6 Other Statutory Considerations

This chapter provides discussion of other statutory requirements under NEPA, CEQA, and FRA's Procedures for Considering Environmental Impacts. These topics include a discussion of growth-inducing impacts, a summary comparison of the Build Alternative Options, and significant and unavoidable effects. Per the requirements of NEPA, this chapter includes a discussion of the relationship between short-term use of the environment and the maintenance and enhancement of long-term productivity. As required by CEQA, this chapter also includes a discussion of potentially growth-inducing impacts, significant unavoidable environmental changes, and impacts that are expected to be less than significant.

6.1 Growth-Inducing Impacts

In accordance with Section 15126.2(d) of the CEQA Guidelines, an EIR must:

> *Discuss the ways in which the proposed project could foster economic or population growth, or the construction of additional housing, either directly or indirectly, in the surrounding environment. Included in this are projects which would remove obstacles to population growth… Increases in the population may tax existing community service facilities, requiring construction of new facilities that could cause significant environmental effects. Also discuss the characteristics of some projects which may encourage and facilitate other activities that could significantly affect the environment, either individually or cumulatively. It must not be assumed that growth in any area is necessarily beneficial, detrimental, or of little significance to the environment.*

Additionally, CEQ regulations, which establish the steps necessary to comply with NEPA, require evaluation of the potential environmental consequences of all proposed federal activities and programs. This provision includes a requirement to examine indirect consequences, which may occur in areas beyond the immediate influence of a proposed action and at some time in the future. CEQ regulations, 40 CFR Part 1508.8, refer to these consequences as secondary impacts. Secondary impacts may include changes in land use, economic vitality, and population density, which are all elements of growth.

Substantial growth impacts could be manifested through the provision of infrastructure or service capacity to accommodate growth beyond the levels currently permitted by local or regional plans and policies. In general, growth induced by a project is considered a significant impact if it directly or indirectly affects the ability of agencies to provide needed public services or if it can be demonstrated that the potential growth significantly affects the environment in some other way.

The four-county region of Los Angeles, Orange, Riverside, and San Bernardino Counties (which the Program Corridor crosses) grew by more than 7.4 million people between 1970 and 2010. In 2010, the region was home to approximately 46 percent of the population in the State of California. Los Angeles County has the largest population in the four-county region, followed by Orange County. Growth patterns between 1970 and 2010 showed that Riverside County and San Bernardino County grew at an average annual rate of 4.0 percent and 2.8 percent, respectively, while Los Angeles County and Orange County grew annually by 0.8 percent and 1.9 percent, respectively.

Population projections prepared by the California Department of Finance forecast that the population within the four-county region will continue to grow between 2018 and 2050; however, the annual growth rate is anticipated to slow to 0.5 percent annually for the region as a whole. There are higher annual growth rates forecast for San Bernardino County (1.0 percent) and Riverside County (1.1 percent) compared with Los Angeles County (0.3 percent) and Orange County (0.4 percent) (California Department of Finance 2018).

Despite a forecast slowdown in growth rates, the four-county region is still projected to grow approximately 17 percent overall between 2018 and 2050, for a total population of approximately 21.3 million people in 2050. By then, the four-county region will account for approximately 43 percent of the state population. These growth forecasts suggest that the Program Corridor between Los Angeles and San Bernardino Counties would support a substantial portion of the state's population in 2050.

6.1.1 Western Section

Growth in the Western Section of the Program Corridor is expected with or without the Build Alternative Options. Two additional round-trip daily trains would serve existing stations at LAUS, Fullerton, and Riverside in the Western Section. No new stations or improvements to existing stations would be required to accommodate the proposed service. The Build Alternative Options are not expected to induce additional growth in the Western Section.

6.1.2 Eastern Section

San Bernardino and Riverside Counties have experienced population, housing, and employment growth over the past several decades. As discussed in Section 3.2, Land Use and Planning, of this Tier 1/Program EIS/EIR, there is a planned 18 percent increase in residential uses in the Eastern Section of the Program Corridor. Between 2010 and 2035, population and housing in Riverside County are each anticipated to increase by approximately 63 percent; however, employment is expected to grow faster than housing (County of Riverside 2003). Similarly, San Bernardino County

is expecting an increase in population of 630,000 people, an increase of more than 230,000 homes, and 316,000 additional jobs by 2040 (County of San Bernardino 2014).

Because Riverside County and San Bernardino County supply a portion of the labor pool for the Los Angeles-Orange County metropolitan area, daily round-trip service and new station areas may induce additional housing growth in the new station catchment areas. Build Alternative Option 1 proposes up to five new potential stations within Loma Linda/Redlands, the Pass Area, the Mid-Valley area, and the Cities of Indio and Coachella. Build Alternative Options 2 and 3 propose up to four new potential stations within the Loma Linda/Redlands Area, the Pass Area, the Mid-Valley, and the City of Indio. New stations could also introduce employment opportunities in station areas and catalyze investment in transit-oriented development, including additional housing and business.

6.2 Irreversible and Irretrievable Commitment of Resources

CEQA requires that irreversible and irretrievable commitment of resources be addressed for certain categories of projects, including "[t]he adoption, amendment, or enactment of a plan, policy, or ordinance of a public agency" and any project also subject to NEPA (CEQA Guidelines CCR Sections 15127[a] and 15127[c]). NEPA requires that an environmental analysis include identification of "…any irreversible and irretrievable commitment of resources which would be involved in the proposed action should it be implemented" (Section 102 [42 USC Section 4332(c)]).

Irreversible and irretrievable resource commitments are related to the use of non-renewable resources and the effects that this use could have on future generations. Commitments of resources could be current, as well as future, with the latter potentially associated with the secondary effect of growth-inducing impacts. Irreversible effects result primarily from the use or destruction of a specific resource (e.g., energy and minerals) that cannot be replaced within a reasonable time frame. Irretrievable resource commitments involve the loss in value of an affected resource that cannot be restored as a result of the action (e.g., extinction of a threatened or endangered species or the disturbance of a cultural resource).

Resources such as timber used for the construction of the potential stations and tracks are generally considered renewable and would ultimately be replenished. Human resources are also considered a renewable resource. Non-renewable resources such as petrochemical construction materials, steel, copper, lead and other metals, gravel, concrete, and other materials are typically considered finite and would not be replenished over the lifetime of the Program.

The construction and implementation of the Build Alternative Options would entail the irreversible and irretrievable commitment of some land and energy and human resources. These resources include the following:

- Commitment of land for transportation purposes
- Commitment of natural resources during construction activities associated with the Program, including the use of construction materials (e.g., steel, concrete, etc.)
- Consumption of non-renewable energy resources, mainly diesel and electricity, as a result of construction, operation, and maintenance of the proposed infrastructure improvements
- Labor expenditure required for the planning, design, construction, and operation of the Build Alternative Options

Land used for new stations and parking areas would likely require property acquisitions, and these properties would be committed to transportation purposes. To the extent that this commitment would be for long-range use, it would be an irreversible commitment. In the event, however, that a greater need would arise for the land in the future or the Program Corridor was no longer needed, the land could conceivably be converted to some other use. Currently, there is no reason to expect that such a need for conversion would ever be necessary or desirable.

In terms of the Build Alternative Options' commitment of resources, there are several resources, both natural and built, that would be expended during the construction and operation of improvements. The Build Alternative Options would result in a short-term increase in the use of energy to manufacture, deliver, and construct the proposed infrastructure improvements. The manufacturing of materials used to construct the Build Alternative Options and energy in the form of natural gas, petroleum products, and electricity consumed during construction and operation would contribute to the incremental depletion of renewable and non-renewable resources. Steel, concrete, and other materials would be recycled, to the extent feasible. However, the loss of these resources is considered irreversible because their reuse for some other purpose than the Build Alternative Options would be highly unlikely or impossible. Based on these considerations, the Program constitutes an irreversible and irretrievable commitment of natural resources.

The Build Alternative Options' use of non-renewable energy sources such as diesel fuel is considered an irreversible, irretrievable commitment of these petroleum resources. However, the commitment of resources to construct and operate the Build Alternative Options is based on the belief that residents, businesses, and visitors would benefit from a safe, reliable, and convenient intercity passenger rail service in the Program Corridor with the capability to meet the future mobility needs. These benefits are anticipated to substantially outweigh any irreversible or irretrievable commitments of resources.

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

NEPA and CEQA require a review of the balance between short-term uses and long-term productivity of resources within a project area. Potential impacts that narrow the range of beneficial uses to the environment include selecting a development option that reduces the ability to pursue other possibilities or committing a piece of land or other resources to a particular use that limits additional uses being performed on the same site.

Effects on resources are often characterized as being short term or long term in duration. Impacts that occur only during construction are considered temporary. Impacts that occur within a period of 3 years or less would be considered a short-term use and in excess to 3 years would be considered long term. Construction can create temporary water quality effects and increases in noise, emissions, traffic, and human population that can disturb resources in an area but subside when the work is complete. Long-term effects are related to the maintenance and enhancement of long-term productivity, in particular, the consistency of the Program with long-term economic, social, regional, and local planning objectives. These impacts may lead to permanent loss or degradation of resources. As required by PRC Section 21001(g), the short- and long-term effects of the Program under consideration are summarized below.

The Program Corridor faces transportation challenges associated with anticipated population growth, constrained travel options, rail service frequency, and a need for increased travel capacity without impacting air quality and natural resources. These challenges are likely to continue in the future, as continued growth in population and employment is expected to generate increased travel demand. In the short term, construction activities would likely increase employment opportunities, as well as locally purchased materials and services. In the long term, proposed improvements would likely increase the frequency and reliability of intercity rail service.

Implementation of the Build Alternative Options may result in property acquisitions, land use reclassification, and potential disruption of biological and wetland resources during construction and operation. Future Tier 2/Project-level environmental review would consider these factors in more detail, as specific rail infrastructure improvements and station facilities are carried forward. While some of the proposed improvements may disrupt the existing conditions of the area, short- and long-term benefits would also result and should be considered accordingly.

Implementation of the Build Alternative Options would increase travel options and improve mobility throughout the region, as well as provide additional capacity to meet growing travel demand between the Los Angeles Basin and the Coachella Valley.

6.4 Significant and Unavoidable Environmental Effects

Section 15126.2(c) of the CEQA Guidelines requires EIRs to include a discussion of any significant environmental impacts that cannot be avoided if the Program is implemented. Sections 3.2 through 3.16 of this Tier 1/Program EIS/EIR provide a Program-level evaluation of potentially significant environmental effects related to the Program and identifies potential mitigation strategies, where available, that could avoid or reduce these significant impacts. If, after mitigation, a specific effect cannot be fully reduced to a less than significant level, it is considered a potentially significant and unavoidable impact at the Tier 1/Program EIS/EIR service-level evaluation.

As discussed, this Tier 1/Program EIS/EIR evaluates the potential for substantial effects from the Build Alternative Options and offers mitigation strategies that could potentially avoid or minimize impacts on resources through further design or other measures identified at the Tier 2/Project-level analysis. Implementation of the Build Alternative Options could result in a significant and unavoidable impacts on the following resources:

- **Land Use and Planning.** Implementation of the Build Alternative Options has the potential to conflict with local land use plans and polices and covert designated farmland to transportation use. Mitigation may reduce, avoid, or minimize these potentially significant impacts; however, impacts may also remain significant and unavoidable if further analysis shows that they cannot be sufficiently mitigated (Section 3.2, Land Use and Planning, of this Tier 1/Program EIS/EIR for details).
- **Transportation.** Implementation of the Build Alternative Options has the potential to conflict with a program, plan, ordinance, or policy addressing the circulation system, including transit, roadway, bicycle, and pedestrian facilities at a local level. Mitigation may reduce, avoid, or minimize these potentially significant impacts; however, impacts may also remain significant and unavoidable if further analysis shows that they cannot be sufficiently mitigated (Section

3.3, Transportation, of this Tier 1/Program EIS/EIR for details). However, implementation of the Build Alternative Options would also improve regional mobility and access through the provision of an enhanced passenger rail system.

- **Visual Quality and Aesthetics.** Implementation of the Build Alternative Options has the potential to result in significant and unavoidable impacts on scenic vistas, visual character, and visual quality, as well as light and glare. Mitigation may reduce, avoid, or minimize these potentially significant impacts; however, impacts may also remain significant and unavoidable if further analysis shows that they cannot be sufficiently mitigated (Section 3.4, Visual Quality and Aesthetics, of this Tier 1/Program EIS/EIR for details).
- **Air Quality.** The location and number of new stations, infrastructure improvement locations, and construction methods have not yet been selected; however, construction of the Build Alternative Options has the potential to generate emissions that exceed the SCAQMD daily criteria pollutant and localized significance thresholds. However, implementation of the Build Alternative Options would also improve regional air quality through the provision of an enhanced passenger rail system (Section 3.5, Air Quality and Greenhouse Gases, of this Tier 1/Program EIS/EIR for details).
- **Noise and Vibration.** Implementation of the Build Alternative Options has the potential to generate noise during construction and operation within the Eastern Section, which could result in an exceedance of local noise standards. Mitigation may reduce, avoid, or minimize these potentially significant impacts; however, impacts may also remain significant and unavoidable if further analysis shows that there is a conflict that cannot be mitigated between land uses (Section 3.6, Noise and Vibration, of this Tier 1/Program EIS/EIR for details).
- **Biological Resources.** Implementation of the Build Alternative Options has the potential to result in significant and unavoidable impacts on sensitive vegetation communities, special-status plan and wildlife species, wildlife corridors and habitat linkages, as well as significant and unavoidable conflicts with local plans and policies intended to protect natural resources. Mitigation may reduce, avoid, or minimize these potentially significant impacts; however, impacts may also remain significant and unavoidable if further analysis shows that there is a conflict that cannot be mitigated between land uses (Section 3.8, Biological Resources, of this Tier 1/Program EIS/EIR for details).
- **Floodplains, Hydrology, and Water Quality.** Implementation of the Build Alternative Options has the potential to result in impacts on surface and groundwater resources. Mitigation may reduce, avoid, or minimize these potentially significant impacts; however, impacts may also remain significant and unavoidable if further analysis shows that that

impacts cannot be sufficiently mitigated (Section 3.9, Floodplains, Hydrology, and Water Quality) of this Tier 1/Program EIS/EIR for details).

- **Geology, Soils, Seismicity, and Paleontological Resources.** Implementation of the Build Alternative Options within the Eastern Section has the potential to result in significant and unavoidable impacts on paleontological and mineral resources, as construction of the Build Alternatives (specifically, construction of the proposed stations) would require grading and excavation in areas that are paleontologically sensitive or within MRZs. Mitigation may reduce, avoid, or minimize these potentially significant impacts; however, impacts may also remain significant and unavoidable if further analysis shows that land use conflicts cannot be mitigated or if accidental destruction to previously undiscovered paleontological resources were to occur (Section 3.10, Geology, Soils, Seismicity, and Paleontological Resources, of this Tier 1/Program EIS/EIR for details).
- **Public Utilities and Energy.** Implementation of the Build Alternative Options has the potential to result in significant and unavoidable impacts on public utilities. Specifically, implementation of the Build Alternative Options could require potable water supplies at new rail stations, which are not currently identified. Mitigation may reduce, avoid, or minimize these potentially significant impacts; however, impacts may remain significant and unavoidable if further analysis determines that the operational activities would result in water supply impacts (Section 3.12, Public Utilities and Energy, of this Tier 1/Program EIS/EIR for details).
- **Cultural Resources.** Implementation of the Build Alternative Options has the potential to result in significant and unavoidable impacts on cultural, historic, and TCRs, as construction (specifically, construction of the proposed stations) would require grading and excavation in areas that may contain known and unknown resources. Mitigation may reduce, avoid, or minimize these potentially significant impacts; however, impacts may remain significant and unavoidable if mitigation would not sufficiently reduce land use conflicts or if accidental destruction to previously undiscovered cultural resources were to occur (Section 3.13, Cultural Resources, of this Tier 1/Program EIS/EIR for details).
- **Parklands and Community Services.** Implementation of the Build Alternative Options has the potential to result in impacts on parklands and community services due to the potential need of parkland acquisitions. Mitigation may reduce, avoid, or minimize these potentially significant impacts; however, impacts may remain significant and unavoidable if mitigation would not sufficiently reduce land use conflicts with existing parkland resources (Section 3.14, Parklands and Community Services, of this Tier 1/Program EIS/EIR for details).