

7 OTHER CEQA/NEPA CONSIDERATIONS

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

- A clarification was added that carbon monoxide is the only significant and unavoidable criteria pollutant under air quality
- A clarification was added that examples of sensitive viewers for aesthetics and visual quality also include school staff and students and Pacific Crest Trail users
- The numbers of residential and business displacements were updated based on the engineering and design refinements described in Chapter 2; however, impact conclusions remain the same as in the Draft EIR/EIS. The agricultural resources impact analysis was updated based on the engineering and design refinements described in Chapter 2. These changes resulted in a reduction in permanent impacts on Important Farmlands by approximately 200 acres; however, impact conclusions remain the same as in the Draft EIR/EIS.

This chapter describes the significant and unavoidable impacts under the California Environmental Quality Act (CEQA) that would result from implementation of the proposed Bakersfield to Palmdale Project Section of the California High-Speed Rail (HSR) System. Pursuant to the National Environmental Policy Act (NEPA) and CEQA, this chapter describes the relationship between short-term uses of the environment and long-term productivity, as well as significant irreversible environmental changes or irretrievable commitments of resources from implementing the Bakersfield to Palmdale Project Section. This chapter is based on the detailed analysis of environmental resources of concern presented in Chapter 3, Affected Environment, Environmental Consequences, and Mitigation Measures. Chapter 8, Preferred Alternative and Station Sites, provides a discussion of the environmentally superior alternative and environmentally preferable alternative.

Chapter 2, Alternatives, explains the efforts the Authority has made through the tiered project development and environmental review process to design the HSR system and the Bakersfield to Palmdale Project Section in particular, in a manner that avoids and minimizes impacts. Chapter 2, Section 2.4.2.1, High-Speed Rail Project Impact Avoidance and Minimization Features, presents the specific impact avoidance and minimization features to avoid or reduce potential adverse impacts. Chapter 3, Affected Environment, Environmental Consequences, and Mitigation Measures, describes the potential environmental consequences of developing the Bakersfield to Palmdale Project Section of the HSR system.

7.1 Significant and Unavoidable Adverse Impacts

CEQA requires findings of significance related to each resource area and employs a threshold-based approach to identifying significant impacts. Under CEQA, a determination of significance is made prior to the application of mitigation measures. If an impact is determined to be potentially significant, then mitigation measures are applied with the intent of reducing the impact to a less than significant level. In some cases, the mitigation would not reduce the impact's severity to a less than significant level; these impacts are considered to be significant and unavoidable. The impacts that cannot be mitigated to a less than significant level are the following:

- **Air Quality**—All Bakersfield to Palmdale Project Section (B-P) Build Alternatives and the Fresno to Bakersfield Locally Generated Alternative (F-B LGA) from the intersection of 34th Street and L Street to Oswell Street, would have significant and unavoidable criteria pollutant air quality impacts (carbon monoxide emissions only) after mitigation measures during the construction period. Construction emissions of volatile organic compounds and nitrogen oxides would be reduced with the purchase of emissions offsets; however, carbon monoxide emissions offsets are not available to reduce project impacts from carbon monoxide emissions to a less than significant level. Construction emissions would be slightly increased with the César E. Chávez National Monument Design Option (CCNM Design Option) and the Refined CCNM Design Option over those anticipated for Alternatives 1, 2, 3, and 5; however,

no additional significant and unavoidable air quality impacts would result due to the CCNM Design Option or the Refined CCNM Design Option. Once operational, implementation of the project for Alternatives 1, 2, 3, and 5, the CCNM Design Option, the Refined CCNM Design Option, and the F-B LGA from the intersection of 34th Street and L Street to Oswell Street, would not result in significant and unavoidable impacts related to air quality.

- **Noise**—All B-P Build Alternatives and the F-B LGA from the intersection of 34th Street and L Street to Oswell Street, would have significant and unavoidable noise impacts on some noise-sensitive receivers even after mitigation measures are applied because they are located outside the area where a noise barrier would be fully effective or because the noise barrier would not fully mitigate the impact. In addition, the F-B LGA from the intersection of 34th Street and L Street to Oswell Street would have a significant and unavoidable impact on 16 vibration-sensitive receivers located within 275 feet of the alignment. No significant and unavoidable noise or vibration impacts would result from the CCNM Design Option or the Refined CCNM Design Option due to project design features that would reduce noise for sensitive receivers at the Nuestra Señora Reina de La Paz/César E. Chávez National Monument (La Paz).
- **Safety and Security**—Under Alternative 5, the impact of the displacement of the Los Angeles County Sheriff's Department Lancaster Station, even with implementation of mitigation, would be significant and unavoidable. With implementation of mitigation, the new Los Angeles County Sheriff's Department Lancaster Station would be designed and constructed to be consistent with local land use plans and would be subject to separate site-specific analysis under CEQA. Development of new and/or expanded facilities would comply with local site development and permitting processes, including impact fees and CEQA analysis. However, because the exact location and extent of construction that would be required for the relocation of such facilities is unknown, it is conservatively determined that the impact of relocating the Los Angeles County Sheriff's Department Lancaster Station under Alternative 5 would be significant and unavoidable under CEQA. For Alternatives 1, 2, and 3, the CCNM Design Option, the Refined CCNM Design Option, and the F-B LGA from the intersection of 34th Street and L Street to Oswell Street, no significant and unavoidable impacts related to safety and security would occur.
- **Socioeconomics and Communities**—The B-P Build Alternatives would result in significant and unavoidable impacts related to the permanent displacement and relocation of local businesses from construction. Alternatives 1, 2, and 3 would displace 231 businesses, and Alternative 5 would displace 285 businesses. The gap analysis identified that the Lancaster-Palmdale area has an inadequate number of business spaces in which to relocate the displaced businesses. Many of the potential impacts from the construction of new commercial and industrial space are likely to be avoided or mitigated; however, because project-specific details cannot be known, it is possible that the construction and operation of new commercial and industrial space could result in significant and unavoidable impacts under CEQA. The F-B LGA from the intersection of 34th Street and L Street to Oswell Street, the CCNM Design Option, and the Refined CCNM Design Option would not result in significant and unavoidable impacts related to business displacement.

The B-P Build Alternatives would result in significant and unavoidable impacts on community facilities. All B-P Build Alternatives would displace four community facilities. Although implementation of mitigation measures will reduce impacts related to disruptions to activities and services at those facilities, because the exact location and extent of the construction that would be required to relocate such facilities is unknown, it is conservatively determined that the impact of relocating these community facilities would be a significant and unavoidable impact for all B-P Build Alternatives. The F-B LGA from the intersection of 34th Street and L Street to Oswell Street, the CCNM Design Option, and the Refined CCNM Design Option would not result in significant and unavoidable impacts related to business displacement.

- **Station Planning, Land Use, and Development**—The B-P Build Alternatives would result in significant and unavoidable impacts on planned development. All B-P Build Alternatives would conflict with a proposed residential tract to be built in Lancaster and would require the minor reconfiguration of a proposed truck stop in Tehachapi. No feasible mitigation is available to minimize or mitigate the permanent disruption to planned development; therefore, impacts would remain significant and unavoidable. The addition of the CCNM Design Option or Refined CCNM Design Option would not change these impact conclusions. The F-B LGA from the intersection of 34th Street and L Street to Oswell Street would not result in significant and unavoidable impacts on station planning, land use, and development.
- **Agricultural Lands**—All B-P Build Alternatives would directly convert Important Farmland to transportation use, including Important Farmland currently under a Williamson Act contract or under a local Agricultural zoning designation. In addition, the B-P Build Alternatives would indirectly convert Important Farmland due to parcel severance. Mitigation would be required to address the direct and indirect permanent conversion of agricultural land to nonagricultural use from construction. However, mitigation would only provide permanent protection for existing agricultural land and would not create new farmland (e.g., convert natural land to agriculture). There currently is no feasible mitigation that would reduce significant impacts to a less than significant level; therefore, direct and indirect impacts resulting from the conversion of Important Farmland to a nonagricultural use would remain significant and unavoidable. The F-B LGA from the intersection of 34th Street and L Street to Oswell Street, the CCNM Design Option, and the Refined CCNM Design Option would not directly or indirectly convert Important Farmland to a nonagricultural use and therefore would not result in significant and unavoidable impacts on agricultural resources.
- **Parks, Recreation, and Open Space**—Operation of Alternatives 1, 2, 3, and 5 would result in views of the trains from the Pacific Crest Trail. Noise from passing trains would be perceptible to trail users. Mitigation would reduce the contrasting urban appearance of the project with the natural environment; however, the impact would remain significant and unavoidable due to the substantial change in character of this recreation resource and its value in the long term. Operation of the B-P Alternatives with the CCNM Design Option would result in views of the trains from La Paz, and would result in a significant and unavoidable impact due to the change in character of this resource. However, with the Refined CCNM Design Option, impacts would be avoided because views of the HSR alignment would be mostly blocked by vegetation and natural terrain, or too far away to be substantially visible. The F-B LGA from the intersection of 34th Street and L Street to Oswell Street would not result in significant and unavoidable impacts on parks, recreation, or open space.
- **Aesthetics and Visual Quality**—The B-P Build Alternatives would have significant and unavoidable impacts on visual quality from the perspective of sensitive viewers in the Edison/Rural Valley, Tehachapi Mountains West, Tehachapi Valley, Tehachapi Mountains East, and Rosamond Rural landscape units. The portion of the F-B LGA from the intersection of 34th and L Street to Oswell Street would have significant and unavoidable impacts on visual quality from the perspective of sensitive viewers in the East Bakersfield landscape unit. At certain key viewpoints in these landscape units, the permanent introduction of prominent structures would be visually incompatible with the surrounding environment. These elements include the following: HSR viaducts, roadway overcrossings, and raised embankments; the removal of scenic natural vegetation; and large-scale cut and fill of hillsides. These elements would degrade existing visual quality where visible to sensitive viewers such as residents, school students and staff, Pacific Crest Trail users, and visitors to La Paz. Impacts would remain significant and unavoidable after implementation of mitigation measures because of the large scale of visual changes. The CCNM Design Option would result in significant and unavoidable impacts from certain viewpoints in La Paz, though it would reduce the number of key viewpoints significantly affected compared to the B-P Build Alternatives without the CCNM Design Option. The Refined CCNM Design Option would not result in significant and unavoidable impacts related to aesthetics and visual quality.

- **Cultural Resources**—Alternative 5 would have a significant and unavoidable impact on a historically significant built environment resource (Denny’s Restaurant No. 30 in the city of Lancaster) even after mitigation is applied because the resource would be demolished. Also, the B-P Build Alternatives and the CCNM Design Option would result in a substantial adverse change to La Paz. Although visual and noise screening of the viaduct, as well as potential coloring of the viaduct, would minimize visual and audible impacts, the level of significance after mitigation would still remain significant. Conversely, under the Refined CCNM Design Option, the visual alteration would be minimal, distant, and low within the view sheds from La Paz, only visible from a few locations on the historic property, and would not reduce the isolation of the setting; therefore, impacts to La Paz would be less than significant. The F-B LGA from the intersection of 34th Street and L Street to Oswell Street would also not result in significant and unavoidable impacts on cultural resources.

7.2 Project Benefits

The Bakersfield to Palmdale Project Section is being proposed, despite these significant and unavoidable impacts, based on the benefits listed below and identified in Chapter 1, Project Purpose, Need, and Objectives, and in Chapter 3, Affected Environment, Environmental Consequences, and Mitigation Measures.

Transportation Benefits

- Provides an essential building block to establish very high-speed passenger rail service as part of Phase 1 of the HSR system, to meet the state’s growing demands on its transportation system
- Closure of the passenger rail gap that currently exists between Bakersfield and Palmdale
- Adds capacity to the state’s transportation infrastructure via the new HSR transportation mode, thereby reducing pressure on the state’s existing transportation infrastructure, including highways and airports

Environmental Benefits

- Provides long-term reductions in regional vehicle miles traveled by automobile
- Provides long-term improvements in regional air quality by reducing criteria pollutants and greenhouse gases generated by automobiles and aircraft
- Provides long-term reduction in transportation-related energy requirements
- Supports achieving the state’s greenhouse gas reduction goals as described in Assembly Bill 32, Senate Bill 32, and the California Air Resources Board’s 2017 Scoping Plan
- Supports the state’s goals for reducing vehicle miles traveled and promoting transit-oriented development, as reflected in Senate Bill 743

Economic and Employment Benefits

- Provides economic and employment benefits from construction, including in the San Joaquin Valley, which has suffered historically high unemployment

7.3 Relationship between Short-term Use of the Environment and the Enhancement of Long-term Productivity

Developing the Bakersfield to Palmdale Project Section of the California HSR System would require an investment of materials to create new transportation infrastructure. This investment of materials is expected to include natural resources such as rock and aggregate (e.g., for base of alignment and other facility foundations), steel (e.g., for rail and catenary structures), other building materials, and the various structural components of the HSR trains. Fossil fuels would be consumed for project construction. In addition, the project would require conversion of land to accommodate the new transportation infrastructure. In many cases, the land required is already

being put to economic use as productive farmland, urban and rural structures (including homes, businesses, and parks), and local roads and state highways. The consequences of these land conversions are described in Chapter 3, Affected Environment, Environmental Consequences, and Mitigation Measures.

As indicated in Chapter 1, Project Purpose, Need, and Objectives, the capacity of California's intercity transportation system is insufficient to meet existing and future travel demand, and the current and projected future congestion of the system will continue to result in deteriorating air quality, reduced reliability, and increased travel times. The Bakersfield to Palmdale Project Section of the California HSR System would provide benefits (such as increased safety, reduced pollutant emissions, and reduced greenhouse gases) and accessibility improvements (such as transit linkages to the San Francisco Bay Area, Sacramento, and Southern California).

HSR service would provide linkages to bus, light rail, and commuter rail services for intercity travelers to other areas. Because the HSR system would provide a new alternative to regional transportation options that consume fossil fuels (e.g., automotive trips, commercial air travel), and because it would be powered by electricity primarily generated by harnessing renewable resources (e.g., solar power, wind power), the Bakersfield to Palmdale Project Section would make an important contribution to greenhouse gas reduction efforts.

As described in Section 3.18, Regional Growth, the proposed HSR system would provide direct and indirect economic benefits, including short- and long-term employment benefits. The HSR system would improve accessibility to labor and customer markets and accommodate regional job growth by providing a more attractive market for commercial and office development in the Bakersfield and Palmdale station areas. Regional job growth is expected to be primarily internal to Kern and Los Angeles Counties (i.e., not by population shifts from the Bay Area and Southern California). Improved accessibility would increase the competitiveness of the region, as well as the state's industries and overall economy. Chapter 1, Project Purpose, Need, and Objectives describes the benefits of the HSR project in more detail.

7.4 Significant Irreversible Environmental Changes that Would Result from the Project if Implemented

The Bakersfield to Palmdale Project Section would require the commitment of material and energy for construction and operation, and the commitment of land for HSR facilities.

As previously described, the project would require an investment of materials such as rock, aggregate, steel, and other building materials. Fossil fuels would be consumed for project construction. In addition, the project would require the conversion of land, including productive agricultural land, to accommodate the new transportation infrastructure (including maintenance facilities and stations). The significance of these impacts is evaluated throughout Chapter 3. Overall, it is expected that residents and businesses in the region would benefit from the improved quality of the transportation system (e.g., improved accessibility, increased capacity, energy savings), which would outweigh the irreversible commitment of resources.

This page intentionally left blank