

## 5.0

# LONG-TERM CEQA CONSIDERATIONS

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Section 15126 of the CEQA Guidelines requires that all phases of a project must be considered when evaluating its impact on the environment, including planning, acquisition, development and operation. As part of this analysis, the EIR must also identify (1) significant environmental effects of the proposed project, (2) significant environmental effects that cannot be avoided if the proposed project is implemented, (3) significant irreversible environmental changes that would result from implementation of the proposed project, and (4) growth-inducing impacts of the proposed project. Additionally, this section addresses irreversible damage from environmental accidents.

### 5.1 SIGNIFICANT ENVIRONMENTAL EFFECTS THAT CANNOT BE AVOIDED IF THE PROPOSED PROJECT IS IMPLEMENTED

**Table ES.4-1, *Summary of Environmental Consequences***, in the **Executive Summary**, and **Sections 3.1 through 3.18** of this PEIR provide a comprehensive identification of the environmental effects of the 2016 Regional Transportation Plan/Sustainable Communities Strategy (2016 RTP/SCS, “Plan,” or “Project”), including the level of significance both before and after mitigation. Many of the impacts that are determined to be significant and unavoidable could be mitigated to less than significant at the project level. However, this PEIR is at the programmatic level project information, and detailed site plans and project descriptions are not available. Therefore, without the ability to evaluate each project that could occur as a result of the 2016 RTP/SCS, these impacts were determined to be significant and unavoidable.

Section 15126.2(b) of the CEQA Guidelines requires that an EIR (including a Program EIR or PEIR, describe any significant impacts that cannot be avoided, even with the implementation of feasible mitigation measures. Implementation of the 2016 RTP/SCS would result in the following unavoidable significant and Project-related and/or cumulative impacts:

- **Aesthetics**—Implementation of the 2016 RTP/SCS would obstruct views of or alter the appearance of scenic resources or vistas along designated scenic highways and vista points. In addition, construction and implementation of the projects associated with the Plan would create significant contrasts with the overall visual character of the landscape, as well as light and glare and shade and shadow effects. The effects of each of these impacts would also result in cumulative impacts outside the region.
- **Agriculture and Forestry Resources**—Implementation of the 2016 RTP/SCS could result in the loss of prime farmland or grazing lands. The Plan would also contribute to a cumulatively impacts due to the considerable loss of agriculture and forestry resources.
- **Air Quality**—Construction emissions from implementation of the 2016 RTP/SCS would result in a significant impact on air quality. In the SCAG region, the three criteria pollutants designated nonattainment are PM<sub>2.5</sub>, PM<sub>10</sub>, and ozone (**Table 3.3.2-3, 2015 Nonattainment Areas in the SCAG Region for All Criteria Pollutants by County by NAAQs**). Despite temporary significant construction emissions, long term criteria pollutant emissions by county is expected to decline with implementation of the Plan (**Table 3.3.4-1, Criteria Pollutant Emission by County – Existing Conditions [2015] vs. Plan [2040]**). Transportation

conformity with air quality management plans and state implementation plans are required under federal CAA Section 176(c) for federal funding and compliance with air quality goals. As the Plan only focuses on certain sectors, the Plan would also contribute to cumulative impacts with respect to air quality.

- **Biological Resources**—Implementation of the 2016 RTP/SCS would displace natural vegetation, some of which is used as habitat for sensitive species in the SCAG region. Projects included in the Plan would contribute to habitat fragmentation of existing habitat, while forming barriers to animal migration or foraging routes. Construction and operation of projects and development anticipated to occur under the Plan would increase near-road disturbances such as litter, trampling, light pollution, and road noise, and would result in damage to previously inaccessible and undisturbed natural areas, or direct fatalities to wildlife. The Plan could result in potentially displacing or disturbing riparian or wetland habitat, prime farmland or grazing lands, or existing open space and recreation lands. In addition, siltation of streams and other water resources may result from construction activities in proximity to erodible soils. The Plan would also contribute to cumulative impacts due to the considerable loss of biological resources.
- **Cultural Resources**—Implementation of the 2016 RTP/SCS could disturb or cause a substantial adverse change in the significance of a historical, archaeological, paleontological resource or human remains. The Plan would also contribute to a cumulative impacts due to the considerable loss of cultural resources.
- **Energy**—Transportation projects and land use strategies included in the 2016 RTP/SCS would result in the increased use of electricity and natural gas. The Plan would also contribute to a cumulatively considerable demand for energy within and outside of the region.
- **Geology and Soils**—Implementation of the 2016 RTP/SCS would expose people or structures to seismic hazards such as surface rupture, ground shaking, liquefaction, landslides, seismically induced ground-shaking, or seiches or tsunami waves. In addition, transportation projects and anticipated development associated with land use strategies included in the Plan could be located on expansive or unstable soils, resulting in potential on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse. Earthwork associated with construction of Plan's transportation projects and development associated with land use strategies could also result in substantial soil erosion and/or loss of topsoil. Potentially hazardous geological and seismic conditions are found throughout the SCAG region and Southern California in general, and are generally site specific. The 2016 RTP/SCS encompasses all development (both transportation and land use changes) that would occur in the region through 2040 and the impacts of that development are discussed fully above. As a result, the Project would be expected to contribute to a cumulatively considerable increase in risk associated with geologic hazards.
- **Greenhouse Gas Emissions and Climate Change**— Implementation of the 2016 RTP/SCS would decrease greenhouse gas (GHG) emissions by 27 million metric tons by 2040 as compared to existing conditions (**Table 3.8.4.2, Greenhouse Gas Emissions Summary for the SCAG Region**). The Plan would meet and exceed the per capita GHG emissions reduction targets set by CARB pursuant to SB 375. In fact, the Plan would achieve its per

capita GHG emissions reduction target for 2035 at an accelerated rate which sets the Plan on a trajectory of yielding greater progress post 2035, in 2040 and beyond, which is consistent with achieving State's long-term GHG emission goals. By meeting the SB 375 targets, the Plan has contributed its share, if not greater, to meeting the AB 32 targets. The Plan is also in alignment with county and/or city-climate related plans. The GHG reduction trajectory of the Plan is consistent, if not more aggressive, with the accelerated pace established in the recent Executive Order B-30-15 and the State long-term (2050) GHG emissions reduction goals. Cumulative impacts with respect to GHG emissions would occur in the event project level mitigation measures not capable to fully address cumulative impacts of GHG emissions to the appropriate level.

- Hazards and Hazardous Materials—Implementation of the 2016 RTP/SCS would increase the risk of significant hazards to the public or the environment through the routine transport, use, or disposal of hazardous materials. Transportation projects and land use strategies included in the Plan may increase the risk of emitting hazardous materials within one-quarter mile of a school. In addition, the increased mobility associated with the Plan could cause cumulative significant impacts with respect to the risk associated with hazardous materials transport to areas outside of the SCAG region. While impact to hazards and hazardous materials can be minimized with proper storage and handling of materials as guided by the business plan, the impact from transport of hazardous materials from other regions would remain cumulatively significant.
- Hydrology and Water Quality—Implementation of the 2016 RTP/SCS would degrade local surface water quality due to increased roadway runoff due to construction of transportation projects and development encouraged by land use strategies. Increased impervious surfaces would reduce groundwater infiltration. The Plan would influence the pattern of urbanization in the SCAG region, and would contribute to the conversion of undeveloped land to urban areas. This would result in impacts to storm water infiltration and groundwater recharge. In addition, this increased urbanization would contribute to an increased demand for water supply and associated infrastructure, as well as an increased need for waste water treatment capacity. The Plan would contribute to a cumulatively considerable impact on water supply and water quality.
- Land Use and Planning—Implementation of the land use policies and strategies in the 2016 RTP/SCS would result in potential conflicts with existing local general plans, adopted local land use/specific plans and other goals and policies. Projects associated with the Plan have the potential to disrupt or divide established communities. Cumulative impacts within and outside the SCAG region could occur due to conflicting policies.
- Mineral Resources— Implementation of the Plan would also result in a significant loss of aggregate resources in the region and would also contribute to a cumulatively impacts due to the considerable loss of these resources.
- Noise—Transportation projects and development encouraged by land use strategies would expose noise- and vibration-sensitive land uses to noise and vibration in excess of normally acceptable levels and/or experience substantial increases in noise and vibration as a result of new or expanded transportation or other facilities. Such facilities may increase ambient

noise levels in urban areas of the region to exceed normally acceptable levels. Noise would result in cumulative impacts.

- Population, Housing, and Employment—Implementation of the 2016 RTP/SCS may influence substantial population growth to some areas of the region, and could require the acquisition of rights-of-way for transportation projects and development associated with land use strategies. These actions could displace existing homes and businesses. The Plan would contribute to cumulatively considerable impacts related to population and housing.
- Public Services—Implementation of the 2016 RTP/SCS would result in increased need for police, fire, and emergency personnel, and increase the demand for school facilities within the SCAG region and would contribute to cumulatively considerable impacts due to the need for additional public service facilities.
- Recreation—Implementation of the 2016 RTP/SCS would result in increased need for recreation facilities and would contribute to cumulatively considerable impacts due to the need for new recreation facilities.
- Transportation, Traffic, and Safety—Implementation of transportation projects and land use strategies included in the 2016 RTP/SCS would increase total daily vehicle miles of travel (VMT) in 2040 compared to current daily VMT and would create substantially greater average daily vehicle hours of delay (VHD) for heavy-duty truck trips in 2040 compared to the current condition. This increase would result in substantial cumulative impacts with respect to increased VMTs and VHDs.
- Utilities and Service Systems—The Plan would result in the expansion or construction of new wastewater treatment facilities, expansion or construction of new stormwater drainage facilities, increase use of limited water supplies, and increase use of limited landfill capacity. The Plan would contribute to cumulative impacts due to the considerable demand for utilities and service systems. Increased population in and surrounding SCAG region would result in increased need for water conveyance capacities, resulting in expansion or construction of new stormwater drainage facilities. This increase would result in substantial cumulative impacts with respect to increase use of water supplies.

## 5.2 SIGNIFICANT IRREVERSIBLE ENVIRONMENTAL EFFECTS

Section 15126.2(c) of the CEQA Guidelines requires a discussion of any significant irreversible environmental changes that would be caused by the proposed project (2016 RTP/SCS). Specifically, Section 15126.2(c) states:

Uses of nonrenewable resources during the initial and continued phases of the project may be irreversible, since a large commitment of such resources makes removal or nonuse thereafter unlikely. Primary impacts and, particularly secondary impacts (such as highway improvement which provides access to a previously inaccessible area) generally commit future generations to similar uses. Also irreversible damage can result from environmental accidents associated with the project. Irreversible commitments of resources should be evaluated to assure that such current consumption is justified.

Generally, a project (2016 RTP/SCS) would result in significant irreversible environmental changes if any of the following would occur:

- The primary and secondary impacts would generally commit future generations to similar uses.
- The project would involve a large commitment of nonrenewable resources.
- The project involves uses in which irreversible damage could result from any potential environmental accidents associated with the project.
- The proposed consumption of resources is not justified (e.g., the project involves the wasteful use of energy).

Implementation of the 2016 RTP/SCS would result in permanent changes to the existing conditions, which have been described throughout this PEIR. While the Plan focuses development into existing urban areas and along existing or future high-quality transit areas (HQTAs), there will still be some conversion of undeveloped land to urbanized uses. These conversions are considered a permanent irreversible change and would occur directly through construction of development on undeveloped land.

Land use changes and transportation projects would result in significant irreversible impacts to aesthetics and visual resources, including changes to existing community character and views. Future development projects associated with the Plan would result in a direct irreversible loss of sensitive vegetation communities that supports rare, threatened, or endangered species, and impacts to these resources would be significant and irreversible. Transportation projects and other land use changes would result in significant irreversible impacts to agricultural resources and forest lands, and the availability of known cultural and mineral resources. The Plan would substantially induce irreversible population growth and increased density, which would displace existing housing units, and result in additional people that would be susceptible to noise impacts. As development occurs at urban edges, additional people and structures would be at risk from landslides, seismic activities, wildland fires and other potential dangers.

The Plan's regional growth and land use changes would result in the irreversible consumption of nonrenewable resources. The irreversible commitment of limited resources is inherent in any development project or, in the case of the Plan, combined development projects. Resources anticipated to be irreversibly committed over the timespan of the construction activities related to the Plan include, but are not limited to, lumber and other related forest products; sand, gravel, and concrete; petrochemicals; construction materials; steel, copper, lead, and other metals; and water. However, the amount and rate of consumption of these resources would not result in significant environmental impacts related to the unnecessary, inefficient, or wasteful use of resources. Development associated with the Plan represents a long-term commitment to the consumption of fossil fuel oil and natural gas. These increased energy demands relate to construction, lighting, heating, and cooling of residences and buildings, and construction and operation of transit systems.

### **5.3 GROWTH INDUCING IMPACTS**

Section 15125.2(d) of the CEQA Guidelines requires that growth inducing impacts of a proposed project be considered. Growth inducing impacts are characteristics of a project that could directly or indirectly create economic or population growth, or the construction of additional housing, either directly or indirectly, in the surrounding environment. According to the CEQA Guidelines, such projects include those that would remove obstacles to population growth (e.g., a major expansion of a wastewater treatment plant) and projects that encourage and facilitate other activities that are beyond those proposed as part of the project

and could affect the environment are growth inducing. In addition, as set forth in the CEQA Guidelines, increases in the population may tax existing community service facilities, requiring construction of new facilities that could cause significant environmental effects. The CEQA Guidelines also state that it must not be assumed that growth in an area is necessarily beneficial, detrimental or of little significance to the environment. Induced growth is considered a significant impact only 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, in some other way, significantly affects the environment, that is, that it would result in construction that would adversely affect the environment.

Factors that would potentially induce population growth include roads, highways, freeways, rail and other transportation improvements that provide access to previously undeveloped areas. The availability of adequate water supplies, the availability of sewage treatment facilities, the availabilities of developable land, the types and availability of employment opportunities, housing supply and costs, commuting distances, cultural and recreational amenities, climate, and local government growth policies contained in general plans and zoning ordinances would also induce population growth.

Because a number of variables influence growth, it is difficult to determine how Plan alone would affect growth. As described in **Sections 3.1** through **3.18**, the 2016 RTP/SCS would affect each of the categories described above directly through transportation projects and indirectly through land use strategies that would create a more compact development pattern than if no Plan were in place. The Plan would provide greater access to more of the region than the No Project Alternative due to transportation improvements; however targeting growth in the HQTAs would limit the geographic spread of growth. Nonetheless, the 2016 RTP/SCS could influence and possibly induce growth into specific areas of the region by providing new or expanded access. Overall, the 2016 RTP/SCS would accommodate and facilitate growth in the region.

## **5.4 IRREVERSIBLE DAMAGE FROM ENVIRONMENTAL ACCIDENTS**

Implementation of projects included in the 2016 RTP/SCS would increase the potential for environmental impacts such as hazardous waste spills on freeways through the routine transport, use, or disposal of hazardous materials, and would increase the potential for other environmental accidents that have the potential to cause irreversible damage.

Another area of concern is the potential contamination of water quality throughout the region. During wet or rainy seasons, the precipitation runoff increases, which may lead to a greater decrease in water quality as a larger quantity of hazardous fluids can be transported to aquatic systems through sediments and/or plant materials. Development near known sources of moving water have a high potential from the direct release of oil, gasoline, or other hazardous mechanical fluids associated with general vehicles, large haul trucks or other public transit systems.