

6.0 Other CEQA/NEPA Considerations

This chapter describes any unavoidable adverse, potentially significant impacts that implementing the proposed Fresno to Bakersfield Section of the high-speed train (HST) project would create. It also describes the relationship between short-term uses of the environment and long-term productivity. This chapter discusses significant irreversible or irretrievable commitments of resources or foreclosures of future options that implementing the proposed HST and heavy maintenance facility (HMF) would create. This chapter is based on the detailed analysis of environmental resources of concern presented in Chapter 3.0, Affected Environment, Environmental Consequences, and Mitigation Measures. A discussion of the environmentally superior alternative, environmentally preferable alternative, and the least environmentally damaging practicable alternative is provided in Chapter 7, Preferred Alternative.

6.1 Unavoidable Adverse Potentially Significant Impacts

Chapter 2 explains the efforts the agencies have made through the tiered project development and environmental review process to design the HST System, and the Fresno to Bakersfield Section, in a manner that avoids and minimizes impacts. Chapter 3.0, Affected Environment, Environmental Consequences, and Mitigation Measures, describes the potential environmental consequences of developing the Fresno to Bakersfield Section of the HST System. Project design features were identified to avoid or reduce potential adverse impacts and additional mitigation measures were prescribed for significant adverse impacts. In some cases the mitigation would not reduce the impact's severity to a less-than-significant level. The impacts that cannot be mitigated to a less-than-significant level are the following:

- Noise effects. All the HST alternatives would have significant and unavoidable impacts on sensitive receptors after mitigation in some locations, from operations.
- Socioeconomics and Communities. Adverse effects of project operation include the potential to disrupt and/or divide adjacent communities by physically removing homes, businesses, and community facilities and placing a new linear project through the community outside of and away from the existing railroad right-of-way. The intensity of this effect would be substantial for several small, unincorporated communities along the BNSF Alternative east of Hanford, the BNSF Alternative through Wasco-Shafter, and the Corcoran Bypass Alternative (e.g., Ponderosa Road east of Hanford, Newark Avenue northeast of Corcoran, 5th Avenue and Waukena Avenue east of Corcoran, and Crome between Shafter and Bakersfield), as well as in Central and Northeast district neighborhoods of Bakersfield for all three Bakersfield alternative alignments. Even with the implementation of mitigation measures, the impacts to these communities would be significant. Project operation would also result in the displacement and relocation of local residents and businesses. Residential relocation effects of substantial intensity associated with the BNSF, Bakersfield South, and Bakersfield Hybrid alternatives would occur in Corcoran and the Bakersfield Northwest and Northeast districts. Effects of moderate intensity from residential displacements would occur in unincorporated Fresno, Kings, and Kern counties from the BNSF Alternative and in Armona from the Hanford West Bypass Alternatives. Commercial and industrial business displacements and required relocations associated with the BNSF, Bakersfield South, and Bakersfield Hybrid alternatives would result in effects of substantial intensity in Corcoran and the Bakersfield Central and Northeast districts. Commercial and industrial business relocations required under the BNSF Alternative and the Fresno HMF site in Fresno's Edison and Roosevelt districts would result in effects of moderate intensity. Relocation assistance would be provided to all relocated residents and businesses, however, the impact would remain significant.

- **Environmental Justice.** Because many minority and low-income populations reside in the urban areas of Fresno, Corcoran, Wasco, Shafter and Bakersfield where other reasonably foreseeable construction projects will also occur, there are likely to be disproportionately high and adverse cumulative construction effects experienced by these populations. Mitigation measures that will be implemented will not completely eliminate the adverse impacts to the low-income and minority populations and when considered with other reasonably foreseeable projects in the area, these populations are likely to bear a disproportionate burden of the cumulative construction period impacts. During project operation, despite the project benefits experienced by low-income and minority populations including the reduction in regional air quality, a reduction in traffic congestion, and long-term regional economic benefits, minority and low-income populations concentrated in urban areas along the project area in Fresno, Corcoran, Wasco, Shafter and Bakersfield, as well as in rural areas such as Newark Avenue, 5th Avenue and Waukena Avenue, and Crome would also bear disproportionately high and adverse project period impacts. These impacts would include an increase in both ambient noise levels and vibratory impacts above standards; disruption of communities and the displacement of community facilities, changes or loss of park resources, decreases in visual quality, and cumulative impacts for noise and vibration, communities, and aesthetics and visual resources.
- **Station Planning, Land Use, and Development.** The BNSF, Hanford West Bypass 1 and 2, Hanford West Bypass 1 Modified and Bypass 2 Modified, Corcoran Bypass, Allensworth Bypass, and Wasco-Shafter Bypass alternatives; the Kings/Tulare Regional Station alternatives; and the HMF alternatives would cause a substantial change in the intensity of land use that would be incompatible with adjacent land uses and this would remain significant after mitigation under CEQA. However, the impacts would not be significant under NEPA because in the regional context the project's acquired land would constitute a small portion of the total industrial, residential, commercial, and public land in the four counties, and would not result in material changes in regional land uses, or development patterns.
- **Agricultural Lands.** The permanent conversion of agricultural land to non-agricultural use would remain significant after mitigation.
- **Parks, Recreation, and Open Space.** Operation of the BNSF Alternative would introduce a modern feature that is not consistent with the historic atmosphere of Colonel Allensworth State Historic Park. HST operation for the BNSF Alternative would substantially degrade the existing visual setting of the recreation facilities at Bakersfield High School. HST operation of the BNSF, Bakersfield South, and Bakersfield Hybrid Alternatives would substantially degrade the existing visual character of the site and its surroundings at the Bakersfield Amtrak Station Playground, Mill Creek Linear Park, and Kern River Parkway.
- **Aesthetics and Visual Quality.** All HST alternatives would have significant and unavoidable impacts on visual quality in the following areas:
 - The BNSF Alternative would lower visual quality in Corcoran, Wasco, Shafter, Bakersfield, Colonel Allensworth State Historic Park, Rosedale, Kern River, and Bakersfield landscape units.
 - The Bakersfield South Alternative and Bakersfield Hybrid alternatives would lower visual quality in the Rosedale, Kern River, and Bakersfield landscape units.
 - The Corcoran Elevated and Corcoran Bypass alternatives would lower visual quality in the Corcoran landscape unit.

- The BNSF, Corcoran Bypass, Wasco-Shafter Bypass, Hanford West Bypass 1 and 1 Modified, and Hanford West Bypass 2 and 2 Modified alternatives would lower visual quality of rural residents in the Rural Valley/Agricultural Landscape Unit.
- Cultural resources: All HST alternatives would have significant and unavoidable impacts on historically significant built environment resources, including resources listed on or eligible for listing on the NRHP.

6.2 Relationship between Short-Term Use of the Environment and the Enhancement of Long-Term Productivity

Developing the Fresno to Bakersfield Section of the HST 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 alignment and other facility foundations), steel (e.g., for rail and catenary structures), other building materials, and the various structural components of the HST 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 3.0, Affected Environment, Environmental Consequences, and Mitigation Measures.

As indicated in Chapter 1.0, Project Purpose, Need, and Objectives, the capacity of California's intercity transportation system, including in the San Joaquin Valley, 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 Fresno to Bakersfield Section of the HST System would provide benefits (such as increased safety, reduced pollutant emissions, and reduced greenhouse gases) and accessibility improvements (such as transit linkages to the Bay Area, Sacramento, and Southern California). HST service will provide linkages to a number of bus, light rail, and commuter rail services for intercity travelers to other areas. Because the HST System would provide a new alternative to regional transportation options that consume fossil fuels (e.g., automotive trips and commercial air travel), and because the HST System would be powered by electricity primarily generated by harnessing renewable resources (e.g., solar power, wind power), the Fresno to Bakersfield Section of the HST System would make an important contribution to greenhouse gas reduction efforts. As described in Section 3.18, Regional Growth, the proposed HST System would provide direct and indirect economic benefits, including short- and long-term employment benefits. The HST System would improve accessibility to labor and customer markets and induce regional job growth by providing a more attractive market for commercial and office development in the Fresno and Bakersfield station areas. Regional job growth is expected to be primarily internal to Fresno, Kings, Tulare, and Kern counties (i.e., not by population shifts from the Bay Area and Southern California). Improved accessibility would increase the competitiveness of the San Joaquin Valley, as well as the state's industries and overall economy. The benefits of the HST project are described in more detail in Chapter 1, Project Purpose, Need, and Objectives.

6.3 Significant Irreversible Environmental Changes That Would Result from the Proposed Project If Implemented

The Fresno to Bakersfield Section of the HST System would require the commitment of material and energy for construction and operation, and the commitment of land for HST 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 stations, ancillary facilities, and potentially an HMF). These environmental changes would be irreversible. The significance of these impacts is evaluated throughout Chapter 3.0. 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.