of race, color, national origin, age, sex, or disability, as afforded by Title VI of the Civil Rights Act of 1964 and related statutes. Similarly, additional Authority policy guidance (also adopted in 2012) articulates the agency's position that fair treatment of people of all races, cultures, and income is incorporated into all the Authority's programs, policies, and activities, and in particular during the development and evaluation of the environmental documents.

On January 21, 2025, USEO 14173 rescinded USEO 12898, Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations, and other USEOs that have historically provided direction for federal agencies to integrate environmental justice (EJ) considerations into their decision-making. Council on Environmental Quality guidance issued in 2025 stated that EJ analyses could be included in environmental reviews should other applicable law require such an analysis. California statutes, such as Assembly Bill 32 and Senate Bill 535 (and Authority policies implementing these statutes), require the Authority to identify impacts on disadvantaged communities. The revocation of underlying USEOs did not eliminate statutory obligations under California law, Title VI, or the Authority's own policies.

Chapter 5 is included in the Draft EIR/EIS for informational purposes and as documentation of the Authority's compliance with state law, federal civil rights law, and its own adopted policies.

18.13 Chapter 9: Public and Agency Involvement

18.13.1 LAA-Response-Chapter 9 OUTREACH-01: Public Involvement Process

18.13.1.1 Comment Summary

Multiple commenters were concerned with the public involvement process and suggested that the outreach was not adequate for a project of this size and scope.

18.13.1.2 Response

Pursuant to the requirements of NEPA and CEQA, the Authority has conducted an extensive public and agency involvement program as part of the environmental review process. Public involvement and outreach included development and provision of informational materials such as fact sheets, informational and scoping meetings (including town hall meetings), public and agency meetings, meetings with individuals and groups, as well as presentations and briefings to interested and affected organizations and associations.

Agency involvement included agency scoping meetings, Interagency Working Group meetings with agency representatives, and other agency consultation. Public and agency outreach also included notification and circulation of the Draft EIR/EIS and notification of the Final EIR/EIS. Chapter 9, Public and Agency Involvement, and Appendix 9-A, Comprehensive List of Public and Agency Meetings, of the Draft EIR/EIS describe the public and agency involvement efforts conducted during preparation of the Draft EIR/EIS. Chapter 9 and Appendix 9-A have also been revised in the Final EIR/EIS to include outreach activities that occurred after Draft EIR/EIS publication; refer to Section 16.11: Chapter 9, Public and Agency Involvement, and Section 16.54, Appendix 9-A: Comprehensive List of Public and Agency Meetings, respectively, in Chapter 16 of the Final EIR/EIS.

Circulation and Notice of Availability

Pursuant to the requirements set forth by State CEQA Guidelines Sections 15086 and 15087, the FRA's Procedures for Considering Environmental Impacts, 64 *Federal Register* 28545, and the Council on Environmental Quality's NEPA regulations (40 Code of Federal Regulations Parts 1500–1508 [2016]), the Authority provided widespread notice of the availability of the Draft EIR/EIS to ensure that members of the public; local, state, and federal agencies; and Native American tribes had the opportunity to review and provide comments.

As required by State CEQA Guidelines Section 15087, CEQA lead agencies are to provide public notice of the availability of an EIR. Notices are to "be mailed to the last known name and address of all organizations and individuals who have previously requested such notice in writing." The Authority satisfied this requirement as indicated by the third bullet in the list below. Additionally, noticing must include one of the following: (1) one-time publication in a newspaper of general circulation, (2) posting notice on and off site where the project would be located, and (3) direct mailings to the owners/ occupants of contiguous parcels. As indicated by the list below that provides greater detail, the Authority exceeded the minimum noticing requirements by including publication of notices in 11 local newspapers of general circulation, publication of the Draft EIR/EIS on the Authority's website (https://hsr.ca.gov/programs/environmental-planning/project-section-environmental-documents-tier-2/los-angeles-to-anaheim-project-section-environmental-documents/), publication of availability of the Draft EIR/EIS on the Authority's website and various social media platforms, and mailing of notices to property owners and occupants 500 to 1,000 feet from the project footprint.

Similarly, Section 9, Citizen Involvement, of the FRA Procedures for Considering Environmental Impacts provides that NEPA lead agencies must (1) develop a list of interested parties during which preparation of the EIS should be consulted, (2) publish a notice of intent to prepare an EIS in the *Federal Register*, (3) circulate the Draft EIS and place the document in repositories such as public libraries, (4) issue a press release and publish a notice of availability in local newspapers of general circulation, and (5) at the agency's discretion, hold a public hearing at least 30 days subsequent to the Draft EIS publication. In accordance with these requirements, the Authority prepared a list of interested parties, which was incorporated into Chapter 10, EIR/EIS Distribution, of the Draft EIR/EIS; a notice of availability of the Draft EIR/EIS was published in the *Federal Register* on December 5, 2025; provided electronic, printed, or both, copies of the Draft EIR/EIS to 13 area libraries; published notices in 11 local newspapers of general circulation; and hosted a public hearing 33 days after the release of the Draft EIR/EIS.

The Authority provided broad notice of the availability of the Draft EIR/EIS in the following ways:

- Publication in 11 local newspapers, including some in Spanish and Korean

- Emails to all individuals and organizations who had previously registered to receive information via email about the Draft EIR/EIS
- Direct mailing to those on the project mailing list and those that had requested notice in writing
- Direct mailing to owners/occupants of property within 1,000 feet of the Shared Passenger Track Alternatives' footprints for unincorporated areas, within 500 feet of the project footprint for incorporated areas, and within 0.5 mile of the HSR stations, grade separations, potential LMFs, relocated and modified Metrolink stations, and layover tracks
- Direct mailing to agencies, elected officials, and tribes
- Direct mailing to schools, educational facilities, and school districts within 0.25 mile of the project footprint
- Direct mailing to public transit agencies that operate within 5 miles (bus operators) and 10 miles (rail providers)
- Filing of electronic notices with the County Clerks' Offices in Los Angeles and Orange County
- Submittal of copies to the State Clearinghouse
- Publication in the *Federal Register*

As described in more detail in Chapters 9 and 10 of the Draft EIR/EIS, the Authority provided access to the Draft EIR/EIS in the following ways: the entire Draft EIR/EIS, Volumes 1 through 3, was made available on the Authority's website; electronic media containing these documents were made available to anyone who requested them via the Authority's website, free of charge; and electronic media and printed copies were made available for public view in the Authority's Sacramento and Los Angeles offices, as well as in 13 repositories (libraries). In the months prior to the December 5, 2025, Draft EIR/EIS publication date, the Authority maintained regular contact with the repositories regarding their capacity to receive and maintain the distribution materials for public review, and electronic media and printed copies were prepared for the public libraries in the vicinity of the project.

All technical reports referenced in the Draft EIR/EIS were available in electronic form by request via the Authority's website or by calling the Authority office at (877) 669-0494. These supporting documents not included in the volumes of the Draft EIR/EIS were not provided on the website, because the Authority makes every effort to ensure the website and its contents meet mandated Section 508 of the Rehabilitation Act and Americans with Disabilities Act requirements, pursuant to the California State–mandated Web Content Accessibility Guidelines 2.0 Level AA standard.

The Authority also facilitated awareness of the availability of the Draft EIR/EIS and the comment period in the following ways: by using mailed announcements and e-blasts, by providing information during monthly agency meetings and regular consultations, and by holding one virtual community open house, three in-person open house/public hearings, and a virtual public hearing during the public review period for the Draft EIR/EIS.

The public was given the opportunity to comment on the Draft EIR/EIS in several ways. Comments could be submitted to the Authority by mailing a hardcopy letter, verbally at the public hearing, by means of email, or electronically on the Authority's website. The Authority has considered all comments on the Draft EIR/EIS received during the comment period between December 5, 2025, and February 3, 2026. These comments and the Authority's responses are included in the following chapters of this Final EIR/EIS: Chapter 19, Responses to Comments from Federal Agencies; Chapter 20, Responses to Comments from State Agencies; Chapter 21, Responses to Comments from Elected Officials; Chapter 22, Responses to Comments from Local Agencies; Chapter 23, Responses to Comments from Businesses and Organizations; Chapter 24, Responses to Comments from Individuals; and Chapter 25, Responses to Comments from Native American Tribes. A total of 309 submission letters were submitted on the Draft EIR/EIS, including three that were submitted after the close of the comment period. Within these submission letters were 1,450 individual comments.

Public Hearing and Meeting Notices

The Notice of Availability, which was distributed initially on December 5, 2025, included notice of a virtual Open House on December 11, 2025; in-person Open House/Public Hearings on January 7, January 12, and January 22, 2025; and a virtual Public Hearing January 26, 2026. In addition to notification efforts described above in the Circulation and Notice of Availability section, the Authority also posted the Notice of Availability on the project section webpage with a link from the Authority's homepage. The Authority also issued a press release on December 5, 2025, with the specific hearing and meeting information.

To facilitate the open houses and public hearings, various publications and materials were developed in English, Spanish, and Korean. These documents included the Statewide HSR Fact Sheets, the project section Executive Summary, and the Notice of Availability. In addition, the Authority website includes information about HSR, the proposed HSR route, the Authority's Business Plans since 2008, newsletters, press releases, Authority Board meetings, recent developments, status of the environmental review process, Authority contact information, and related links. Language interpreters were available at the virtual Community Open Houses and Public Hearing.