

EXECUTIVE SUMMARY

In accordance with Section 15123 of the *California Environmental Quality Act (CEQA) Guidelines*,¹ this section of the Program Environmental Impact Report (PEIR) provides an overview of Connect SoCal (“Connect SoCal”; “Plan”), its potential environmental impacts and mitigation measures, and a summary of the alternatives to the proposed project evaluated in this PEIR. The summary is also required to identify areas of controversy known to the Lead Agency, including issues raised by agencies and the public, and issues to be resolved.

Connect SoCal is a long-range comprehensive plan for the region’s multi-modal transportation system. Preparing the Plan is one of SCAG’s primary statutory responsibilities under federal and state law. A regional transportation plan (RTP) is the mechanism used in California by both Metropolitan Planning Organizations (MPOs) and Regional Transportation Planning Agencies (RTPA) to conduct long-range (at least 20-year) planning in their regions. SCAG must adopt an RTP and update it every four years, or more frequently, if the region is to receive federal and state transportation dollars for public transit, streets/roads, and bicycle and pedestrian improvements.

In 2008, California enacted the Sustainable Communities and Climate Protection Act, also known as Senate Bill 375 (Stats. 2012, Ch. 728) (SB 375), which requires MPOs to include a Sustainable Communities Strategy (SCS) element as part of their RTP updates, with the purpose of identifying policies and strategies to reduce per capita passenger vehicle-generated GHG emissions. The SCS is required to identify the general location of land uses, residential densities, and building intensities within the region; identify areas within the region sufficient to house all the population of the region; identify areas within the region sufficient to house an eight-year projection of the regional housing need; identify a transportation network to service the regional transportation needs; gather and consider the best practically available scientific information regarding resources areas and farmland in the region; consider the state housing goals; set forth a forecasted development pattern for the region; and allow the regional transportation plan to comply with the federal Clean Air Act (CAA) of 1970 (42 USC. § 7401 *et seq.*) (Gov. Code, § 65080, subd. (b)(F)(2)(B)), of which, when integrated with the transportation network, and other transportation measures and policies will reduce the GHG from automobiles and light duty trucks to achieve, if there is a reasonable way to do so, the GHG emission reduction targets approved by the California Air Resources Board (ARB). If the SCS does not achieve the GHG emission targets set by ARB, an Alternative Planning Strategy (APS) must be developed to demonstrate how the targets could be achieved.

¹ *State CEQA Guidelines*, Section 15123.

In 2012, SCAG adopted its first combined Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS), a long-range plan for transportation in the region that links air quality, land use, and transportation needs. The RTP/SCS was last updated in 2016. The Plan updates the growth forecast, land use assumptions, and transportation investments that served as the foundation of both the 2012 and 2016 plans.

The Plan includes a growth forecast with population, household and employment growth anticipated to occur in the SCAG region by 2045; a transportation network including a list of transportation projects in the region; and a forecasted development pattern with land use and transportation strategies that the region could pursue over the Plan horizon. The Plan was developed to achieve targets for greenhouse (GHG) emissions reductions, consistent with SB 375 and other regional goals.

The Plan further identifies the purpose and goals, tracks trends and evaluates project performance, details financial assumptions and expenditures, and profiles key transportation investments. Please see the Draft Connect SoCal Plan and supplementary technical reports for full details, or visit SCAG's Connect SoCal Website located at: <https://www.connectsocial.org/Pages/default.aspx>

ES.1 BACKGROUND AND PROJECT OVERVIEW

ES.1.1 SCAG Role and Responsibilities

SCAG is one of 18 MPOs in the State of California and is comprised of the following counties: Los Angeles, Riverside, San Bernardino, Orange, Imperial and Ventura. To the north of the SCAG region are the counties of Kern and Inyo; to the east are the States of Nevada and Arizona; to the south is the County of San Diego as well as the U.S.-Mexico border; and to the west is the Pacific Ocean. The SCAG region also consists of 15 subregional entities that have been recognized by the Regional Council, SCAG's governing body, as partners in the regional policy planning process. There are 16 federally recognized tribal sovereign nations located within the SCAG region.

In addition to the federal designation as an MPO, SCAG is designated under California state law as the Multicounty Designated Transportation Planning Agency and Council of Governments (COG) for the six-county region. Founded in 1965, SCAG is a Joint Powers Authority, established as a voluntary association of local governments and agencies.

SCAG serves as the regional forum for cooperative decision making by local government elected officials and its primary responsibilities in fulfillment of federal and state requirements include the development of the Plan; the Federal Transportation Improvement Program (FTIP); the annual Overall Work Program; and transportation-related portions of local air quality management plans. SCAG's other major functions

include determining the regional transportation plans and programs are in conformity with state air quality plans; periodic preparation of a Regional Housing Needs Assessment (RHNA); and intergovernmental review of regionally significant projects. SCAG is just one part of a large body of governments and public organizations that collectively plan, construct, operate and maintain the region's transportation system. SCAG's work helps facilitate implementation, but the agency does not directly implement or construct projects.

The Regional Council is SCAG's governing body. It consists of 86 elected officials, representing cities, counties, county transportation commissions, transportation corridor agencies, tribal governments, and air districts in the region. The Regional Council has general authority to conduct the affairs of SCAG and directs the actions of the agency throughout the year. Additionally, the Regional Council implements the policy direction provided at the annual General Assembly of the membership, acts upon policy recommendations from SCAG's standing policy committees and external agencies, and appoints standing or ad-hoc subcommittees to study specific programs or issues.

SCAG provides opportunities to participate in regional planning through collaboration and participation in regional programs and dialogs. Responsible for regional policy direction and review, the primary standing committees at SCAG include; the Executive/Administration Committee; the Transportation Committee; the Community, Economic & Human Development (CEHD) Committee; the Energy & Environmental Committee; and the Legislative/Communication & Membership Committee. In addition to the standing committees, there are various subcommittees, technical advisory committees, working groups, and task forces that either report to the standing committees or provide input to SCAG staff, while other groups are established on an ad hoc basis to assist with specific projects or address specific regional policy.

ES.2 PROPOSED PROJECT

ES.2.1 Project Description

The Connect SoCal Plan is an update to SCAG's 2016 RTP/SCS, which had been adopted by SCAG's Regional Council on April 7, 2016 and subsequently last amended on September 2018. Building upon the progress made since the 2016 RTP/SCS, the Plan is a long-range visioning plan for the six county SCAG region, taking into account its transportation needs, existing and projected land use patterns, and job growth. It highlights the existing land use and transportation conditions throughout the SCAG region, and forecasts how it will meet the region's transportation needs between 2020 and 2045. The Plan identifies and prioritizes expenditures of this anticipated funding for transportation projects of all transportation modes: highways, streets and roads, transit, rail, bicycle and pedestrian, as well as aviation

ground access. It also includes a set of visions, goals, objectives, policies and performance measures developed through public and stakeholder outreach sessions across SCAG's region.

More specifically, Connect SoCal provides a strategy for accommodating projected population, household and employment growth in the SCAG region by 2045, as well as a transportation investment strategy for the region. The Plan details how the SCAG region can achieve several outcomes essential to the success of the region's long-range transportation and land use goals. The Plan:

- Describes where and how the region can accommodate a 23 percent increase in projected households and 16 percent increase in jobs between 2020 and 2045;
- Details a regional transportation investment given \$633.9 billion in expected revenues from federal, state, regional and local sources over the next 25 years; and
- Complies with SB 375, the state's SCS law, which integrates land use and transportation planning and mandates both a reduction in greenhouse gas emissions from passenger vehicles (19% reduction for the SCAG region) and the provision of adequate housing for the region's 25-year projected population growth

The Plan is constrained by expected transportation revenues. The Plan identifies transportation and land use strategies to accommodate projected population, household and employment growth and improve the quality of life for existing and future residents.

ES.2.2 Local Input and Public Outreach

SCAG developed a "Bottom-Up Local Input and Envisioning Process," which assisted the agency in understanding as to what is happening at the local level – and formed the basis for projections and strategies in Connect SoCal. The local input process was approved and adopted by the SCAG Regional Council in October 2017.

SCAG held one-on-one meetings with all 197 local jurisdictions. In addition to seeking feedback on regional forecasts of population, household and employment growth, SCAG gathered data on land use, protected natural lands, farmland, flood areas and coastal inundation, regional bikeways, regional truck routes, planned major transit stops, high quality transit corridors, future transit priority areas, and other local data. In addition to the jurisdictions themselves, the data came from county assessors' offices, county transportation commissions, and state and federal partners.

Approximately 90 percent of local jurisdictions provided feedback on one or more data elements requested for local review. Collectively, these towns, cities and counties represent an estimated 94 percent

of the region’s residents. SCAG staff also regularly convened a series of technical advisory groups that engaged local, state, and federal agencies in the transportation and sustainable communities planning process.

Demographic Assumptions

While growth rates are at a historic low; a gradual increase to the total population is expected. In the SCAG region, a 0.6 annual growth rate corresponds to about 114,000 new residents annually, or 3.2 million new residents between 2019 and 2045. At the county level, the region anticipates population increases of 9.1% to 35.4% for its six-county area (**Table ES-1, 2019-2045 Population, Households and Employment Projects in the SCAG Region**)

**Table ES-1
2019-2045 Population, Households, and Employment Projections in the SCAG Region**

County Name	Population 2019	Population 2045	Percentage Increase	Households 2019	Households 2045	Percentage Increase	Employment 2019	Employment 2045	Percentage Increase
Imperial	207,700	281,200	35%	58,000	92,500	59%	77,300	130,200	68%
Los Angeles	10,333,600	11,677,200	13%	3,409,500	4,124,500	21%	4,826,600	5,382,200	12%
Orange	3,250,100	3,534,600	9%	1,053,500	1,153,500	10%	1,765,600	1,980,400	12%
Riverside	2,462,600	3,251,700	32%	758,300	1,086,100	43%	812,800	1,102,700	36%
San Bernardino	2,217,100	2,815,500	27%	656,500	874,800	33%	828,300	1,063,800	28%
Ventura	868,600	947,500	9%	276,100	306,400	11%	346,400	389,400	12%
SCAG Region	19,339,700	22,507,200		6,211,900	7,638,600		8,657,138	10,048,500	

Source: SCAG 2019

Financial Assumptions

In accordance with federal fiscal constraint requirements, Connect SoCal is a financially constrained Plan. Connect SoCal identifies the amount of funding that is reasonably expected to be available to build, operate, and maintain the region’s surface transportation system through the forecast horizon year of 2045.

The financially constrained Connect SoCal includes both a “traditional” core revenue forecast comprised of existing local, state, and federal sources, and more innovative but reasonably available sources of revenue to implement a program of improvements.

The financial plan's forecast of core revenue totals approximately \$638.6 billion from both core and reasonably available resources. Local sources comprise 61 percent of the funding and the largest share of core revenues, followed by state sources which comprise 31 percent of revenue, federal source total 8 percent of revenue.

As shown in **Table ES-2, Connect SoCal Expenditure (in Billions)**, capital projects total \$287 billion in nominal dollars. Operating and maintenance (O&M) costs total \$316 billion, while debt service obligations total \$35.6 billion. Transit-related costs comprise the largest share of O&M costs for the region, totaling \$173.9 billion.

Table ES-2
Connect SoCal Expenditure (in Billions)

Capital Projects and Other Programs	\$287.0
Arterials	\$20.8
Goods Movement (including Grade Separations)	\$65.7
High-Occupancy Vehicle/Express Lanes	\$13.6
Mixed-Flow and Interchange Improvements	\$10.3
Transportation System Management (Including ITS)	\$13.7
Transit	\$66.8
Passenger Rail	\$53.2
Active Transportation	\$17.7
Transportation Demand Management	\$7.3
Other	\$18.1
Operations and Maintenance	\$316.0
State Highways	\$68.0
Transit	\$173.9
Passenger Rail	\$26.6
Regionally Significant Local Streets and Roads	\$47.5
Debt Service	\$35.6
Cost Total	\$638.6

Source: SCAG

Note: due to rounding, the total will not exactly match.

*Includes \$4.8 billion for active transportation in addition to capital project investment level of \$17.7 billion for a total of \$22.5 billion for active transportation improvements

**Includes Safety, Pooled Incentives, Mobility Equity Fund, Regional PEV Charger Program, and Others

ES.2.3 Goals and Guiding Principles

SCAG has developed goals for Connect SoCal, which fall into four core categories: economy, mobility, environment and healthy/complete communities. The Plan lays out goals related to housing, transportation technologies, equity and resilience in order to adequately reflect the increasing importance of these topics in the region, and where possible the goals have been developed to link to potential performance measures and targets (see **Table ES-3, Connect SoCal Goals**). The Plan's guiding policies magnifies these goals, creating a specific direction for Plan investments (see **Table ES-4 Connect SoCal Guiding Principles**).

Table ES-3
Connect SoCal Goals

Connect SoCal Goals	
1	Encourage regional economic prosperity and global competitiveness.
2	Improve mobility, accessibility, reliability, and travel safety for people and goods.
3	Enhance the preservation, security, and resilience of the regional transportation system.
4	Increase person and goods movement and travel choices within the transportation system.
5	Reduce greenhouse gas emissions and improve air quality.
6	Support healthy and equitable communities.
7	Adapt to a changing climate and support an integrated regional development pattern and transportation network.
8	Leverage new transportation technologies and data-driven solutions that result in more efficient travel.
9	Encourage development of diverse housing types in areas that are supported by multiple transportation options.
10	Promote conservation of natural and agricultural lands and restoration of critical habitats.

Source: SCAG Connect SoCal, 2019

Table ES-4
Connect SoCal Guiding Principles

Connect SoCal Guiding Principals	
1	Base transportation investments on adopted regional performance indicators and MAP-21/FAST Act regional targets.
2	Place high priority for transportation funding in the region on projects and programs that improve mobility, accessibility, reliability and safety, and that preserve the existing transportation system.
3	Assure that land use and growth strategies recognize local input, promote sustainable transportation options, and support equitable and adaptable communities.
4	Encourage RTP/SCS investments and strategies that collectively result in reduced non-recurrent congestion and demand for single occupancy vehicle use, by leveraging new transportation technologies and expanding travel choices.
5	Encourage transportation investments that will result in improved air quality and public health, and reduced greenhouse gas emissions.
6	Monitor progress on all aspects of the Plan, including the timely implementation of projects, programs, and strategies.
7	Regionally, transportation investments should reflect best-known science regarding climate change vulnerability, in order to design for long-term resilience.

Source: SCAG Connect SoCal 2019

ES.3 PROJECT LOCATION AND SETTING

The SCAG region consists of six counties that includes Imperial, Los Angeles, Orange, Riverside, San Bernardino, and Ventura, and 191 cities. The total area of the SCAG region is approximately 38,000 square miles. Additionally, the SCAG region consists of 15 sub-regional entities that have been recognized by the Regional Council, SCAG's governing body, as partners in the regional policy planning process. The SCAG region is home to approximately 19 million people. This represents 5.8 percent of the 328 million people in the United States and 48 percent of California's population.² To the north of the SCAG region are the counties of Kern and Inyo; to the east is State of Nevada and State of Arizona; to the south is the U.S.-Mexico border; to the west is the county of San Diego; and to the northwest is the Pacific Ocean. The region includes the county with the largest land area in the nation, San Bernardino County; as well as the county with the highest population in the nation, Los Angeles County.

Transportation Network

The region's transportation network comprises more than 9,000 miles of public transit, 5,000 miles of bikeways, 135,578 lane miles of roadways, and 94 miles of express lanes. The Port of Los Angeles and Port of Long Beach are the largest container importers in the Western Hemisphere that contribute to our expansive goods movement system. The region's aviation system is one of the busiest in the world in terms of air passenger and cargo demand, with more than 110.2 million annual passengers and 3.14 million tons of cargo in 2017. Southern California features:

- 105 miles of heavy and light rail
- 534 miles of commuter rail (Metrolink)
- 9,000 miles of bus routes
- 5,075 miles of bikeways
- 135,578 total lane miles of roadways
- 94 miles of high occupancy toll (HOT) roads

Housing

As of 2018, California ranks 49th of 50 states in the number of housing units per resident. With many strong indications, high demand for housing and short supply drives up rental and home prices

² Connect SoCal Demographics & Growth Forecast Technical Report, 2019

throughout the state. Indeed, seven of the 10 most expensive housing markets in the United States are in California.

There are many contributors to the overall housing shortfall, such as zoning, costs and fees that prevent projects from being feasible, time delays, environmental litigation, community resistance to medium and high-density projects, and lack of local funding mechanisms. Additionally, population and employment growth in metropolitan areas in California has slowed in recent years because wages cannot compensate for the high cost of housing.

ES.3.1 Land Use and Transportation Strategies

Since the Plan foresees regional growth along with transportation system improvements, it identifies strategies to increase transportation choices with a reduced dependence on automobiles and an increase growth in walkable, mixed-use communities and HQTAs. Increased choices in mobility, enhanced quality of life, and increasing sustainability practices could also lead to improved air quality in the region. Thus, the Plan focuses on land use strategies and transportation investments that would enable the SCAG region to develop into a more sustainable region.

Land Use Strategies

The land use strategies included in the Connect SoCal Plan are built upon strategies listed in the 2016 RTP/SCS and are intended to increase travel mode choices, guide future land development, and improve air quality. It also attempts to balance the region's land use choices with its transportation investments.

The Plan includes land use strategies with the committed and projected transportation investments such that they emphasize system preservation and enhancement, active transportation, and land use integration. These strategies identify how the SCAG region can implement Connect SoCal and achieve related GHG reductions. It is important to note that SCAG does not have a direct role in implementing the Sustainable Communities Strategy – neither through decisions about what type of development goes where, nor what transportation projects are ultimately built. Connect SoCal's land use strategies are as follows:

1. Focus Growth Near Destinations and Mobility Options
2. Promote Diverse Housing Choices
3. Leverage Technology Innovations
4. Support Implementation of Sustainability Policies
5. Promote a Green Region

Priority Growth Areas

Consideration of the Plan requires an understanding of several more localized geographies. Priority Growth Areas (PGAs) follow the principles of center-focused placemaking. Connect SoCal's PGAs – Job Centers, Transit Priority Areas (TPA), High Quality Transit Areas (HQTA), Neighborhood Mobility Areas (NMAs), and Livable Corridors – account for only five percent of region's total land area, but implementation of SCAG's recommended growth strategies will help these areas accommodate 76 percent of forecasted household growth and 86 percent of forecasted employment growth between 2016 and 2045. This more compact form of regional development, if fully realized, can reduce travel distances, increase mobility options, improve access to workplaces, and conserve the region's resource areas.

Transportation Strategies

Connect SoCal recognizes that the region can no longer afford to rely solely on expanding the transportation system to address the region's many changes and challenges. There is a need to use a comprehensive planning approach for a transportation system that focuses on preservation, sustainability, and productivity, as well as strategic expansion. Anticipated land use patterns as part of Connect SoCal provide a strategic opportunity to build a smart transportation system that is responsive to the region's changes and challenges. Connect SoCal includes proposed strategies for transportation investments, totaling approximately \$638.6 billion (See **Table ES-2, Connect SoCal Expenditure [in billions]**). Select transportation strategies are as follows:

- System Preservation.
- ***Congestion Management Process.*** Federal regulations require the development, establishment and implementation of a CMP. Consistent with federal requirements, SCAG implements, monitors and evaluates these actions as part of Connect SoCal.
- ***Congestion Pricing.*** Connect SoCal identified three congestion pricing strategies, two of which were incorporated into the 2012 and 2016 RTP/SCS:
 - Develop a network of express lanes, that connects to existing express lanes in order to accommodate growing inter-county travel
 - Establish a mileage-based user fee to generate a funding source for aging infrastructure and construction of other travel options
 - Develop Cordon/Area Pricing which involves charging a variable or fixed fee to drive into or within a highly congested area.

- **Transportation Demand Management.** Connect SoCal commits \$7.3 billion through 2045 to implement TDM strategies throughout the region. There are three primary goals of this program:
 - Reduce the number of SOV trips and per capita VMT through ridesourcing (which includes carpooling and vanpooling) and providing first/last mile services to and from transit
 - Redistribute or eliminate vehicle trips during peak demand periods by supporting telecommuting and alternative work schedules
 - Reduce the number of SOV trips through use of other modes such as transit, rail, bicycling, and walking, or other micro-mobility modes
- **Passenger Rail.** Connect SoCal strategies for passenger rail in the SCAG region consists of four main elements:
- **Active Transportation.** Active Transportation strategies are grouped into eight categories that address trip type as well as a range of regional priorities. Specific details on the Active Transportation Strategies highlighted below can be found in the Active Transportation Technical Report.

Transportation Safety. Connect SoCal prioritizes the safety and mobility of the region’s residents, including drivers and passengers, transit riders, pedestrians, and bicyclists. SCAG’s Safety strategies are largely grounded in the State’s Strategic Highway Safety Plan (SHSP) that helps member agencies interested in pursuing safety initiatives and strategies at the local level. SCAG outlines detailed strategies and actions that local jurisdictions and county transportation commissions can undertake to enhance safety in our region in the transportation safety and security report.

Highway and Arterial Network. Connect SoCal emphasizes working with partner implementing agencies to prioritize projects that preserve and optimize the existing highway and arterial network. Projects include interchange improvements, auxiliary lanes, general purpose lanes, carpool lanes, toll lanes and Express/HOT lanes. The complete list of projects can be found in **Appendix 2.0, Project List**.

Goods Movement. SCAG has developed key strategies to realize a regional visor that maintains regional economic competitiveness, promotes job creation and retention, increased freight mobility and safety, and mitigating environmental impacts. Specific details of goods movement challenges and strategies can be found in the Goods Movement Technical Report. Key strategies include:

Aviation. SCAG, by definition, is primarily a regional surface transportation planning agency. Therefore, SCAG is focused on air passenger and cargo activity from the perspective of how the traffic coming and going from the airports affects the region’s roads, highways, and transit systems, and how to improve

ground transportation access to the airports. On a basic level, SCAG maintains an updated list of airport ground access improvements. However, SCAG has and will continue to play a role in terms of aviation systems research, planning, and analysis, as well as encouraging collaboration and communication amongst the region's aviation stakeholders.

Emerging Technologies. SCAG recognizes that many new technologies provide consumer solutions and have made inroads in public acceptance due to advancements in smartphones, mobile banking, navigational apps and social networking. Improvements in regional mobility will therefore be derived from how technology is used rather than from any individual technological development. Moreover, strategies to use the benefits of emerging technologies to advance Connect SoCal goals should be viewed through the lens of improving health, safety, equity and mobility outcomes.

ES.4 ALTERNATIVES TO THE PROJECT

CEQA requires an Environmental Impact Report (EIR) to describe a range of reasonable alternatives to the project or to the location of the project that could feasibly avoid or substantially lessen significant environmental impacts while attaining most of the project objectives.³ Plan alternatives are evaluated as to how well they achieve the goals, policies, and objectives, the extent of their environmental impacts compared to the Plan, and whether or not they reduce or eliminate significant impacts caused by the Plan. These alternatives include:

Alternative 1: No Project Alternative

The No Project Alternative is required by Section 15126.6I(2) of the *CEQA Guidelines* and assumes that the Plan would not be implemented. The No Project Alternative allows decision makers to compare the impacts of approving the proposed project with the impacts of not approving the proposed project. The No Project Alternative evaluates “what would be reasonably expected to occur in the foreseeable future if the project were not approved, based on current plans and consistent with available infrastructure and community services” (*CEQA Guidelines* Section 15126.6E(2)). The No Project Alternative is aligned with the Trend/Baseline Scenario⁴ and includes transportation projects that are in place at the time of preparation of the Connect SoCal Plan and that are included in the first two years of the previously conforming transportation plan and/or federal transportation improvement program (FTIP). “Exempt projects” include safety projects and certain mass transit projects, transportation control measures (“TCMs”) that are approved by the State Implementation Plan, and project phases that were authorized by the FHWA/FTA prior to expiration of SCAG’s conformity finding for the adopted 2016 RTP/SCS.

³ CEQA Guidelines, California Code of Regulations (CCR), Title 14, Division 6, Chapter 3, § 15126.6. 2005

⁴ Connect SoCal – Sustainable Communities Strategy Technical Report.

These exempt projects would also be included in the No Project Alternative since they could move forward in the absence of an adopted Connect SoCal Plan.⁵

The land use strategies included in the No Project Alternative are based on the trending socioeconomic growth projection to the future (2045) updated with the same jurisdictional local input population, household and employment data as those in the Connect SoCal Plan to reflect the most recent local input growth estimates in the region.

Alternative 2: Existing Plans - Local Input Alternative

The Existing Plans - Local Input Alternative is aligned with the Existing Plans – Local Input Scenario in the Plan.⁶ This alternative incorporates local general plans and land use information to reflect the Plan’s population, household and employment growth estimates in the region. The Plan’s transportation and land use strategies are not included in this alternative. The transportation network analyzed under this alternative are the transportation projects planned by each County Transportation Commission (CTC) in the region. In general, this alternative represents a more dispersed land use pattern as compared to Connect SoCal.

Alternative 3: Intensified Land Use Alternative

This Intensified Land Use Alternative is based off the Plan’s transportation network and strategies. This alternative analyzes more aggressive densities and land use patterns than included in the Accelerated Tomorrow Scenario.⁷ The land use pattern builds on the land use strategies as described in the Connect SoCal Plan and beyond. Specifically, it increases densities and intensifies land use patterns of the Plan, especially around HQTAs in an effort to maximize transit opportunities. The growth pattern associated with this alternative optimizes urban areas and suburban town centers, transit-oriented developments (TODs), HQTAs, livable corridors, and neighborhood mobility areas. It also includes a greater progressive job-housing distribution optimized for TODs and infill in HQTAs. It includes the same transportation investments as the Plan. This alternative considers the basis of the Plan with enhancements to accelerate the SB 375 GHG emissions reduction trend into 2045 and beyond, and includes related improvements for air quality, livability, public health, active transportation opportunities, and affordability.

5 Federal Highway Administration. *Transportation Conformity: A Basic Guide for State and Local Officials* (Revised 2010), FHWA-HEP-11-001. Available at:

http://www.fhwa.dot.gov/environment/air_quality/conformity/guide/guide10.cfm

6 Connect SoCal – Sustainable Communities Strategy Technical Report.

7 Connect SoCal – Sustainable Communities Strategy Technical Report.

ES.5 AREAS OF KNOWN CONTROVERSY

A Notice of Preparation (NOP) for this PEIR was issued on January 23, 2019 by SCAG for a 30-day public review period. A total of 22 comment letters were received. The NOP and copies of each comment letter received are included in **Appendix 1.0** of the PEIR. Two scoping meetings were held on February 13, 2019. The purpose of these meetings was to provide early consultation for the public to express their concerns about the project and acquire information and make recommendations on issues to be addressed in the PEIR. In accordance with Sections 15087 and 15105 of the CEQA Guidelines, this PEIR is being circulated for a 45-day public review period. Responsible and trustee agencies and the public are invited to comment in writing on the information contained in this document. Persons and agencies commenting are encouraged to provide information that they believe is missing from the Draft PEIR and to identify where the information can be obtained. All comment letters received concerning the PEIR will be responded to in writing, and the comment letters, together with the responses to those comments, will be included in the Final PEIR.

Comments received in response to the published NOP (provided in **Appendix 1.0**) identified environmental topics that local and regional agencies and City residents recommended for analysis in the Draft EIR. These topics include:

- Biological Resources
- Vehicle Miles Traveled (VMT)
- Air Quality
- Greenhouse Gases and Climate Change
- Mitigation Measures

ES.6 ISSUES TO BE RESOLVED

The *State CEQA Guidelines* require an EIR to present issues to be resolved by the lead agency. These issues include the choice between alternatives and whether or how to mitigate potentially significant impacts. The major issues to be resolved by SCAG, as the Lead Agency for the project include the following:

- Whether the recommended mitigation measures should be adopted or modified;
- Whether additional mitigation measures need to be applied to the project; and
- Whether the project or an alternative should be approved.

ES.7 SUMMARY OF PROJECT IMPACTS

A summary of the environmental impacts associated with implementation of the proposed project, mitigation measures included to avoid or lessen the severity of potentially significant impacts, and residual impacts, is provided in **Table ES-5, Summary of Project Impacts, Mitigation Measures, and Residual Impacts**, below.

As discussed in **Chapter 1.0, Introduction**, SCAG has no concurrent authority/jurisdiction to implement mitigation related to land use plans and projects that implement the Plan. With respect to the transportation projects in the Plan, these projects are to be implemented by Caltrans, county transportation commissions, local transit agencies, and local governments (i.e., cities and counties), and not SCAG. SCAG also has no authority/jurisdiction to require these agencies to implement project-specific mitigation measures.

CEQA case law has also held that deferral of the specifics of mitigation is permissible where the lead agency commits itself to mitigation and, in the mitigation measure, either describes performance standards to be met in future mitigation or provides a menu of alternative mitigation measures to be selected from in the future (*California Native Plant Society v. City of Rancho Cordova* (2009) 172 Cal.App.4th 603 [the details of exactly how the required mitigation and its performance standards will be achieved can be deferred pending completion of a future study]; *Endangered Habitats League Inc. v. County of Orange* (2005) 131 Cal.App.4th 777, 793 [deferred mitigation acceptable when performance standards are included]; *Riverwatch v. County of San Diego* (1999) 76 Cal.App.4th 1428, 1448–1450 [a deferred approach may be appropriate where it is not reasonably practical or feasible to provide a more complete analysis before approval and the EIR otherwise provides adequate information of the project’s impacts]; *Sacramento Old City Assn. v. City Council of Sacramento*, supra, 229 Cal.App.3d at 1028–1029 [deferral of agency’s selection among several alternatives based on performance criteria was appropriate]).⁸ CEQA Guidelines section 15126.4(a)(1)(B) codifies this concept:

“Formulation of mitigation should not be deferred until some future time. However, measures may specify performance standard which would mitigate the significant effect of the project and which may be accomplished in more than one specified way.”

⁸ Note that in litigation challenging SANDAG’s adoption of its 2050 Regional Transportation Plan/Sustainable Communities Strategy, the California Court of Appeal found that “[a]n EIR may not defer the formulation of mitigation measures to a future time, but mitigation measures may specify performance standards which would mitigate the project’s significant effects and may be accomplished in more than one specified way.” *Cleveland National Forest Foundation v. San Diego Assn. of Governments* (2014) 231 Cal. App. 4th 1056, 1089 (partially reversed on other grounds by *Cleveland National Forest Foundation v. San Diego Assn. of Governments* (2017) 3 Cal.5th 497).

Mitigation measures are subject to the same rules regarding level of detail appropriate to the EIR being prepared. In this case, the PEIR addresses a large-scale region with a variety of projects spread over more than 20 years. As such, this PEIR identifies program-wide measures for implementation by SCAG. In addition, the PEIR identifies project-level mitigation measures for lead agencies to consider, as applicable and feasible, in subsequent project-specific design, CEQA review, and decision-making processes. It is ultimately up to the lead agency to determine the appropriateness of the mitigation measure based on project-specific circumstances. As appropriate and authorized by the *CEQA Guidelines* and case law, the program-wide mitigation measures included in this PEIR are less detailed than those that would be part of a project EIR and the selection of detailed mitigation measures is properly deferred to future project-specific CEQA reviews.

The project-level mitigation measures identified by SCAG (or comparable measures) “can and should” be considered by lead agencies in project-specific environmental review documents as appropriate and feasible. This language mirrors *CEQA Guidelines* section 15091(a)(2), and it is assumed that each lead agency for specific projects would have the ability to impose and enforce these measures (i.e., that they can implement them). Lead agencies for specific projects are responsible for developing project specific mitigation measures and ensuring adherence to such mitigation measures.

While the PEIR strives to provide as much detail as possible in the mitigation measures, some flexibility must be maintained to present mitigation approaches for impacts occurring over a large geographic scope and caused by a wide variety of transportation and land use activities. CEQA case law provides that a first-tier EIR may contain generalized mitigation criteria (see, e.g., *Koster v. County of San Joaquin* (1996) 47 Cal.App.4th 29). In addition, in each resource area, the PEIR identifies mitigation measures which are performance standards-based, which lead, responsible, or trustee agencies “can and should” comply with in assessing and mitigating project-specific impacts. SCAG then identifies examples of project-level mitigation measures that may be required by lead agencies, to meet performance standards. Lead agencies may also identify other comparable measures capable of reducing impacts below the specified threshold.

For projects proposing to streamline environmental review pursuant to SB 375, SB 743, or SB 226, or for projects otherwise tiering off this PEIR, the project-level mitigation measures described in this PEIR (or comparable measures) can and should be considered and implemented by lead agencies (and project sponsors) during the subsequent, project- or site-specific environmental reviews for transportation and development projects as applicable and feasible. However, SCAG cannot require lead agencies to adopt mitigation, and it is ultimately the responsibility of the lead agency to determine and adopt project-specific mitigation as appropriate and feasible for each project.

The performance standards-based mitigation measures used in this PEIR recognize the limits of SCAG's authority; distinguish between SCAG commitments and project-level responsibilities and authorities; optimize flexibility for project implementation; and facilitate CEQA streamlining and tiering where appropriate on a project-by-project basis determined by each lead agency.⁹

⁹ Note that compliance with existing regulations, such as the Uniform Building Code and California Building Code, is not necessarily considered mitigation because compliance is already required. However, such regulations do reduce environmental impacts and are identified herein where appropriate, to provide additional information on the how potential impacts are reduced. In some cases, as indicated in the PEIR, regulatory compliance is sufficient to reduce impacts to a level of less than significance. In other cases, mitigation is proposed to ensure and/or specify the means of compliance with regulations that lack specificity.

**Table ES-5
Summary of Project Impacts, Mitigation Measures, and Residual Impacts**

Significance Threshold and Project Impacts	Mitigation Measures	Residual Impact
AESTHETICS		
<p>Impact AES-1: Potential for the Plan to have a substantial adverse effect on a scenic vista.</p>	<p><i>SCAG Mitigation Measures</i></p> <p>SMM AES-1: SCAG shall facilitate minimizing impacts to scenic vistas through cooperation, information sharing regarding the locations of designated scenic vistas, and regional program development as part of SCAG’s ongoing regional planning efforts, such as web-based planning tools for local government including REVISION, and other GIS tools and data services, including, but not limited to, Map Gallery, GIS library, and GIS applications, and direct technical assistance efforts such as sharing of associated online training materials. Caltrans and lead agencies, such as county and city planning departments, shall be consulted during this update process.</p> <p><i>Project Level Mitigation Measures</i></p> <p>PMM AES-1: In accordance with provisions of sections 15091(a)(2) and 15126.4(a)(1)(B) of the <i>State CEQA Guidelines</i>, a Lead Agency for a project can and should consider mitigation measures to address potential aesthetic impacts to scenic vistas, as applicable and feasible. Such measures may include the following or other comparable measures identified by the Lead Agency:</p> <ul style="list-style-type: none"> a) Use a palette of colors, textures, building materials that are graffiti-resistant, and/or plant materials that complement the surrounding landscape and development. b) Use contour grading to better match surrounding terrain. Contour edges of major cut-and-fill to provide a more natural looking finished profile. c) Design new corridor landscaping to respect existing natural and man-made features and to complement the dominant landscaping of the surrounding areas. d) Replace and renew landscaping along corridors with road widenings, interchange projects, and related improvements. e) Retain or replace trees bordering highways, so that clear-cutting is not evident. f) Provide new corridor landscaping that respects and provides appropriate transition to existing natural and man-made features and is complementary to the dominant landscaping or native habitats of surrounding areas. g) Reduce the visibility of construction staging areas by fencing and screening these areas with low contrast materials consistent with the surrounding environment, and by revegetating graded slopes and exposed earth surfaces at the earliest opportunity; h) Use see-through safety barrier designs (e.g. railings rather than walls) 	<p>Significant and unavoidable</p>

Significance Threshold and Project Impacts	Mitigation Measures	Residual Impact
<p>Impact AES-2: Potential to substantially damage scenic resources, including but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway.</p>	<p><i>SCAG Mitigation Measures</i> See SMM AES-1.</p> <p><i>Project Level Mitigation Measures</i> See PMM AES-1.</p>	<p>Significant and unavoidable</p>
<p>Impact AES-3: Potential to substantially degrade the existing visual character or quality of public views (public views are those that are experienced from publicly accessible vantage points). In an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality.</p>	<p><i>SCAG Mitigation Measures</i> See SMM AES-1.</p> <p><i>Project Level Mitigation Measures</i> PMM AES-2: In accordance with provisions of sections 15091(a)(2) and 15126.4(a)(1)(B) of the <i>State CEQA Guidelines</i>, a Lead Agency for a project can and should consider mitigation measures to address potential aesthetic impacts that substantially degrade visual character, as applicable and feasible. Such measures may include the following or other comparable measures identified by the Lead Agency:</p> <ul style="list-style-type: none"> a) Minimize contrasts in scale and massing between the projects and surrounding natural forms and development, minimize their intrusion into important viewsheds, and use contour grading to better match surrounding terrain in accordance with county and city hillside ordinances, where applicable. b) Design landscaping along highway corridors to add significant natural elements and visual interest to soften the hard-edged, linear transportation corridors. c) Require development of design guidelines for projects that make elements of proposed buildings/facilities visually compatible, or minimize visibility of changes in visual quality or character through use of hardscape and softscape solutions. Specific measures to be addressed include setback buffers, landscaping, color, texture, signage, and lighting criteria. d) Design projects consistent with design guidelines of applicable general plans. e) Require that sites are kept in a blight/nuisance-free condition. Remove blight or nuisances that compromise visual character or visual quality of project areas including graffiti abatement, trash removal, landscape management, maintenance of signage and billboards in good condition, and replace compromised native vegetation and landscape. f) Where sound walls are proposed, require sound wall construction and design methods that account for visual impacts as follows: <ul style="list-style-type: none"> – use transparent panels to preserve views where sound walls would block views from residences; – use landscaped earth berm or a combination wall and berm to minimize the apparent sound wall height; – construct sound walls of materials whose color and texture complements the surrounding landscape and development; g) Design sound walls to increase visual interest, reduce apparent height, and be visually compatible with the surrounding area; and landscape the sound walls with plants that screen the sound wall, preferably with either native vegetation or landscaping that complements the 	<p>Significant and unavoidable</p>

Significance Threshold and Project Impacts	Mitigation Measures	Residual Impact
<p>Impact AES-4: Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area.</p>	<p style="text-align: center;">dominant landscaping of surrounding areas.</p> <p><i>SCAG Mitigation Measures</i></p> <p>SMM AES-2: SCAG shall facilitate minimizing impacts on aesthetics related to new sources of light or glare through cooperation, information sharing regarding guidelines and policies, design approaches, building materials, siting, and technology, such as web-based planning tools for local government including CA LOTS, and other GIS tools and data services, including, but not limited to, Map Gallery, GIS library, and GIS applications, and direct technical assistance efforts and sharing of associated online training materials. Lead agencies, such as county and city planning departments, shall be consulted during this update process.</p> <p><i>Project Level Mitigation Measures</i></p> <p>PMM AES-3: In accordance with provisions of sections 15091(a)(2) and 15126.4(a)(1)(B) of the <i>State CEQA Guidelines</i>, a Lead Agency for a project can and should consider mitigation measures to address potential aesthetic impacts that substantially degrade visual character, as applicable and feasible. Such measures may include the following or other comparable measures identified by the Lead Agency:</p> <ul style="list-style-type: none"> a) Use lighting fixtures that are adequately shielded to a point below the light bulb and reflector and that prevent unnecessary glare onto adjacent properties. b) Restrict the operation of outdoor lighting for construction and operation activities to the hours of 7:00 a.m. to 10:00 p.m. c) Use high-pressure sodium and/or cut-off fixtures instead of typical mercury-vapor fixtures for outdoor lighting. d) Use unidirectional lighting to avoid light trespass onto adjacent properties. e) Design exterior lighting to confine illumination to the project site, and/or to areas which do not include light-sensitive uses. f) Provide structural and/or vegetative screening from light-sensitive uses. g) Shield and direct all new street and pedestrian lighting away from light-sensitive off-site uses. h) Use non-reflective glass or glass treated with a non-reflective coating for all exterior windows and glass used on building surfaces. i) Architectural lighting shall be directed onto the building surfaces and have low reflectivity to minimize glare and limit light onto adjacent properties. 	<p>Significant and unavoidable</p>
<p>AGRICULTURAL RESOURCES</p>		
<p>Impact AG-1: Potential for the Plan to convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to nonagricultural use.</p>	<p><i>SCAG Mitigation Measures</i></p> <p>SMM AG-1: SCAG shall host a Natural & Farm Lands Conservation Working Group which will provide a forum for stakeholders to share best practices and develop recommendations for natural and agricultural land conservation throughout the region, including the development of a Natural Lands Conservation Strategy for the Connect SoCal Plan.</p> <p>SMM AG-2: SCAG shall expand on the Natural Resource Inventory Database and Conservation Framework & Assessment by incorporating strategic mapping layers to build the database and further refine the</p>	<p>Significant and unavoidable</p>

Significance Threshold and Project Impacts	Mitigation Measures	Residual Impact
	<p>priority conservation areas by (1) further investing in mapping and farmland data tracking and (2) working with County Transportation Commissions (CTCs) and SCAG’s subregions to support their county-level efforts at data building. SCAG shall encourage CTCs to develop advanced mitigation programs or include them in future transportation measures by (1) funding pilot programs that encourage advance mitigation including data and replicable processes, (2) participating in state-level efforts that would support regional advanced mitigation planning in the SCAG region, and (3) supporting the inclusion of advance mitigation programs at county level transportation measures.</p> <p>SMM AG-3: SCAG shall align with funding opportunities and pilot programs to begin implementation of conservation strategies through (1) seeking planning funds, such as cap and trade auction proceeds that could help prepare for local action on acquisition and restoration, (2) supporting CTCs and other partners, and (3) continuing policy alignment with the State Wildlife Action Plan 2015 Update and its implementation.</p> <p>SMM AG-4: SCAG shall provide incentives to jurisdictions that cooperate across county lines to protect and restore natural habitat corridors, especially where corridors cross county boundaries, as detailed in the Natural & Farm Lands Technical Report strategies of Connect SoCal. SCAG will work with stakeholders to identify incentives and leverage resources that help protect habitat corridors.</p> <p><i>Project Level Mitigation Measures</i></p> <p>PMM AG-1: In accordance with provisions of sections 15091(a)(2) and 15126.4(a)(1)(B) of the <i>State CEQA Guidelines</i>, a Lead Agency for a project can and should consider mitigation measures to address potential adverse effects on agricultural resources, as applicable and feasible. Such measures may include the following or other comparable measures identified by the Lead Agency:</p> <ul style="list-style-type: none"> a) Require project sponsors to mitigate for loss of farmland by providing permanent protection of in-kind farmland in the form of easements, fees, or elimination of development rights/potential. b) Project relocation or corridor realignment to avoid Prime Farmland, Unique Farmland, or Farmland of Local or Statewide Importance. c) Maintain and expand agricultural land protections such as urban growth boundaries. d) Provide for mitigation fees to support a mitigation bank¹⁰ that invests in farmer education, agricultural infrastructure, water supply, marketing, etc. that enhance the commercial viability of retained agricultural lands. e) Minimize severance and fragmentation of agricultural land by constructing underpasses and overpasses at reasonable intervals to provide property access. f) Use berms, buffer zones, setbacks, and fencing to reduce conflicts between new development and farming uses and protect the functions of farmland. 	
<p>Impact AG-2: Potential for the Plan to conflict with existing zoning for agricultural use, or a Williamson</p>	<p><i>SCAG Mitigation Measures</i> See SMM AG-1 through SMM AG-4.</p>	<p>Significant and unavoidable</p>

¹⁰ The California Department of Fish and Wildlife provides a definition for conservation or mitigation banks on their website (please see <https://www.wildlife.ca.gov/Conservation/Planning/Banking>).

Significance Threshold and Project Impacts	Mitigation Measures	Residual Impact
<p>Act contract.</p>	<p><i>Project Level Mitigation Measures</i> See PMM AG-1. PMM AG-2: Project level mitigation measures can and should be considered by Lead Agencies as applicable and feasible. Measures to reduce substantial adverse effects on Williamson Act contracts to the maximum extent practicable, as determined appropriate by each Lead Agency, may include the following, or other comparable measures:</p> <ul style="list-style-type: none"> a) Project relocation or corridor realignment to avoid lands in Williamson Act contracts. b) Establish conservation easements consistent with the recommendations of the Department of Conservation, or 20-year Farmland Security Zone contracts (Government Code Section 51296 et seq.), 10-year Williamson Act contracts (Government Code Section 51200 et seq.), or use of other conservation tools available from the California Department of Conservation Division of Land Resource Protection. 	
<p>Impact AG-3: Potential for the Plan to conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)), timberland (as defined by Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104(g)).</p>	<p><i>SCAG Mitigation Measures</i> See SMM AG-1 through SMM AG-2. <i>Project Level Mitigation Measures</i> PMM AG-3: Project level mitigation measures can and should be considered by Lead Agencies as applicable and feasible. Measures to reduce substantial adverse effects, through the conversion of Farmland to maximum extent practicable, as determined appropriate by each Lead Agency, may include the following, or other comparable measures:</p> <ul style="list-style-type: none"> a) Minimize construction related impacts to agricultural and forestry resources by locating materials and stationary equipment in such a way as to prevent conflict with agriculture and forestry resources. 	
<p>Impact AG-4: Potential for the Plan to result in the loss of forest land or conversion of forest land to non-forest use.</p>	<p><i>SCAG Mitigation Measures</i> See SMM AG-1 through SMM AG-2. <i>Project Level Mitigation Measures</i> See PMM AG-3</p>	<p>Significant and unavoidable</p>
<p>Impact AG-5: Potential for the Plan to involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use.</p>	<p><i>SCAG Mitigation Measure</i> See SMM AG-1 through SMM AG-2 and SMM-GHG-1 through SMM-GHG-5. <i>Project Level Mitigation Measures</i> See PMM AG-2 and PMM GHG-2. PMM AG-4: Project level mitigation measures can and should be considered by Lead Agencies as applicable and feasible. Measures to reduce substantial adverse effects, through the conversion of Farmland, to the maximum extent practicable, as determined appropriate by each Lead Agency, may include the following, or other comparable measures:</p> <ul style="list-style-type: none"> a) Design proposed projects to minimize, to the greatest extent feasible, the loss of the highest valued agricultural land. 	<p>Significant and unavoidable</p>

Significance Threshold and Project Impacts	Mitigation Measures	Residual Impact
	<p>b) Redesign project features to minimize fragmenting or isolating Farmland. Where a project involves acquiring land or easements, ensure that the remaining non-project area is of a size sufficient to allow economically viable farming operations. The project proponents shall be responsible for acquiring easements, making lot line adjustments, and merging affected land parcels into units suitable for continued commercial agricultural management.</p> <p>c) Reconnect utilities or infrastructure that serve agricultural uses if these are disturbed by project construction. If a project temporarily or permanently cuts off roadway access or removes utility lines, irrigation features, or other infrastructure, the project proponents shall be responsible for restoring access as necessary to ensure that economically viable farming operations are not interrupted.</p> <p>PMM AG-5: Project level mitigation measures can and should be considered by Lead Agencies as applicable and feasible. Measures to reduce substantial adverse effects, through the conversion of Farmland, to the maximum extent practicable, as determined appropriate by each Lead Agency, may include the following, or other comparable measures:</p> <p>a) Manage project operations to minimize the introduction of invasive species or weeds that may affect agricultural production on adjacent agricultural land. Where a project has the potential to introduce sensitive species or habitats or have other spill-over effects on nearby agricultural lands, the project proponents shall be responsible for acquiring easements on nearby agricultural land and/or financially compensating for indirect effects on nearby agricultural land. Easements (e.g., flowage easements) shall be required for temporary or intermittent interruption in farming activities (e.g., because of seasonal flooding or groundwater seepage). Acquisition or compensation would be required for permanent or significant loss of economically viable operations.</p>	
AIR QUALITY		
Impact AQ-1: Conflict with or obstruct implementation of the applicable air quality plan.	No mitigation is required.	Less than significant
Impact AQ-2: Potential to violate any air quality standard or contribute substantially to an existing or projected air quality violation.	<p><i>SCAG Mitigation Measures</i></p> <p>SMM-AQ-1: SCAG shall develop the Southern California Disadvantaged Communities Planning Initiative which would provide funds to selected applicants to develop a low-cost, high-impact model which leverages SCAG’s staff, data, and outreach resources to deliver context-sensitive plans in high-need, low-resourced active transportation infrastructure and frameworks. As part of the initiative, the model will be operationalized through the development of plans in six communities and refined to provide a sustainable resource for SCAG staff to partner with local agencies to develop local active transportation plans.</p> <p>SMM-AQ-2: SCAG shall continue its commitment to analyze public health outcomes as part of the Connect SoCal. As part of the public health analysis for the Plan, SCAG shall continue to analyze the plan’s impacts on air quality through its Public Health Working group and continue to support policy change at the city and country level through education programs.</p> <p>SMM-AQ-3: SCAG shall continue to conduct air quality-related technical analyses on the region, specifically in vulnerable areas that are typically environmental justice areas. For example, SCAG staff conducted technical analysis of emissions impacts on populations within 500 feet of freeways and highly</p>	Significant and unavoidable

Significance Threshold and Project Impacts	Mitigation Measures	Residual Impact
	<p>travelled corridors in the Connect SoCal Environmental Justice Appendix. SCAG staff shall also continue to work with districts and relevant stakeholders to be informed of any updates new and/or changes to air quality issue areas through various forums like the Environmental Justice Working Group.</p> <p><i>Project Level Mitigation Measures</i></p> <p>PMM-AQ-1: In accordance with provisions of sections 15091(a)(2) and 15126.4(a)(1)(B) of the <i>State CEQA Guidelines</i>, a Lead Agency for a project can and should consider mitigation measures to reduce substantial adverse effects related to violating air quality standards. Such measures may include the following or other comparable measures identified by the Lead Agency:</p> <ul style="list-style-type: none"> a) Minimize land disturbance. b) Suspend grading and earth moving when wind gusts exceed 25 miles per hour unless the soil is wet enough to prevent dust plumes. c) Cover trucks when hauling dirt. d) Stabilize the surface of dirt piles if not removed immediately. e) Limit vehicular paths on unpaved surfaces and stabilize any temporary roads. f) Minimize unnecessary vehicular and machinery activities. g) Sweep paved streets at least once per day where there is evidence of dirt that has been carried on to the roadway. h) Revegetate disturbed land, including vehicular paths created during construction to avoid future off-road vehicular activities. i) On Caltrans projects, Caltrans Standard Specifications 10-Dust Control, 17-Watering, and 18-Dust Palliative shall be incorporated into project specifications. j) Require contractors to assemble a comprehensive inventory list (i.e., make, model, engine year, horsepower, emission rates) of all heavy-duty off-road (portable and mobile) equipment (50 horsepower and greater) that could be used an aggregate of 40 or more hours for the construction project. Prepare a plan for approval by the applicable air district demonstrating achievement of the applicable percent reduction for a CARB-approved fleet. k) Ensure that all construction equipment is properly tuned and maintained. l) Minimize idling time to 5 minutes—saves fuel and reduces emissions. m) Provide an operational water truck on-site at all times. Use watering trucks to minimize dust; watering should be sufficient to confine dust plumes to the project work areas. Sweep paved streets at least once per day where there is evidence of dirt that has been carried on to the roadway. n) Utilize existing power sources (e.g., power poles) or clean fuel generators rather than temporary power generators. o) Develop a traffic plan to minimize traffic flow interference from construction activities. The plan may include advance public notice of routing, use of public transportation, and satellite parking areas with a shuttle service. Schedule operations affecting traffic for off-peak hours. Minimize obstruction of through-traffic lanes. Provide a flag person to guide traffic properly 	

Significance Threshold and Project Impacts	Mitigation Measures	Residual Impact
	and ensure safety at construction sites. p) As appropriate require that portable engines and portable engine-driven equipment units used at the project work site, with the exception of on-road and off-road motor vehicles, obtain CARB Portable Equipment Registration with the state or a local district permit. Arrange appropriate consultations with the CARB or the District to determine registration and permitting requirements prior to equipment operation at the site. q) Require projects within 500 feet of residences, hospitals, or schools to use Tier 4 equipment for all engines above 50 horsepower (hp) unless the individual project can demonstrate that Tier 4 engines would not be required to mitigate emissions below significance thresholds.	
Impact AQ-3: Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard.	<i>SCAG Mitigation Measures</i> See SMM AQ-1, SMM AQ-2, SMM, and SMM AQ-3. <i>Project Level Mitigation Measures</i> See PMM-AQ-1.	Significant and unavoidable
Impact AQ-4: Expose sensitive receptors to substantial pollutant concentrations.	<i>SCAG Mitigation Measures</i> See SMM AQ-1, SMM AQ-2, SMM, and SMM AQ-3. <i>Project Level Mitigation Measures</i> See PMM-AQ-1.	Significant and unavoidable
Impact AQ-4: Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people.	No mitigation is required.	Less than significant
BIOLOGICAL RESOURCES		
Impact BIO-1: Have a substantial adverse effect, either directly or through habitat modification, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or US Fish and Wildlife Service.	<i>SCAG Mitigation Measures</i> SMM BIO-1: SCAG shall facilitate reducing future impacts to species identified as a candidate, sensitive, or special status species and its habitats through cooperation, information sharing, and program development. SCAG shall consult with the resource agencies, such as the USFWS, NMFS, USACE, USFS, BLM, and CDFW, as well as local jurisdictions including cities and counties, to incorporate designated critical habitat, federally protected wetlands, the protection of sensitive natural communities and riparian habitats, designated open space or protected wildlife habitat, local policies and tree preservation ordinances, applicable HCPs and NCCPs, or other related planning documents into SCAG’s ongoing regional planning efforts, such as web-based planning tools for local government including CA LOTS, and other GIS tools and data services, including, but not limited to, Map Gallery, GIS library, and GIS applications, and direct technical assistance efforts and sharing of associated online Training materials. Planning efforts shall be consistent with the approach outlined in the California Wildlife Action Plan. SMM BIO-2: SCAG shall continue to develop a regional conservation strategy in coordination with local jurisdictions and other stakeholders, including the county transportation commissions. The conservation strategy will build upon existing efforts including those at the sub-regional and local levels to identify potential priority conservation areas. SCAG shall develop new regional tools, like the Regional Data Platform and Regional Greenprint to help local jurisdictions identify areas well	Significant and unavoidable

Significance Threshold and Project Impacts	Mitigation Measures	Residual Impact
	<p>suited for infill and redevelopment as well as critical habitat and natural lands to be preserved, including natural habitat corridors. SCAG will also collaborate with stakeholders to establish a new Regional Advanced Mitigation Program (RAMP) initiative to preserve habitat.</p> <p><i>Project Level Mitigation Measures</i></p> <p>PMM BIO-1: In accordance with provisions of sections 15091(a)(2) and 15126.4(a)(1)(B) of the <i>State CEQA Guidelines</i>, a Lead Agency for a project can and should consider mitigation measures to reduce substantial adverse effects related to threatened and endangered species. Such measures may include the following or other comparable measures identified by the Lead Agency:</p> <ul style="list-style-type: none"> a) Require project design to avoid occupied habitat, potentially suitable habitat, and designated critical habitat, wherever practicable and feasible. b) Where avoidance is determined to be infeasible, provide conservation measures to fulfill the requirements of the applicable authorization for incidental take pursuant to Section 7 or 10(a) of the federal ESA, Section 2081 of the California ESA to support issuance of an incidental take permit, and/or as identified in local or regional plans. Conservation strategies to protect the survival and recovery of federally and state-listed endangered and local special status species may include: <ul style="list-style-type: none"> i. Impact minimization strategies ii. Contribution of in-lieu fees for in-kind conservation and mitigation efforts iii. Use of in-kind mitigation bank credits iv. Funding of research and recovery efforts v. Habitat restoration vi. Establishment of conservation easements vii. Permanent dedication of in-kind habitat c) Design projects to avoid desert native plants protected under the California Desert Native Plants Act, salvage and relocate desert native plants, and/or pay in lieu fees to support off-site long-term conservation strategies. d) Temporary access roads and staging areas will not be located within areas containing sensitive plants, wildlife species or non-native habitat wherever feasible, so as to avoid or minimize impacts to these species e) Develop and implement a Worker Environmental Awareness Program (environmental education) to inform project workers of their responsibilities to avoid and minimize impacts on sensitive biological resources. f) Retain a qualified botanist to document the presence or absence of special status plants before project implementation. g) Appoint a qualified biologist to monitor construction activities that may occur in or adjacent to occupied sensitive species' habitat to facilitate avoidance of resources not permitted for impact. h) Appoint a qualified biologist to monitor implementation of mitigation measures. 	

Significance Threshold and Project Impacts	Mitigation Measures	Residual Impact
	<ul style="list-style-type: none"> i) Schedule construction activities to avoid sensitive times for biological resources (e.g. steelhead spawning periods during the winter and spring, nesting bird season) and to avoid the rainy season when erosion and sediment transport is increased. j) Develop an invasive species control plan associated with project construction k) If construction occurs during breeding seasons in or adjacent to suitable habitat, include appropriate sound attenuation measures required for sensitive avian species and other best management practices appropriate for potential local sensitive wildlife l) Conduct pre-construction surveys to delineate occupied sensitive species' habitat to facilitate avoidance. m) Where projects are determined to be within suitable habitat and may impact listed or sensitive species that have specific field survey protocols or guidelines outlined by the USFWS, CDFW, or other local agency, conduct preconstruction surveys that follow applicable protocols and guidelines and are conducted by qualified and/or certified personnel. 	
<p>Impact BIO-2: Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Game or US Fish and Wildlife Service.</p>	<p><i>SCAG Mitigation Measures</i> See SMM BIO-1 and SMM BIO-2.</p> <p><i>Project Level Mitigation Measures</i> See PMM BIO-1.</p> <p>PMM BIO-2: In accordance with provisions of sections 15091(a)(2) and 15126.4(a)(1)(B) of the <i>State CEQA Guidelines</i>, a Lead Agency for a project can and should consider mitigation measures to reduce substantial adverse effects related to riparian habitats and other sensitive natural communities. Such measures may include the following or other comparable measures identified by the Lead Agency:</p> <ul style="list-style-type: none"> a) Consult with the USFWS and NMFS where such state-designated sensitive or riparian habitats provide potential or occupied habitat for federally listed rare, threatened, and endangered species afforded protection pursuant to the federal ESA. b) Consult with the USFS where such state-designated sensitive or riparian habitats provide potential or occupied habitat for federally listed rare, threatened, and endangered species afforded protection pursuant to the federal ESA and any additional species afforded protection by an adopted Forest Land Management Plan or Resource Management Plan for the four national forests in the six-county area: Angeles, Cleveland, Los Padres, and San Bernardino. c) Consult with the CDFW where such state-designated sensitive or riparian habitats provide potential or occupied habitat for state-listed rare, threatened, and endangered species afforded protection pursuant to the California ESA, or Fully Protected Species afforded protection pursuant to the State Fish and Game Code. d) Consult with the CDFW pursuant to the provisions of Section 1600 of the State Fish and Game Code as they relate to Lakes and Streambeds. e) Consult with the USFWS, USFS, CDFW, and counties and cities in the SCAG region, where state-designated sensitive or riparian habitats are occupied by birds afforded protection 	<p>Significant and unavoidable</p>

Significance Threshold and Project Impacts	Mitigation Measures	Residual Impact
	<p>pursuant to the MBTA during the breeding season.</p> <ul style="list-style-type: none"> f) Consult with the CDFW for state-designated sensitive or riparian habitats where furbearing mammals, afforded protection pursuant to the provisions of the State Fish and Game Code for fur-bearing mammals, are actively using the areas in conjunction with breeding activities. g) Require project design to avoid sensitive natural communities and riparian habitats, wherever practicable and feasible. h) Where avoidance is determined to be infeasible, develop sufficient conservation measures through coordination with local agencies and the regulatory agency (i.e., USFWS or CDFW) to protect sensitive natural communities and riparian habitats and develop appropriate compensatory mitigation, where required. i) Appoint a qualified wetland biologist to monitor construction activities that may occur in or adjacent to sensitive communities. j) Appoint a qualified wetland biologist to monitor implementation of mitigation measures. k) Schedule construction activities to avoid sensitive times for biological resources and to avoid the rainy season when erosion and sediment transport is increased. l) When construction activities require stream crossings, schedule work during dry conditions and use rubber-wheeled vehicles, when feasible. Have a qualified wetland scientist determine if potential project impacts require a Notification of Lake or Streambed Alteration to CDFW during the planning phase of projects. m) Consult with local agencies, jurisdictions, and landowners where such state-designated sensitive or riparian habitats are afforded protection pursuant an adopted regional conservation plan. n) Install fencing and/or mark sensitive habitat to be avoided during construction activities. o) Salvage and stockpile topsoil (the surface material from 6 to 12 inches deep) and perennial native plants, when recommended by the qualified wetland biologist, for use in restoring native vegetation to areas of temporary disturbance within the project area. Salvage of soils containing invasive species, seeds and/or rhizomes will be avoided as identified by the qualified wetland biologist. p) Revegetate with appropriate native vegetation following the completion of construction activities. as identified by the qualified wetland biologist. q) Complete habitat enhancement (e.g., through removal of non-native invasive wetland species and replacement with more ecologically valuable native species). r) Use Best Management Practices (BMPs) at construction sites to minimize erosion and sediment transport from the area. BMPs include encouraging growth of native vegetation in disturbed areas, using straw bales or other silt-catching devices, and using settling basins to minimize soil transport. 	

Significance Threshold and Project Impacts	Mitigation Measures	Residual Impact
<p>Impact BIO-3: Have a substantial adverse effect on State or Federally Protected Wetlands (including but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption or other means.</p>	<p><i>SCAG Mitigation Measures</i> See SMM BIO-1 and SMM BIO-2.</p> <p><i>Project Level Mitigation Measures</i> See PMM BIO-1 and PMM BIO-2.</p> <p>PMM BIO-3: In accordance with provisions of sections 15091(a)(2) and 15126.4(a)(1)(B) of the <i>State CEQA Guidelines</i>, a Lead Agency for a project can and should consider mitigation measures to reduce substantial adverse effects related to wetlands. Such measures may include the following or other comparable measures identified by the Lead Agency.</p> <ul style="list-style-type: none"> a) Require project design to avoid federally protected aquatic resources consistent with the provisions of Sections 404 and 401 of the CWA, wherever practicable and feasible. b) Where the lead agency has identified that a project, or other regionally significant project, has the potential to impact other wetlands or waters, such as those considered Waters Of the State of California under the State Wetland Definition and Procedures for Dischargers of Dredged or Fill Material to Waters of the State , not protected under Section 404 or 401 of the CWA, seek comparable coverage for these wetlands and waters in consultation with the SWRCB, applicable RWQCB, and CDFW. c) Where avoidance is determined to be infeasible, develop sufficient conservation measures to fulfill the requirements of the applicable authorization for impacts to federal and state protected aquatic resource to support issuance of a permit under Section 404 of the CWA as administered by the USACE. The use of an authorized Nationwide Permit or issuance of an individual permit requires the project applicant to demonstrate compliance with the USACE’s Final Compensatory Mitigation Rule. The USACE reviews projects to ensure environmental impacts to aquatic resources are avoided or minimized as much as possible. Consistent with the administration’s performance standard of “no net loss of wetlands” a USACE permit may require a project proponent to restore, establish, enhance or preserve other aquatic resources in order to replace those affected by the proposed project. This compensatory mitigation process seeks to replace the loss of existing aquatic resource functions and area. Project proponents required to complete mitigation are encouraged to use a watershed approach and watershed planning information. The new rule establishes performance standards, sets timeframes for decision making, and to the extent possible, establishes equivalent requirements and standards for the three sources of compensatory mitigation: <ul style="list-style-type: none"> – Permittee-responsible mitigation – Contribution of in-kind in-lieu fees – Use of in-kind mitigation bank credits – Where avoidance is determined to be infeasible and d) Where avoidance is determined to be infeasible and proposed projects’ impacts exceed an existing Nationwide Permit (NWP) and/or California SWRCB-certified NWP, the lead agency should provide USACE and SWRCB (where applicable) an alternative analysis consistent with the Least Environmentally Damaging Practicable Alternatives in this order of priorities: 	<p>Significant and unavoidable</p>

Significance Threshold and Project Impacts	Mitigation Measures	Residual Impact
	<ul style="list-style-type: none"> - Avoidance - Impact Minimization - On-site alternatives - Off-site alternatives <p>e) Require review of construction drawings by a certified wetland delineator as part of each project-specific environmental analysis to determine whether aquatic resources will be affected and, if necessary, perform formal wetland delineation</p>	
<p>Impact BIO-4: Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites.</p>	<p><i>SCAG Mitigation Measures</i> See SMM BIO-1 and SMM BIO-2, SMM AG-1 through SMM AG-4, SMM GHG-1, SMM WF-1.</p> <p>SMM BIO-3: SCAG shall encourage and facilitate research, programs and policies to identify, protect and restore natural habitat corridors, especially where corridors cross county boundaries. Additionally, continue support for preserving wildlife corridors and wildlife crossings to minimize the impact of transportation projects on wildlife species and habitat fragmentation.</p> <p><i>Project Level Mitigation Measures</i> See PMM BIO-1 through PMM BIO-3.</p> <p>PMM BIO-4: In accordance with provisions of sections 15091(a)(2) and 15126.4(a)(1)(B) of the <i>State CEQA Guidelines</i>, a Lead Agency for a project can and should consider mitigation measures to reduce substantial adverse effects related to wildlife movement. Such measures may include the following or other comparable measures identified by the Lead Agency:</p> <ul style="list-style-type: none"> a) Consult with the USFS where impacts to migratory wildlife corridors may occur in an area afforded protection by an adopted Forest Land Management Plan or Resource Management Plan for the four national forests in the six-County area: Angeles, Cleveland, Los Padres, and San Bernardino. b) Consult with counties, cities, and other local organizations when impacts may occur to open space areas that have been designated as important for wildlife movement related to local ordinances or conservation plans. c) Prohibit construction activities within 500 feet of occupied breeding areas for wildlife afforded protection pursuant to Title 14 § 460 of the California Code of Regulations protecting fur-bearing mammals, during the breeding season. d) Conduct a survey to identify active raptor and other migratory nongame bird nests by a qualified biologist at least two weeks before the start of construction at project sites from February 1 through August 31. e) Prohibit construction activities with 250 feet of occupied nest of birds afforded protection pursuant to the Migratory Bird Treaty Act, during the breeding season. f) Ensure that suitable nesting sites for migratory nongame native bird species protected under the Migratory Bird Treaty Act and/or trees with unoccupied raptor nests should only be removed prior to February 1, or following the nesting season. g) When feasible and practicable, proposed projects will be designed to minimize impacts to wildlife movement and habitat connectivity and preserve existing and functional wildlife 	<p>Significant and unavoidable</p>

Significance Threshold and Project Impacts	Mitigation Measures	Residual Impact
	<p>corridors.</p> <ul style="list-style-type: none"> h) Conduct site-specific analyses of opportunities to preserve or improve habitat linkages with areas on- and off-site. i) Long linear projects with the possibility of impacting wildlife movement should analyze habitat linkages/wildlife movement corridors on a broad scale to avoid critical narrow choke points that could reduce function of recognized movement corridor. j) Require review of construction drawings and habitat connectivity mapping by a qualified biologist to determine the risk of habitat fragmentation. k) Pursue mitigation banking to preserve habitat linkages and corridors (opportunities to purchase, maintain, and/or restore offsite habitat). l) When practicable and feasible design projects to promote wildlife corridor redundancy by including multiple connections between habitat patches. m) Evaluate the potential for installation of overpasses, underpasses, and culverts to create wildlife crossings in cases where a roadway or other transportation project may interrupt the flow of species through their habitat. Provide wildlife crossings in accordance with proven standards, such as FHWA’s Critter Crossings or Ventura County Mitigation Guidelines and in consultation with wildlife corridor authorities. n) Install wildlife fencing where appropriate to minimize the probability of wildlife injury due to direct interaction between wildlife and roads or construction. o) Where avoidance is determined to be infeasible, design sufficient conservation measures through coordination with local agencies and the regulatory agency (i.e., USFWS or CDFW) and in accordance with the respective counties and cities general plans to establish plans to mitigate for the loss of fish and wildlife movement corridors and/or wildlife nursery sites. The consideration of conservation measures may include the following measures, in addition to the measures outlined in MM-BIO-1(b), where applicable: <ul style="list-style-type: none"> – Wildlife movement buffer zones – Corridor realignment – Appropriately spaced breaks in center barriers – Stream rerouting – Culverts – Creation of artificial movement corridors such as freeway under- or overpasses – Other comparable measures p) Where the lead agency has identified that a RTP/SCS project, or other regionally significant project, has the potential to impact other open space or nursery site areas, seek comparable coverage for these areas in consultation with the USFWS, CDFW, NMFS, or other local jurisdictions. 	

Significance Threshold and Project Impacts	Mitigation Measures	Residual Impact
<p>Impact BIO-5: Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance.</p>	<p>SCAG Mitigation Measures See SMM BIO-1, SMM BIO-2 and SMM BIO-3.</p> <p><i>Project Level Mitigation Measures</i> See PMM BIO-1 through PMM BIO-4.</p> <p>PMM BIO-5: In accordance with provisions of sections 15091(a)(2) and 15126.4(a)(1)(B) of the <i>State CEQA Guidelines</i>, a Lead Agency for a project can and should consider mitigation measures to reduce conflicts with local policies and ordinances protecting biological resources . Such measures may include the following or other comparable measures identified by the Lead Agency.</p> <ul style="list-style-type: none"> a) Consult with the appropriate local agency responsible for the administration of the policy or ordinance protecting biological resources. b) Prioritize retention of trees on-site consistent with local regulations. Provide adequate protection during the construction period for any trees that are to remain standing, as recommended by an International Society of Arboriculture (ISA) certified arborist. c) If specific project area trees are designated as "Protected Trees," "Landmark Trees," or "Heritage Trees," obtain approval for encroachment or removals through the appropriate entity, and develop appropriate mitigation measures at that time, to ensure that the trees are replaced. Mitigation trees shall be locally collected native species, as directed by a qualified biologist. d) Appoint an ISA certified arborist to monitor construction activities that may occur in areas with trees are designated as "Protected Trees," "Landmark Trees," or "Heritage Trees," to facilitate avoidance of resources not permitted for impact. Before the start of any clearing, excavation, construction or other work on the site, securely fence off every protected tree deemed to be potentially endangered by said site work. Keep such fences in place for duration of all such work. Clearly mark all trees to be removed. e) Establish a scheme for the removal and disposal of logs, brush, earth and other debris that will avoid injury to any protected tree. Where proposed development or other site work could encroach upon the protected perimeter of any protected tree, incorporate special measures to allow the roots to breathe and obtain water and nutrients. Minimize any excavation, cutting, filing, or compaction of the existing ground surface within the protected perimeter. Require that no change in existing ground level occur from the base of any protected tree at any time. Require that no burning or use of equipment with an open flame occur near or within the protected perimeter of any protected tree. f) Require that no storage or dumping of oil, gas, chemicals, or other substances that may be harmful to trees occur from the base of any protected trees, or any other location on the site from which such substances might enter the protected perimeter. Require that no heavy construction equipment or construction materials be operated or stored within a distance from the base of any protected trees. Require that wires, ropes, or other devices not be attached to any protected tree, except as needed for support of the tree. Require that no sign, other than a tag showing the botanical classification, be attached to any protected tree. g) Thoroughly spray the leaves of protected trees with water periodically during construction to 	<p>Significant and unavoidable</p>

Significance Threshold and Project Impacts	Mitigation Measures	Residual Impact
	<p>prevent buildup of dust and other pollution that would inhibit leaf transpiration, as directed by the certified arborist.</p> <p>h) If any damage to a protected tree should occur during or as a result of work on the site, the appropriate local agency will be immediately notified of such damage. If, such tree cannot be preserved in a healthy state, as determined by the certified arborist, require replacement of any tree removed with another tree or trees on the same site deemed adequate by the local agency to compensate for the loss of the tree that is removed. Remove all debris created as a result of any tree removal work from the property within two weeks of debris creation, and such debris shall be properly disposed of in accordance with all applicable laws, ordinances, and regulations. Design projects to avoid conflicts with local policies and ordinances protecting biological resources</p> <p>i) Where avoidance is determined to be infeasible, sufficient conservation measures to fulfill the requirements of the applicable policy or ordinance shall be developed, such as to support issuance of a tree removal permit. The consideration of conservation measures may include:</p> <ul style="list-style-type: none"> - Avoidance strategies - Contribution of in-lieu fees - Planting of replacement trees - Re-landscaping areas with native vegetation post-construction - Other comparable measures developed in consultation with local agency and certified arborist. 	
<p>Impact BIO-6: Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan.</p>	<p><i>SCAG Mitigation Measures</i> SMM BIO-1, SMM BIO-2 and SMM BIO-3.</p> <p><i>Project Level Mitigation Measures</i> See PMM BIO-1 through PMM BIO-5.</p> <p>PMM BIO-6: In accordance with provisions of sections 15091(a)(2) and 15126.4(a)(1)(B) of the <i>State CEQA Guidelines</i>, a Lead Agency for a project can and should consider mitigation measures to reduce substantial adverse effects on HCPs and NCCPs. Such measures may include the following or other comparable measures identified by the Lead Agency:</p> <ul style="list-style-type: none"> a) Consult with the appropriate federal, state, and/or local agency responsible for the administration of HCPs or NCCPs. b) Wherever practicable and feasible, the project shall be designed to avoid lands preserved under the conditions of an HCP or NCCP. c) Where avoidance is determined to be infeasible, sufficient conservation measures to fulfill the requirements of the HCP and/or NCCP, which would include but not be limited to applicable authorization for incidental take pursuant to Section 7 or 10(a) of the federal Endangered Species Act or Section 2081 of the California ESA, shall be developed to support issuance of an incidental take permit or any other permissions required for development within the HCP/NCCP boundaries. The consideration of additional conservation measures would include the measures outlined in SMM-BIO-2, where applicable. 	<p>Significant and unavoidable</p>

Significance Threshold and Project Impacts	Mitigation Measures	Residual Impact
CULTURAL RESOURCES		
<p>Impact CULT-1: Cause a substantial adverse change in the significance of a historical resource pursuant to § 15064.5.</p>	<p><i>SCAG Mitigation Measure</i></p> <p>SMM CULT-1: Impacts to cultural resources shall be minimized through cooperation, information sharing, and SCAG’s ongoing regional planning efforts such as web-based planning tools for local governments including CA LOTS, and other GIS tools and data services, including, but not limiting to, Map Gallery, GIS library, and GIS applications; and direct technical assistance efforts such as Toolbox Tuesday series and sharing of associated online Training materials. SCAG shall consult with resource agencies such as the National Park Service, Office of Historic Preservation, and Native American Heritage Commission to identify opportunities for early and effective consultation to identify archaeological sites, historical resources, and cemeteries to avoid such resources wherever practicable and feasible and reduce or mitigate for conflicts in compatible land use to the maximum extent practicable.</p> <p><i>Project Level Mitigation Measures</i></p> <p>PMM CULT-1: In accordance with provisions of sections 15091(a)(2) and 15126.4(a)(1)(B) of the <i>State CEQA Guidelines</i>, a Lead Agency for a project can and should consider mitigation measures to reduce substantial adverse effects related to historical resources. Such measures may include the following or other comparable measures identified by the Lead Agency:</p> <ul style="list-style-type: none"> a) Pursuant to <i>CEQA Guidelines</i> Section 15064.5, conduct a record search during the project planning phase at the appropriate Information Center to determine whether the project area has been previously surveyed and whether historical resources were identified. b) During the project planning phase, retain a qualified architectural historian, defined as an individual who meets the Secretary of the Interior’s (SOI) Professional Qualification Standards (PQS) in Architectural History, to conduct historic architectural surveys if a built environment resource greater than 45 years in age may be affected by the project or if recommended by the Information Center. c) Comply with Section 106 of the National Historic Preservation Act (NHPA) including, but not limited to, projects for which federal funding or approval is required for the individual project. This law requires federal agencies to evaluate the impact of their actions on resources included in or eligible for listing in the National Register. Federal agencies must coordinate with the State Historic Preservation Officer in evaluating impacts and developing mitigation. These mitigation measures may include, but are not limited to the following: <ul style="list-style-type: none"> – Employ design measures to avoid historical resources and undertake adaptive reuse where appropriate and feasible. If resources are to be preserved, as feasible, carry out the maintenance, repair, stabilization, rehabilitation, restoration, preservation, conservation or reconstruction in a manner consistent with the Secretary of the Interior’s Guidelines for Preserving, Rehabilitating, Restoring, and Reconstructing Historic Buildings. If resources would be impacted, impacts should be minimized to the extent feasible. – Where feasible, noise buffers/walls and/or visual buffers/landscaping should be constructed to preserve the contextual setting of significant built resources. d) If a project requires the relocation, rehabilitation, or alteration of an eligible historical resource, the Secretary of the Interior’s Standards for the Treatment of Historic Properties should be used 	<p>Significant and unavoidable</p>

Significance Threshold and Project Impacts	Mitigation Measures	Residual Impact
	<p>to the maximum extent possible to ensure the historical significance of the resource is not impaired. The application of the standards should be overseen by an architectural historian or historic architect meeting the SOI PQS. Prior to any construction activities that may affect the historical resource, a report, meeting industry standards, should identify and specify the treatment of character-defining features and construction activities and be provided to the Lead Agency for review and approval.</p> <ul style="list-style-type: none"> e) If a project would result in the demolition or significant alteration of a historical resource eligible for or listed in the National Register of Historic Places (NRHP), California Register of Historical Resources (CRHR), or local register, recordation should take the form of Historic American Buildings Survey (HABS), Historic American Engineering Record (HAER), or Historic American Landscape Survey (HALS) documentation, and should be performed by an architectural historian or historian who meets the SOI PQS. Recordation should meet the SOI Standards and Guidelines for Architectural and Engineering, which defines the products acceptable for inclusion in the HABS/HAER/HALS collection at the Library of Congress. The specific scope and details of documentation should be developed at the project level in coordination with the Lead Agency. f) During the project planning phase, obtain a qualified archaeologist, defined as one who meets the SOI PQS for archaeology, to conduct a record search at the appropriate Information Center of the California Historical Resources Information System (CHRIS) to determine whether the project area has been previously surveyed and whether resources were identified. g) Contact the NAHC to request a Sacred Lands File search and a list of relevant Native American contacts who may have additional information. h) During the project planning phase, obtain a qualified archaeologist or architectural historian (depending on applicability) to conduct archaeological and/or historic architectural surveys as recommended by the qualified professional, the Lead Agency, or the Information Center. In the event the records indicate that no previous survey has been conducted, the qualified professional or Information Center will make a recommendation on whether a survey is warranted based on the sensitivity of the project area for archaeological resources. i) If potentially significant archaeological resources are identified through survey, and impacts to these resources cannot be avoided, a Phase II Testing and Evaluation investigation should be performed by a qualified archaeologist prior to any construction-related ground-disturbing activities to determine significance. If resources determined significant or unique through Phase II testing, and avoidance is not possible, appropriate resource-specific mitigation measures should be established by the lead agency and undertaken by qualified personnel. These might include a Phase III data recovery program implemented by a qualified archaeologist and performed in accordance with the OHP's Archaeological Resource Management Reports (ARMR): Recommended Contents and Format and Guidelines for Archaeological Research Designs. Additional options can include 1) interpretative signage, or 2) educational outreach that helps inform the public of the past activities that occurred in this area. Archaeological materials collected from a significant resource should be curated with a recognized scientific or educational repository j) If a record search or archaeological assessment indicates that the project is located in an area 	

Significance Threshold and Project Impacts	Mitigation Measures	Residual Impact
	<p>sensitive for archaeological resources, as determined by the Lead Agency in consultation with a qualified archaeologist, retain an archaeological monitor to observe ground disturbing operations, including but not limited to grading, excavation, trenching, or removal of existing features of the subject property. The archaeological monitor should be supervised by an archaeologist meeting the SOI PQS</p> <p>k) Conduct construction activities and excavation to avoid cultural resources (if identified). If avoidance is not feasible, further work may be needed to determine the importance of a resource. Retain a qualified archaeologist, and/or as appropriate, a qualified architectural historian who should make recommendations regarding the work necessary to assess significance. If the cultural resource is determined to be significant under state or federal guidelines, impacts to the cultural resource will need to be mitigated.</p> <p>l) Stop construction activities and excavation in the area where cultural resources are found until a qualified archaeologist can determine whether these resources are significant. If the archaeologist determines that the discovery is significant, it should be curated with a recognized scientific or educational repository.</p>	
<p>Impact CULT-2: Cause a substantial adverse change in the significance of an archaeological resource pursuant to § 15064.5.</p>	<p><i>SCAG Mitigation Measure</i> See SMM CULT-1. <i>Project Level Mitigation Measures</i> See PMM CULT-1.</p>	<p>Significant and unavoidable</p>
<p>Impact CULT-3: Disturb human remains, including those interred outside of dedicated cemeteries.</p>	<p><i>SCAG Mitigation Measures</i> See SMM CULT-1 <i>Project Level Mitigation Measures</i> PMM CULT-2: In accordance with provisions of sections 15091(a)(2) and 15126.4(a)(1)(B) of the <i>State CEQA Guidelines</i>, a Lead Agency for a project can and should consider mitigation measures to reduce substantial adverse effects related to human remains. Such measures may include the following or other comparable measures identified by the Lead Agency:</p> <p>a) In the event of discovery or recognition of any human remains during construction or excavation activities associated with the project, in any location other than a dedicated cemetery, cease further excavation or disturbance of the site or any nearby area reasonably suspected to overlie adjacent human remains until the coroner of the county in which the remains are discovered has been informed and has determined that no investigation of the cause of death is required.</p> <p>b) If any discovered remains are of Native American origin:</p> <ul style="list-style-type: none"> - Contact the County Coroner to contact the NAHC to designate a Native American Most Likely Descendant (MLD). The MLD should make a recommendation to the landowner or the person responsible for the excavation work, for means of treating or disposing of, with appropriate dignity, the human remains and any associated grave goods. This may include obtaining a qualified archaeologist or team of archaeologists to properly excavate the human remains. 	<p>Significant and unavoidable</p>

Significance Threshold and Project Impacts	Mitigation Measures	Residual Impact
	<ul style="list-style-type: none"> - If the NAHC is unable to identify a MLD, or the MLD fails to make a recommendation within 48 hours after being notified by the commission, or the landowner or his representative rejects the recommendation of the MLD and the mediation by the NAHC fails to provide measures acceptable to the landowner, obtain a culturally affiliated Native American monitor, and an archaeologist, if recommended by the Native American monitor, and rebury the Native American human remains and any associated grave goods, with appropriate dignity, on the property and in a location that is not subject to further subsurface disturbance. 	
ENERGY		
Impact ENR-1: Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation.	No mitigation is required	Less than significant
Impact ENR-2: Conflict with or obstruct a state or local plan for renewable energy or energy efficiency.	No mitigation is required	Less than significant
GEOLOGY AND SOILS		
Impact GEO-1: Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving: (i) rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42; (ii) strong seismic ground shaking; (iii) seismic-related ground failure, including liquefaction; (iv) landslides.	No mitigation is required	Less than significant
Impact GEO-2: Result in substantial soil erosion or the loss of topsoil	<p><i>SCAG Mitigation Measure</i></p> <p>SMM-GEO-1: SCAG shall facilitate the minimization of substantial soil erosion or loss of topsoil through cooperation, information sharing, and regional program development as part of SCAG’s ongoing regional planning efforts. Such efforts shall include web-based planning tools for local government including CA LOTS, and other GIS tools and data services, including, but not limited to, Map Gallery, GIS library, and GIS applications, and direct technical assistance efforts such as training series and sharing of associated online training materials. Resource agencies, such as the U.S. Geology Survey, shall be consulted during this update process.</p> <p><i>Project Mitigation Measures</i></p> <p>PMM-GEO-1: In accordance with provisions of sections 15091(a)(2) and 15126.4(a)(1)(B) of the <i>State CEQA Guidelines</i>, a Lead Agency for a project can and should consider mitigation measures to reduce substantial adverse effects related to historical resources. Such measures may include the following</p>	Significant and unavoidable

Significance Threshold and Project Impacts	Mitigation Measures	Residual Impact
	or other comparable measures identified by the Lead Agency: <ul style="list-style-type: none"> a) Consistent with the CBC and local regulatory agencies with oversight of development associated with the Plan, ensure that site-specific geotechnical investigations conducted by a qualified geotechnical expert are conducted to ascertain soil types prior to preparation of project designs. These investigations can and should identify areas of potential failure and recommend remedial geotechnical measures to eliminate any problems. b) Consistent with the requirements of the State Water Resources Control Board (SWRCB) for projects over one acre in size, obtain coverage under the General Construction Activity Storm Water Permit (General Construction Permit) issued by the SWRCB and prepare a stormwater pollution prevention plan (SWPPP) and submit the plan for review and approval by the Regional Water Quality Control Board (RWQCB). At a minimum, the SWPPP should include a description of construction materials, practices, and equipment storage and maintenance; a list of pollutants likely to contact stormwater; site-specific erosion and sedimentation control practices; a list of provisions to eliminate or reduce discharge of materials to stormwater; best management practices (BMPs); and an inspection and monitoring program. c) Consistent with the requirements of the SWRCB and local regulatory agencies with oversight of development associated with the Plan, ensure that project designs provide adequate slope drainage and appropriate landscaping to minimize the occurrence of slope instability and erosion. Design features should include measures to reduce erosion caused by storm water. Road cuts should be designed to maximize the potential for revegetation. d) Consistent with the CBC and local regulatory agencies with oversight of development associated with the Plan, ensure that, prior to preparing project designs, new and abandoned wells are identified within construction areas to ensure the stability of nearby soils. 	
Impact GEO-3: Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction, or collapse.	No mitigation is required	Less than significant
Impact GEO-4: Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property.	No mitigation is required	Less than significant
Impact GEO-5: Have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water.	No mitigation is required	Less than significant
Impact GEO-6: Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature.	<i>SCAG Mitigation Measure</i> SMM-GEO-3: Impacts to paleontological resources shall be minimized through cooperation, information sharing, and SCAG's ongoing regional planning efforts such as web-based planning tools for local	Significant and unavoidable

Significance Threshold and Project Impacts	Mitigation Measures	Residual Impact
	<p>governments including CA LOTS, and other GIS tools and data services, including, but not limiting to, Map Gallery, GIS library, and GIS applications; and direct technical assistance efforts such as training series and sharing of associated online training materials. SCAG shall consult with resource agencies such as the National Park Service, United States Forest Service, and Bureau of Land Management to identify opportunities for early and effective consultation to identify unique paleontological resources and unique geological features to avoid such resources wherever practicable and feasible and reduce or mitigation for conflicts in compatible land use to the maximum extent practicable.</p> <p><i>Project Level Mitigation Measures</i></p> <p>PMM-GEO-1: In accordance with provisions of sections 15091(a)(2) and 15126.4(a)(1)(B) of the <i>State CEQA Guidelines</i>, a Lead Agency for a project can and should consider mitigation measures to reduce substantial adverse effects related to paleontological resources. Such measures may include the following or other comparable measures identified by the Lead Agency:</p> <ul style="list-style-type: none"> a) Ensure compliance with the Paleontological Resources Preservation Act, the Federal Land Policy and Management Act, the Antiquities Act, Section 5097.5 of the Public Resources Code (PRC), adopted county and city general plans, and other federal, state and local regulations, as applicable and feasible, by adhering to and incorporating the performance standards and practices from the 2010 Society for Vertebrate Paleontology (SVP) standard procedures for the assessment and mitigation of adverse impacts to paleontological resources. b) Obtain review by a qualified paleontologist (e.g. who meets the SVP standards for a Principal Investigator or Project Paleontologist or the Bureau of Land Management (BLM) standards for a Principal Investigator), to determine if the project has the potential to require ground disturbance of parent material with potential to contain unique paleontological or resources, or to require the substantial alteration of a unique geologic feature. The assessment should include museum records searches, a review of geologic mapping and the scientific literature, geotechnical studies (if available), and potentially a pedestrian survey, if units with paleontological potential are present at the surface. c) Avoid exposure or displacement of parent material with potential to yield unique paleontological resources. d) Where avoidance of parent material with the potential to yield unique paleontological resources is not feasible: <ul style="list-style-type: none"> 1) All on-site construction personnel receive Worker Education and Awareness Program (WEAP) training prior to the commencement of excavation work to understand the regulatory framework that provides for protection of paleontological resources and become familiar with diagnostic characteristics of the materials with the potential to be encountered. 2) A qualified paleontologist prepares a Paleontological Resource Management Plan (PRMP) to guide the salvage, documentation and repository of unique paleontological resources encountered during construction. The PRMP should adhere to and incorporate the performance standards and practices from the 2010 SVP Standard procedures for the assessment and mitigation of adverse impacts to paleontological resources. If unique 	

Significance Threshold and Project Impacts	Mitigation Measures	Residual Impact
	<p>paleontological resources are encountered during construction, use a qualified paleontologist to oversee the implementation of the PRMP.</p> <p>3) Monitor ground disturbing activities in parent material, with a moderate to high potential to yield unique paleontological resources using a qualified paleontological monitor meeting the standards of the SVP or the BLM to determine if unique paleontological resources are encountered during such activities, consistent with the specified or comparable protocols.</p> <p>4) Identify where ground disturbance is proposed in a geologic unit having the potential for containing fossils and specify the need for a paleontological monitor to be present during ground disturbance in these areas.</p> <p>e) Avoid routes and project designs that would permanently alter unique geological features.</p> <p>f) Salvage and document adversely affected resources sufficient to support ongoing scientific research and education.</p> <p>g) Significant recovered fossils should be prepared to the point of curation, identified by qualified experts, listed in a database to facilitate analysis, and deposited in a designated paleontological curation facility.</p> <p>h) Following the conclusion of the paleontological monitoring, the qualified paleontologist should prepare a report stating that the paleontological monitoring requirement has been fulfilled and summarize the results of any paleontological finds. The report should be submitted to the lead CEQA and the repository curating the collected artifacts, and should document the methods and results of all work completed under the PRMP, including treatment of paleontological materials, results of specimen processing, analysis, and research, and final curation arrangements.</p>	

GREENHOUSE GASES

<p>Impact GHG-1: Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment.</p>	<p><i>SCAG Mitigation Measures</i></p> <p>SMM GHG-1: SCAG, in partnership with local air districts, shall continue to work with the counties and cities to adopt qualified GHG reduction plans (e.g., climate action plans [CAPs], develop GHG-reducing planning policies, and implement local climate initiatives. These reductions can be achieved through a combination of programs, that implement plans developed collaboratively, including ZNE in new construction, retrofits of existing buildings, incentivizing the development of renewable energy sources that serve both new and existing land uses, as well as measures to reduce GHG emissions from transportation sources.</p> <p>SMM GHG-2: SCAG shall encourage energy efficient design for buildings, through SCAG’s Sustainable Communities Program potentially including strengthening local building codes for new construction and renovation to achieve a higher level of energy efficiency.</p> <p>SMM GHG-3: SCAG shall continue working with partners including universities, utilities, regulating agencies, the private sector and NGO’s, and member agencies to support deployment of electric vehicle (EV) charging in the region. SCAG shall provide resources to member agencies and supply them with available information and data so that they can better take advantage of legislation and funding for EV charging.</p>	<p>Significant and unavoidable</p>
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Significance Threshold and Project Impacts	Mitigation Measures	Residual Impact
	<p>SMM GHG-4: SCAG shall continue to pursue partnerships with SCE, municipal utilities, locally operated electricity providers and CPUC to promote energy efficient development in the SCAG region, through coordinated planning and data and information sharing activities.</p> <p><i>Project Level Mitigation Measures:</i></p> <p>PMM-GHG-1: In accordance with provisions of sections 15091(a)(2) and 15126.4(a)(1)(B) of the <i>State CEQA Guidelines</i>, a Lead Agency for a project can and should consider mitigation measures to reduce substantial adverse effects related to greenhouse gas emissions. Such measures may include the following or other comparable measures identified by the Lead Agency:</p> <ul style="list-style-type: none"> a) Integrate green building measures consistent with CALGreen (California Building Code Title 24), local building codes and other applicable laws, into project design including: <ul style="list-style-type: none"> i. Use energy efficient materials in building design, construction, rehabilitation, and retrofit. ii. Install energy-efficient lighting, heating, and cooling systems (cogeneration); water heaters; appliances; equipment; and control systems. iii. Reduce lighting, heating, and cooling needs by taking advantage of light-colored roofs, trees for shade, and sunlight. iv. Incorporate passive environmental control systems that account for the characteristics of the natural environment. v. Use high-efficiency lighting and cooking devices. vi. Incorporate passive solar design. vii. Use high-reflectivity building materials and multiple glazing. viii. Prohibit gas-powered landscape maintenance equipment. ix. Install electric vehicle charging stations. x. Reduce wood burning stoves or fireplaces. xi. Provide bike lanes accessibility and parking at residential developments. b) Reduce emissions resulting from projects through implementation of project features, project design, or other measures, such as those described in Appendix F of the State CEQA Guidelines. c) Include off-site measures to mitigate a project’s emissions. d) Measures that consider incorporation of Best Available Control Technology (BACT) during design, construction and operation of projects to minimize GHG emissions, including but not limited to: <ul style="list-style-type: none"> i. Use energy and fuel-efficient vehicles and equipment; ii. Deployment of zero- and/or near zero emission technologies; iii. Use lighting systems that are energy efficient, such as LED technology; iv. Use the minimum feasible amount of GHG-emitting construction materials; v. Use cement blended with the maximum feasible amount of flash or other materials 	

Significance Threshold and Project Impacts	Mitigation Measures	Residual Impact
	<p>that reduce GHG emissions from cement production;</p> <ul style="list-style-type: none"> vi. Incorporate design measures to reduce GHG emissions from solid waste management through encouraging solid waste recycling and reuse; vii. Incorporate design measures to reduce energy consumption and increase use of renewable energy; viii. Incorporate design measures to reduce water consumption; ix. Use lighter-colored pavement where feasible; x. Recycle construction debris to maximum extent feasible; xi. Plant shade trees in or near construction projects where feasible; and xii. Solicit bids that include concepts listed above. <p>e) Measures that encourage transit use, carpooling, bike-share and car-share programs, active transportation, and parking strategies, including, but not limited to the following:</p> <ul style="list-style-type: none"> i. Promote transit-active transportation coordinated strategies; ii. Increase bicycle carrying capacity on transit and rail vehicles; iii. Improve or increase access to transit; iv. Increase access to common goods and services, such as groceries, schools, and day care; v. Incorporate affordable housing into the project; vi. Incorporate the neighborhood electric vehicle network; vii. Orient the project toward transit, bicycle and pedestrian facilities; viii. Improve pedestrian or bicycle networks, or transit service; ix. Provide traffic calming measures; x. Provide bicycle parking; xi. Limit or eliminate park supply; xii. Unbundle parking costs; xiii. Provide parking cash-out programs; xiv. Implement or provide access to commute reduction program; <p>f) Incorporate bicycle and pedestrian facilities into project designs, maintaining these facilities, and providing amenities incentivizing their use; and planning for and building local bicycle projects that connect with the regional network;</p> <p>g) Improving transit access to rail and bus routes by incentives for construction of transit facilities within developments, and/or providing dedicated shuttle service to transit stations; and</p> <p>h) Adopting employer trip reduction measures to reduce employee trips such as vanpool and carpool programs, providing end-of-trip facilities, and telecommuting programs including but not limited to measures that:</p> <ul style="list-style-type: none"> i. Provide car-sharing, bike sharing, and ride-sharing programs; 	

Significance Threshold and Project Impacts	Mitigation Measures	Residual Impact
	<ul style="list-style-type: none"> ii. Provide transit passes; iii. Shift single occupancy vehicle trips to carpooling or vanpooling, for example providing ride-matching services; iv. Provide incentives or subsidies that increase that use of modes other than single-occupancy vehicle; v. Provide on-site amenities at places of work, such as priority parking for carpools and vanpools, secure bike parking, and showers and locker rooms; vi. Provide employee transportation coordinators at employment sites; vii. Provide a guaranteed ride home service to users of non-auto modes. i) Designate a percentage of parking spaces for ride-sharing vehicles or high-occupancy vehicles, and provide adequate passenger loading and unloading for those vehicles; j) Land use siting and design measures that reduce GHG emissions, including: <ul style="list-style-type: none"> i. Developing on infill and brownfields sites; ii. Building compact and mixed-use developments near transit; iii. Retaining on-site mature trees and vegetation, and planting new canopy trees; iv. Measures that increase vehicle efficiency, encourage use of zero and low emissions vehicles, or reduce the carbon content of fuels, including constructing or encouraging construction of electric vehicle charging stations or neighborhood electric vehicle networks, or charging for electric bicycles; and v. Measures to reduce GHG emissions from solid waste management through encouraging solid waste recycling and reuse. 	
<p>Impact GHG-2: Conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of greenhouse gases.</p>	<p><i>SCAG Mitigation Measures</i> See SMM GHG -1, SMM GHG-2, SMM GHG-3, and SMM GHG-4.</p> <p><i>Project Level Mitigation Measures</i> See PMM-GHG-1.</p>	<p>Significant and unavoidable</p>

HAZARDS AND HAZARDOUS MATERIALS

<p>Impact HAZ-1: Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials.</p>	<p><i>SCAG Mitigation Measures</i></p> <p>SMM HAZ-1: SCAG shall work with the U.S. DOT, the Office of Environmental Service Caltrans, and the private sector to continue to conduct driver safety training programs and enforce speed limits on roadways. In an effort to reduce risks associated with the transport of hazardous materials in the SCAG region, SCAG shall encourage the U.S. Department of Transportation and the California Highway Patrol to continue to enforce speed limits and existing regulations governing goods movement and hazardous materials transportation.</p> <p>SMM HAZ-2: SCAG shall notify member agencies of the importance of ensuring that construction and operation of transportation projects provide for the safe transport and disposal of hazardous waste, consistent with the provisions of HMR, 49 CFR Parts 171–180.</p> <p>SMM HAZ-3: SCAG shall coordinate with the Office of Environmental Services to identify any transportation</p>	<p>Significant and unavoidable</p>
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Significance Threshold and Project Impacts	Mitigation Measures	Residual Impact
	<p>infrastructure elements within the SCAG region where risks to people and property occur at an above-average incident level, potentially warranting consideration for remedial design in future regional transportation plans (RTPs).</p> <p><i>Project Level Mitigation Measures</i></p> <p>PMM HAZ-1: In accordance with provisions of sections 15091(a)(2) and 15126.4(a)(1)(B) of the <i>State CEQA Guidelines</i>, a Lead Agency for a project can and should consider mitigation measures to reduce substantial adverse effects related to the routine transport, use, or disposal of hazardous materials, as applicable and feasible. Such measures may include the following or other comparable measures identified by the Lead Agency:</p> <ol style="list-style-type: none"> a) Where the construction or operation of projects involves the transport of hazardous material, provide a written plan of proposed routes of travel demonstrating use of roadways designated for the transport of such materials. b) Specify Project requirements for interim storage and disposal of hazardous materials during construction and operation. Storage and disposal strategies must be consistent with applicable federal, state, and local statutes and regulations. Specify the appropriate procedures for interim storage and disposal of hazardous materials, anticipated to be required in support of operations and maintenance activities, in conformance with applicable federal, state, and local statutes and regulations, in the business plan for projects as applicable and appropriate. c) Submit a Hazardous Materials Business/Operations Plan for review and approval by the appropriate local agency. Once approved, keep the plan on file with the Lead Agency (or other appropriate government agency) and update, as applicable. The purpose of the Hazardous Materials Business/Operations Plan is to ensure that employees are adequately trained to handle the materials and provides information to the local fire protection agency should emergency response be required. The Hazardous Materials Business/Operations Plan should include the following: <ul style="list-style-type: none"> o The types of hazardous materials or chemicals stored and/or used on-site, such as petroleum fuel products, lubricants, solvents, and cleaning fluids. o The location of such hazardous materials. o An emergency response plan including employee training information. o A plan that describes the way these materials are handled, transported and disposed. d) Follow manufacturer’s recommendations on use, storage, and disposal of chemical products used in construction. e) Avoid overtopping construction equipment fuel gas tanks. f) Properly contain and remove grease and oils during routine maintenance of construction equipment. g) Properly dispose of discarded containers of fuels and other chemicals. h) Prior to shipment remove the most volatile elements, including flammable natural gas liquids, as feasible. i) Identify and implement more stringent tank car safety standards. 	

Significance Threshold and Project Impacts	Mitigation Measures	Residual Impact
	<ul style="list-style-type: none"> j) Improve rail transportation route analysis, and modification of routes based on that analysis. k) Use the best available inspection equipment and protocols and implement positive train control. l) Reduce train car speeds to 40 miles per hour when passing through urbanized areas of any size. m) Limit storage of crude oil tank cars in urbanized areas of any size and provide appropriate security in storage yards for all shipments. n) Notify in advance county and city emergency operations offices of all crude oil shipments, including a contact number that can provide real-time information in the event of an oil train derailment or accident. o) Report quarterly hazardous commodity flow information, including classification and characterization of materials being transported, to all first response agencies (49 Code Fed. Regs. 15.5) along the mainline rail routes used by trains carrying crude oil identified. p) Fund training and outfitting emergency response crews that includes the cost of backfilling personnel while in training. q) Undertake annual emergency responses scenario/field based training including Emergency Operations Center Training activations with local emergency response agencies. 	
<p>Impact HAZ-2: Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment.</p>	<p><i>SCAG Mitigation Measures</i> See SMM HAZ-1 through SMM HAZ-3.</p> <p><i>Project Level Mitigation Measures</i> See PMM HAZ-1.</p> <p>PMM HAZ-2: In accordance with provisions of sections 15091(a)(2) and 15126.4(a)(1)(B) of the <i>State CEQA Guidelines</i>, a Lead Agency for a project can and should consider mitigation measures to reduce hazards related to the reasonably foreseeable upsets and accidents involving the release of hazardous materials, as applicable and feasible. Such measures may include the following or other comparable measures identified by the Lead Agency:</p> <ul style="list-style-type: none"> a) Removal of the most volatile elements, including flammable natural gas liquids, prior to shipment; b) More stringent tank car safety standards; c) Improved rail transportation route analysis, and modification of routes based on that analysis; d) Utilization of the best available inspection equipment and protocols, and implementation of positive train control; e) Reduced train car speeds to 40 miles per hour when passing through urbanized areas of any size; f) Limitations on storage of hazardous materials tank cars in urbanized areas of any size and provide appropriate security in storage yards for all shipments; g) Advance notification to county and city emergency operations offices of all crude oil and hazardous materials shipments, including a contact number that can provide real-time 	<p>Significant and unavoidable</p>

Significance Threshold and Project Impacts	Mitigation Measures	Residual Impact
	information in the event of an oil train derailment or accident; h) Quarterly hazardous commodity flow information, including classification and characterization of materials being transported, to all first response agencies (49 Code Fed. Regs. 15.5) along the mainline rail routes used by trains carrying hazardous materials.	
Impact HAZ-3: Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school	<p><i>SCAG Mitigation Measures</i> See SMM HAZ-1 through SMM HAZ-3.</p> <p><i>Project Level Mitigation Measures</i> See PMM HAZ-1 and PMM HAZ-2.</p> <p>PMM HAZ-3: In accordance with provisions of sections 15091(a)(2) and 15126.4(a)(1)(B) of the <i>State CEQA Guidelines</i>, a Lead Agency for a project can and should consider mitigation measures to reduce substantial adverse effects related to the release of hazardous materials within one-quarter mile of schools, as applicable and feasible. Such measures may include the following or other comparable measures identified by the Lead Agency:</p> <ul style="list-style-type: none"> a) Where the construction and operation of projects involves the transport of hazardous materials, avoid transport of such materials within one-quarter mile of schools, when school is in session, wherever feasible. b) Where it is not feasible to avoid transport of hazardous materials, within one-quarter mile of schools on local streets, provide notifications of the anticipated schedule of transport of such materials. 	Significant and unavoidable
Impact HAZ-4: Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment.	<p><i>SCAG Mitigation Measures</i> See SMM HAZ-1 through SMM HAZ-3.</p> <p><i>Project Level Mitigation Measures</i> PMM HAZ-4: In accordance with provisions of sections 15091(a)(2) and 15126.4(a)(1)(B) of the <i>State CEQA Guidelines</i>, a Lead Agency for a project can and should consider mitigation measures to reduce substantial adverse effects related to projects that are located on a site which is included on the Cortese List, as applicable and feasible. Such measures may include the following or other comparable measures identified by the Lead Agency:</p> <ul style="list-style-type: none"> a) For any listed sites or sites that have the potential for residual hazardous materials as a result of historic land uses, complete a Phase I Environmental Site Assessment, including a review and consideration of data from all known databases of contaminated sites, during the process of planning, environmental clearance, and construction for projects. b) Where warranted due to the known presence of contaminated materials, submit to the appropriate agency responsible for hazardous materials/wastes oversight a Phase II Environmental Site Assessment report if warranted by a Phase I report for the project site. The reports should make recommendations for remedial action, if appropriate, and be signed by a Registered Environmental Assessor, Professional Geologist, or Professional Engineer. c) Implement the recommendations provided in the Phase II Environmental Site Assessment report, where such a report was determined to be necessary for the construction or operation of the project, for remedial action. 	Significant and unavoidable

Significance Threshold and Project Impacts	Mitigation Measures	Residual Impact
	<ul style="list-style-type: none"> d) Submit a copy of all applicable documentation required by local, state, and federal environmental regulatory agencies, including but not limited to: permit applications, Phase I and II Environmental Site Assessments, human health and ecological risk assessments, remedial action plans, risk management plans, soil management plans, and groundwater management plans. e) Conduct soil sampling and chemical analyses of samples, consistent with the protocols established by the U.S. EPA to determine the extent of potential contamination beneath all underground storage tanks (USTs), elevator shafts, clarifiers, and subsurface hydraulic lifts when on-site demolition or construction activities would potentially affect a particular development or building. f) Consult with the appropriate local, state, and federal environmental regulatory agencies to ensure sufficient minimization of risk to human health and environmental resources, both during and after construction, posed by soil contamination, groundwater contamination, or other surface hazards including, but not limited to, underground storage tanks, fuel distribution lines, waste pits and sumps. g) Obtain and submit written evidence of approval for any remedial action if required by a local, state, or federal environmental regulatory agency. h) Cease work if soil, groundwater, or other environmental medium with suspected contamination is encountered unexpectedly during construction activities (e.g., identified by odor or visual staining, or if any underground storage tanks, abandoned drums, or other hazardous materials or wastes are encountered), in the vicinity of the suspect material. Secure the area as necessary and take all appropriate measures to protect human health and the environment, including but not limited to, notification of regulatory agencies and identification of the nature and extent of contamination. Stop work in the areas affected until the measures have been implemented consistent with the guidance of the appropriate regulatory oversight authority. i) Soil generated by construction activities should be stockpiled on-site in a secure and safe manner. All contaminated soils determined to be hazardous or non-hazardous waste must be adequately profiled (sampled) prior to acceptable reuse or disposal at an appropriate off-site facility. Complete sampling and handling and transport procedures for reuse or disposal, in accordance with applicable local, state and federal laws and policies. j) Groundwater pumped from the subsurface should be contained on-site in a secure and safe manner, prior to treatment and disposal, to ensure environmental and health issues are resolved pursuant to applicable laws and policies. Utilize engineering controls, which include impermeable barriers to prohibit groundwater and vapor intrusion into the building. k) As needed and appropriate, prior to issuance of any demolition, grading, or building permit, submit for review and approval by the Lead Agency (or other appropriate government agency) written verification that the appropriate federal, state and/or local oversight authorities, including but not limited to the Regional Water Quality Control Board (RWQCB), have granted all required clearances and confirmed that the all applicable standards, regulations, and conditions have been met for previous contamination at the site. 	

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	<ul style="list-style-type: none"> l) Develop, train, and implement appropriate worker awareness and protective measures to assure that worker and public exposure is minimized to an acceptable level and to prevent any further environmental contamination as a result of construction. m) If asbestos-containing materials (ACM) are found to be present in building materials to be removed, submit specifications signed by a certified asbestos consultant for the removal, encapsulation, or enclosure of the identified ACM in accordance with all applicable laws and regulations, including but not necessarily limited to: California Code of Regulations, Title 8; Business and Professions Code; Division 3; California Health and Safety Code Section 25915-25919.7; and other local regulations. n) Where projects include the demolitions or modification of buildings constructed prior to 1978, complete an assessment for the potential presence or lack thereof of ACM, lead based paint, and any other building materials or stored materials classified as hazardous waste by state or federal law. o) Where the remediation of lead-based paint has been determined to be required, provide specifications to the appropriate agency, signed by a certified Lead Supervisor, Project Monitor, or Project Designer for the stabilization and/or removal of the identified lead paint in accordance with all applicable laws and regulations, including but not necessarily limited to: California Occupational Safety and Health Administration’s (Cal OSHA’s) Construction Lead Standard, Title 8 California Code of Regulations (CCR) Section 1532.1 and Department of Health Services (DHS) Regulation 17 CCR Sections 35001–36100, as may be amended. If other materials classified as hazardous waste by state or federal law are present, the project sponsor should submit written confirmation to the appropriate local agency that all state and federal laws and regulations should be followed when profiling, handling, treating, transporting, and/or disposing of such materials. 	
<p>Impact HAZ-5: For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard or excessive noise for people residing or working in the project area</p>	<p><i>SCAG Mitigation Measures</i> See SMM NOISE-1.</p> <p>SMM HAZ-5: SCAG shall continue to collaborate with key stakeholders on regional aviation planning issues through the Aviation Technical Advisory Committee (ATAC). The ATAC is a partnership between the airports, transportation agencies and commissions, experts, and other community members.</p> <p><i>Project Level Mitigation Measures</i> See PMM NOISE-1.</p>	<p>Significant and unavoidable</p>
<p>Impact HAZ-6: Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan</p>	<p><i>SCAG Mitigation Measures</i> See SMM HAZ-1 through SMM HAZ-5 and SMM TRA-5.</p> <p><i>Project Level Mitigation Measures</i> See PMM HAZ-1 through PMM HAZ-4 and PMM TRA-5.</p> <p>PMM HAZ-5: In accordance with provisions of sections 15091(a)(2) and 15126.4(a)(1)(B) of the <i>State CEQA Guidelines</i>, a Lead Agency for a project can and should consider mitigation measures to reduce substantial adverse effects which may impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan, as applicable and feasible. Such</p>	<p>Significant and unavoidable</p>

Significance Threshold and Project Impacts	Mitigation Measures	Residual Impact
	<p>measures may include the following or other comparable measures identified by the Lead Agency:</p> <ul style="list-style-type: none"> a) Continue to coordinate locally and regionally based on ongoing review and integration of projected transportation and circulation conditions. b) Develop new methods of conveying projected and real time information to citizens using emerging electronic communication tools including social media and cellular networks; c) Continue to evaluate lifeline routes for movement of emergency supplies and evacuation. 	
<p>Impact HAZ-7: Expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires.</p>	<p>This impact is addressed under Section 3.20, Wildfire, Impact WF-2. See below.</p>	
<p>HYDROLOGY AND WATER QUALITY</p>		
<p>Impact HYD-1: Potential to violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or groundwater quality.</p>	<p><i>SCAG Mitigation Measure</i></p> <p>SMM HYD-1: SCAG shall continue to work with local jurisdictions and water quality agencies to encourage regional-scale planning for improved water quality management and pollution prevention. Future impacts to water quality shall be avoided to the extent practical and feasible through cooperative planning, information sharing, and comprehensive pollution control measure development within the SCAG region. This cooperative planning shall occur as part of current and existing coordination, an integral part of SCAG’s ongoing regional planning efforts.</p> <p><i>Project Level Mitigation Measures</i></p> <p>PMM HYD-1: In accordance with provisions of sections 15091(a)(2) and 15126.4(a)(1)(B) of the <i>State CEQA Guidelines</i>, a Lead Agency for a project can and should consider mitigation measures to reduce substantial adverse effects from violation of any water quality standards or waste discharge requirements or otherwise substantially degrade surface or groundwater quality, as applicable and feasible. Such measures may include the following or other comparable measures identified by the Lead Agency:</p> <ul style="list-style-type: none"> a) Complete, and have approved, a Stormwater Pollution Prevention Plan (SWPPP) prior to initiation of construction. b) Implement Best Management Practices to reduce the peak stormwater runoff from the project site to the maximum extent practicable. c) Comply with the Caltrans storm water discharge permit as applicable; and identify and implement Best Management Practices to manage site erosion, wash water runoff, and spill control. d) Complete, and have approved, a Standard Urban Stormwater Management Plan, prior to occupancy of residential or commercial structures. e) Ensure adequate capacity of the surrounding stormwater system to support stormwater runoff from new or rehabilitated structures or buildings. f) Prior to construction within an area subject to Section 404 of the Clean Water Act, obtain all required permit approvals and certifications for construction within the vicinity of a watercourse: g) Where feasible, restore or expand riparian areas such that there is no net loss of impervious 	<p>Significant and unavoidable</p>

Significance Threshold and Project Impacts	Mitigation Measures	Residual Impact
	<p>surface as a result of the project.</p> <ul style="list-style-type: none"> h) Install structural water quality control features, such as drainage channels, detention basins, oil and grease traps, filter systems, and vegetated buffers to prevent pollution of adjacent water resources by polluted runoff where required by applicable urban storm water runoff discharge permits, on new facilities. i) Provide operational best management practices for street cleaning, litter control, and catch basin cleaning are implemented to prevent water quality degradation in compliance with applicable storm water runoff discharge permits; and ensure treatment controls are in place as early as possible, such as during the acquisition process for rights-of-way, not just later during the facilities design and construction phase. j) Comply with applicable municipal separate storm sewer system discharge permits as well as Caltrans' storm water discharge permit including long-term sediment control and drainage of roadway runoff. k) Incorporate as appropriate treatment and control features such as detention basins, infiltration strips, and porous paving, other features to control surface runoff and facilitate groundwater recharge into the design of new transportation projects early on in the process to ensure that adequate acreage and elevation contours are provided during the right-of-way acquisition process. l) Upgrade stormwater drainage facilities to accommodate any increased runoff volumes. These upgrades may include the construction of detention basins or structures that will delay peak flows and reduce flow velocities, including expansion and restoration of wetlands and riparian buffer areas. System designs shall be completed to eliminate increases in peak flow rates from current levels. m) Encourage Low Impact Development (LID) and incorporation of natural spaces that reduce, treat, infiltrate and manage stormwater runoff flows in all new developments, where practical and feasible. 	
<p>Impact HYD-2: Potential to substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin.</p>	<p><i>SCAG Mitigation Measure</i></p> <p>SMM HYD-2: SCAG shall build from existing efforts including those at the sub-regional and local level and shall continue to work with local jurisdictions and water agencies, to encourage regional-scale planning for improved stormwater management and groundwater recharge, including consideration of alternative recharge technologies and practices. Future adverse impacts may be avoided through cooperative planning, information sharing, and comprehensive implementation efforts within the SCAG region.</p> <p><i>Project Level Mitigation Measures</i></p> <p>PMM HYD-2: In accordance with provisions of sections 15091(a)(2) and 15126.4(a)(1)(B) of the <i>State CEQA Guidelines</i>, a Lead Agency for a project can and should consider mitigation measures to reduce substantial adverse effects from violation of any water quality standards or waste discharge requirements or otherwise substantially degrade surface or groundwater quality, as applicable and feasible. Such measures may include the following or other comparable measures identified by the Lead Agency:</p>	<p>Significant and unavoidable</p>

Significance Threshold and Project Impacts	Mitigation Measures	Residual Impact
	<p>a) Avoid designs that require continual dewatering where feasible.</p> <p>For projects requiring continual dewatering facilities, implement monitoring systems and long-term administrative procedures to ensure proper water management that prevents degrading of surface water and minimizes adverse impacts on groundwater for the life of the project, Construction designs shall comply with appropriate building codes and standard practices including the Uniform Building Code.</p> <p>b) Maximize, where practical and feasible, permeable surface area in existing urbanized areas to protect water quality, reduce flooding, allow for groundwater recharge, and preserve wildlife habitat. Minimize new impervious surfaces, including the use of in-lieu fees and off-site mitigation.</p> <p>c) Avoid construction and siting on groundwater recharge areas, to prevent conversion of those areas to impervious surface.</p> <p>d) Reduce hardscape to the extent feasible to facilitate groundwater recharge as appropriate.</p>	
<p>Impact HYD-3a: Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would result in substantial erosion or siltation on- or off-site.</p>	<p><i>SCAG Mitigation Measures</i> See SMM HYD-1 and SMM HYD-2.</p> <p>SMM HYD-3: SCAG shall build from existing efforts including those at the sub-regional and local level and shall continue to work with local jurisdictions to encourage regional-scale planning for maintaining and/or improving existing drainage patterns. Future adverse impacts may be avoided through cooperative planning, information sharing, and comprehensive implementation efforts within the SCAG region.</p> <p><i>Project Level Mitigation Measures</i> See PMM HYD-1.</p>	<p>Significant and unavoidable</p>
<p>Impact HYD-3b: Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would substantially increase the rate or amount of flooding on- or off-site.</p>	<p><i>SCAG Mitigation Measures</i> See SMM HYD-1 through SMM HYD-3.</p> <p><i>Project Level Mitigation Measures</i> See PMM HYD-1 and PMM HYD-2.</p>	<p>Significant and unavoidable</p>
<p>Impact HYD-3c: Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff.</p>	<p><i>SCAG Mitigation Measures</i> See SMM HYD-1 through SMM HYD-3.</p> <p><i>Project Level Mitigation Measures</i> See PMM HYD-1 and PMM HYD-2.</p>	<p>Significant and unavoidable</p>

Significance Threshold and Project Impacts	Mitigation Measures	Residual Impact
<p>Impact HYD-4: In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation.</p>	<p><i>SCAG Mitigation Measures</i></p> <p>SMM-HYD-4: SCAG shall continue to work with local jurisdictions and water quality agencies to encourage flood protection and prevent development in flood hazard areas that do not have appropriate protections. This shall be accomplished through cooperation and information sharing regarding specific alignments and rights-of-way planning for RTP projects, and regional program development as part of SCAG’s ongoing regional planning efforts. These include but are not limited to web-based data distribution planning tools and sustainability programs in conjunction with local governments. Such services would potentially consist of an inventory of areas located in or near a 100-year flood hazard zone or hazard areas that would potentially be affected by a failure of a levee or dam; or inundation by seiche, tsunami, or mudflow.</p> <p><i>Project Level Mitigation Measures</i></p> <p>PMM-HYD-4: In accordance with provisions of sections 15091(a)(2) and 15126.4(a)(1)(B) of the <i>State CEQA Guidelines</i>, a Lead Agency for a project can and should consider mitigation measures capable of avoiding or reducing the potential impacts of locating structures that would impede or redirect flood flows, as applicable and feasible. Such measures may include the following or other comparable measures identified by the Lead Agency:</p> <ul style="list-style-type: none"> a) Ensure that all roadbeds for new highway and rail facilities be elevated at least one foot above the 100-year base flood elevation. Since alluvial fan flooding is not often identified on FEMA flood maps, the risk of alluvial fan flooding should be evaluated and projects should be sited to avoid alluvial fan flooding. Delineation of floodplains and alluvial fan boundaries should attempt to account for future hydrologic changes caused by global climate change. 	<p>Significant and unavoidable</p>
<p>Impact HYD-5: Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan.</p>	<p><i>SCAG Mitigation Measure</i></p> <p>See SMM HYD-2.</p> <p><i>Project Level Mitigation Measure</i></p> <p>See PMM HYD-2.</p>	<p>Significant and unavoidable</p>
<p>LAND USE</p>		
<p>Impact LU-1: Potential for the Plan to physically divide an established community</p>	<p><i>SCAG Mitigation Measures</i></p> <p>SMM LU-1: SCAG shall coordinate with local County Transportation Commissions, Caltrans and other implementing agencies when siting new facilities in residential areas to facilitate minimizing future impacts of transportation projects on established communities, through cooperation, information sharing, and regional program development as part of SCAG’s ongoing regional planning efforts to promote best planning practices.</p> <p><i>Project Level Mitigation Measures</i></p> <p>PMM LU-1: In accordance with provisions of sections 15091(a)(2) and 15126.4(a)(1)(B) of the <i>State CEQA Guidelines</i>, a Lead Agency for a project can and should consider mitigation measures to reduce substantial adverse effects that physically divide a community, as applicable and feasible. Such measures may include the following or other comparable measures identified by the Lead Agency:</p> <ul style="list-style-type: none"> a) Facilitate good design for land use projects that build upon and improve existing circulation patterns 	<p>Significant and unavoidable</p>

Significance Threshold and Project Impacts	Mitigation Measures	Residual Impact
	<ul style="list-style-type: none"> b) Encourage implementing agencies to orient transportation projects to minimize impacts on existing communities by: <ul style="list-style-type: none"> - Selecting alignments within or adjacent to existing public rights of way. - Design sections above or below-grade to maintain viable vehicular, cycling, and pedestrian connections between portions of communities where existing connections are disrupted by the transportation project. - Wherever feasible incorporate direct crossings, overcrossings, or under crossings at regular intervals for multiple modes of travel (e.g., pedestrians, bicyclists, vehicles). c) Where it has been determined that it is infeasible to avoid creating a barrier in an established community, consider other measures to reduce impacts, including but not limited to: <ul style="list-style-type: none"> - Alignment shifts to minimize the area affected. - Reduction of the proposed right-of-way take to minimize the overall area of impact. - Provisions for bicycle, pedestrian, and vehicle access across improved roadways. 	
<p>Impact LU-2: Cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect</p>	<p><i>SCAG Mitigation Measures</i></p> <p>SMM LU-2: SCAG shall continue to promote the Intergovernmental Review (IGR) Program as an internal and external informational tool by reviewing and monitoring all projects submitted to SCAG for review and working with local jurisdictions to ensure that submitted projects support the most currently adopted Connect SoCal Plan. SCAG shall provide comment letters on regionally significant projects to recommend additional resources to help the lead agency support or develop a projects that are consistent with the Plan, as appropriate. The IGR Mapping Tool can also be utilized by local jurisdictions to assess regional impacts. To visit the IGR Mapping tool, please go to: https://maps.scag.ca.gov/IGR/. For more information on SCAG's IGR Program, please visit: http://www.scag.ca.gov/programs/Pages/IGR.aspx.</p> <p>SMM LU-3: SCAG shall encourage cities and counties in the region to provide SCAG with electronic versions of their most recent general plan (and associated environmental document) and any updates as they are produced.</p> <p>SMM LU-4: SCAG shall continue to provide targeted technical services such as GIS and data support for cities and counties to update their general plans at least every ten years, as recommended by the Governor's Office of Planning and Research.</p> <p>SMM LU-5: SCAG shall provide technical assistance and regional leadership to encourage implementation of the Plan goals and strategies that integrate growth and land use planning with the existing and planned transportation network.</p> <p><i>Project Level Mitigation Measures</i></p> <p>PMM LU-2: In accordance with provisions of sections 15091(a)(2) and 15126.4(a)(1)(B) of the State CEQA Guidelines, a Lead Agency for a project can and should consider mitigation measures to reduce substantial adverse effects that physically divide a community, as applicable and feasible. Such measures may include the following or other comparable measures identified by the Lead Agency:</p> <ul style="list-style-type: none"> a) When an inconsistency with the adopted general plan policy or land use regulation (adopted for the purpose of avoiding or mitigating an impact) is identified modify the transportation or 	<p>Significant and unavoidable</p>

Significance Threshold and Project Impacts	Mitigation Measures	Residual Impact
	land use project to eliminate the conflict; or, determine if the environmental, social, economic, and engineering benefits of the project warrant an amendment to the general plan or land use regulation.	
MINERAL RESOURCES		
<p>Impact MIN-1: Potential to result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state.</p>	<p><i>SCAG Mitigation Measures</i></p> <p>SMM MIN-1: SCAG shall coordinate with the Department of Conservation, California Geological Survey to maintain a database of (1) available mineral resources in the SCAG region including permitted and unpermitted aggregate resources and (2) the anticipated 50-year demand for aggregate and other mineral resources. Based on the results of this survey, SCAG shall work with local agencies on strategies to address anticipated demand, including identifying future sites that may seek permitting and working with industry experts to identify ways to encourage and increase recycling to reduce the demand for aggregate.</p> <p><i>Project Level Mitigation Measures</i></p> <p>PMM MIN-1: In accordance with provisions of sections 15091(a)(2) and 15126.4(a)(1)(B) of the <i>State CEQA Guidelines</i>, a Lead Agency for a project can and should consider mitigation measures to reduce the use of mineral resources that could be of value to the region, as applicable and feasible. Such measures may include the following or other comparable measures identified by the Lead Agency:</p> <ul style="list-style-type: none"> a) Provide for the efficient use of known aggregate and mineral resources or locally important mineral resource recovery sites, by ensuring that the consumptive use of aggregate resources is minimized and that access to recoverable sources of aggregate is not precluded, as a result of construction, operation and maintenance of projects. b) Where avoidance is infeasible, minimize impacts to the efficient and effective use of recoverable sources of aggregate through measures that have been identified in county and city general plans, or other comparable measures such as: <ul style="list-style-type: none"> 1) Recycle and reuse building materials resulting from demolition, particularly aggregate resources, to the maximum extent practicable. 2) Identify and use building materials, particularly aggregate materials, resulting from demolition at other construction sites in the SCAG region, or within a reasonable hauling distance of the project site. 3) Design transportation network improvements in a manner (such as buffer zones or the use of screening) that does not preclude adjacent or nearby extraction of known mineral and aggregate resources following completion of the improvement and during long-term operations. 4) Avoid or reduce impacts on known aggregate and mineral resources and mineral resource recovery sites through the evaluation and selection of project sites and design features (e.g., buffers) that minimize impacts on land suitable for aggregate and mineral resource extraction by maintaining portions of MRZ-2 areas in open space or other general plan land use categories and zoning that allow for mining of mineral resources. 	<p>Significant and unavoidable</p>

Significance Threshold and Project Impacts	Mitigation Measures	Residual Impact
<p>Impact MIN-2 Potential to result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan.</p>	<p><i>SCAG Mitigation Measure</i> See SMM MIN-1. <i>Project Level Mitigation Measure</i> See PMM-MIN-1.</p>	<p>Significant and unavoidable</p>
NOISE		
<p>Impact NOISE-1: Generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies.</p>	<p><i>SCAG Mitigation Measures</i> SMM-NOISE-1: SCAG shall coordinate with CTCs and member agencies as part of SCAG’s outreach and technical assistance to local governments to encourage transportation projects and projects involving residential and commercial land uses to mitigate noise and vibration or be developed in areas that are normally acceptable or conditionally acceptable, consistent with applicable guidelines (i.e. OPR, Caltrans, etc.) <i>Project Level Mitigation Measures</i> PMM NOISE-1: In accordance with provisions of sections 15091(a)(2) and 15126.4(a)(1)(B) of the <i>State CEQA Guidelines</i>, a Lead Agency for a project can and should consider mitigation measures to reduce substantial adverse effects that physically divide a community, as applicable and feasible. Such measures may include the following or other comparable measures identified by the Lead Agency:</p> <ul style="list-style-type: none"> a) Install temporary noise barriers during construction. b) Include permanent noise barriers and sound-attenuating features as part of the project design. Barriers could be in the form of outdoor barriers, sound walls, buildings, or earth berms to attenuate noise at adjacent sensitive uses. c) Schedule construction activities consistent with the allowable hours pursuant to applicable general plan noise element or noise ordinance d) Post procedures and phone numbers at the construction site for notifying the Lead Agency staff, local Police Department, and construction contractor (during regular construction hours and off-hours), along with permitted construction days and hours, complaint procedures, and who to notify in the event of a problem. e) Notify neighbors and occupants within 300 feet of the project construction area at least 30 days in advance of anticipated times when noise levels are expected to exceed limits established in the noise element of the general plan or noise ordinance. f) Designate an on-site construction complaint and enforcement manager for the project. g) Ensure that construction equipment are properly maintained per manufacturers’ specifications and fitted with the best available noise suppression devices (e.g., improved mufflers, equipment redesign, use of intake silencers, ducts, engine enclosures, and acoustically attenuating shields or shrouds silencers, wraps). All intake and exhaust ports on power equipment shall be muffled or shielded. h) Use hydraulically or electrically powered tools (e.g., jack hammers, pavement breakers, and rock drills) for project construction to avoid noise associated with compressed air exhaust from pneumatically powered tools. However, where use of pneumatic tools is 	<p>Significant and unavoidable</p>

Significance Threshold and Project Impacts	Mitigation Measures	Residual Impact
	<p>unavoidable, an exhaust muffler on the compressed air exhaust should be used; this muffler can lower noise levels from the exhaust by up to about 10 dBA. External jackets on the tools themselves should be used, if such jackets are commercially available, and this could achieve a further reduction of 5 dBA. Quieter procedures should be used, such as drills rather than impact equipment, whenever such procedures are available and consistent with construction procedures.</p> <ul style="list-style-type: none"> i) Where feasible, design projects so that they are depressed below the grade of the existing noise-sensitive receptor, creating an effective barrier between the roadway and sensitive receptors. j) Where feasible, improve the acoustical insulation of dwelling units where setbacks and sound barriers do not provide sufficient noise reduction. k) Using rubberized asphalt or “quiet pavement” to reduce road noise for new roadway segments, roadways in which widening or other modifications require re-pavement, or normal reconstruction of roadways where re-pavement is planned l) Projects that require pile driving or other construction noise above 90 dBA in proximity to sensitive receptors, should reduce potential pier drilling, pile driving and/or other extreme noise generating construction impacts greater than 90 dBA; a set of site-specific noise attenuation measures should be completed under the supervision of a qualified acoustical consultant. m) Use land use planning measures, such as zoning, restrictions on development, site design, and buffers to ensure that future development is compatible with adjacent transportation facilities and land uses; n) Monitor the effectiveness of noise reduction measures by taking noise measurements and installing adaptive mitigation measures to achieve the standards for ambient noise levels established by the noise element of the general plan or noise ordinance. o) Use equipment and trucks with the best available noise control techniques (e.g., improved mufflers, equipment redesign, use of intake silencers, ducts, engine enclosures, and acoustically attenuating shields or shrouds, wherever feasible) for project construction. p) Stationary noise sources can and should be located as far from adjacent sensitive receptors as possible and they should be muffled and enclosed within temporary sheds, incorporate insulation barriers, or use other measures as determined by the Lead Agency (or other appropriate government agency) to provide equivalent noise reduction. q) Use of portable barriers in the vicinity of sensitive receptors during construction. r) Implement noise control at the receivers by temporarily improving the noise reduction capability of adjacent buildings (for instance by the use of sound blankets), and implement if such measures are feasible and would noticeably reduce noise impacts. s) Monitor the effectiveness of noise attenuation measures by taking noise measurements. t) Maximize the distance between noise-sensitive land uses and new roadway lanes, roadways, rail lines, transit centers, park-and-ride lots, and other new noise-generating facilities. 	

Significance Threshold and Project Impacts	Mitigation Measures	Residual Impact
	<ul style="list-style-type: none"> u) Construct sound reducing barriers between noise sources and noise-sensitive land uses. v) Stationary noise sources can and should be located as far from adjacent sensitive receptors as possible and they should be muffled and enclosed within temporary sheds, incorporate insulation barriers, or use other measures as determined by the Lead Agency (or other appropriate government agency) to provide equivalent noise reduction. w) Use techniques such as grade separation, buffer zones, landscaped berms, dense plantings, sound walls, reduced-noise paving materials, and traffic calming measures. x) Locate transit-related passenger stations, central maintenance facilities, decentralized maintenance facilities, and electric substations away from sensitive receptors to the maximum extent feasible. 	
<p>Impact NOISE-2: Generation of excessive groundborne vibration or groundborne noise levels.</p>	<p><i>SCAG Mitigation Measure</i> See SMM-NOISE-1</p> <p><i>Project Level Mitigation Measures</i> See PMM-NOISE-1.</p> <p>PMM-NOISE-2: In accordance with provisions of sections 15091(a)(2) and 15126.4(a)(1)(B) of the <i>State CEQA Guidelines</i>, a Lead Agency for a project can and should consider mitigation measures to reduce substantial adverse effects related to violating air quality standards. Such measures may include the following or other comparable measures identified by the Lead Agency:</p> <ul style="list-style-type: none"> a) For projects that require pile driving or other construction techniques that result in excessive vibration, such as blasting, determine the potential vibration impacts to the structural integrity of the adjacent buildings within 50 feet of pile driving locations. b) For projects that require pile driving or other construction techniques that result in excessive vibration, such as blasting, determine the threshold levels of vibration and cracking that could damage adjacent historic or other structure, and design means and construction methods to not exceed the thresholds. c) For projects where pile driving would be necessary for construction due to geological conditions, utilize quiet pile driving techniques such as predrilling the piles to the maximum feasible depth, where feasible. Predrilling pile holes will reduce the number of blows required to completely seat the pile and will concentrate the pile driving activity closer to the ground where pile driving noise can be shielded more effectively by a noise barrier/curtain. d) Restrict construction activities to permitted hours in accordance with local jurisdiction regulation. e) Properly maintain construction equipment and outfit construction equipment with the best available noise suppression devices (e.g., mufflers, silences, wraps). f) Prohibit idling of construction equipment for extended periods of time in the vicinity of sensitive receptors. 	<p>Significant and unavoidable</p>

Significance Threshold and Project Impacts	Mitigation Measures	Residual Impact
<p>Impact NOISE-3: For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels.</p>	<p><i>SCAG Mitigation Measures</i> See SMM NOISE-1.</p> <p><i>Project Level Mitigation Measures</i> See PMM NOISE-1.</p>	<p>Significant and unavoidable</p>
<p>POPULATION AND HOUSING</p>		
<p>Impact POP-1: Induce substantial unplanned population growth to areas of the region either directly (e.g., by proposing new homes and businesses) or indirectly (e.g., by extending roads and other infrastructure)</p>	<p><i>SCAG Mitigation Measures</i></p> <p>SMM-POP-1: SCAG shall promote the Sustainability Program which will provide technical assistance to local jurisdictions that support local planning and implementation of the Connect SoCal Plan. The program recognizes sustainable solutions to local growth challenges and will result in local plans that promote sustainability through the integration of transportation and land use. For more information please visit: http://sustain.scag.ca.gov/Documents/Sustainable%20Communities%20Program%20Guidelines.pdf.</p> <p>SMM-POP-2: SCAG shall provide technical assistance to local governments, transit agencies and developers within the region to build housing capacity to compete in the statewide Affordable Housing Sustainable Communities (AHSC) grants program. The AHSC program is one of the few state funding opportunities to address housing shortages within the state. For more information please visit: http://ahsc.scag.ca.gov/Pages/Home.aspx.</p> <p>SMM-POP-3: SCAG shall host summits that addresses the housing crisis and provides solutions to build more housing. Examples include the 2016 Housing Summit (http://www.scag.ca.gov/SiteAssets/HousingSummit/index.html) and the Eighth Annual Economic Summit (https://www.scag.ca.gov/calendar/Pages/8thEconomicSummit.aspx).</p> <p>SMM-POP-4: SCAG shall continue to produce the biennial Local Profile reports for all member jurisdictions in the SCAG region for the purpose of data and information sharing. The Local Profiles reports provide a variety of demographic, economic, education, housing, and transportation information that local jurisdictions can utilize like project and program planning. For more information about the most recently release 2019 Local Profiles, please visit: http://www.scag.ca.gov/DataAndTools/Pages/LocalProfiles.aspx.</p>	<p>Significant and unavoidable</p>
<p>Impact POP-2: Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere.</p>	<p><i>SCAG Level Mitigation Measure</i> See SMM-POP-4.</p> <p>SMM-POP5: SCAG shall assist cities to identify funding and financing opportunities and potential partnerships for public infrastructure improvements for transit-oriented development and other smart growth projects.</p> <p><i>Project Level Mitigation Measures</i></p> <p>PMM-POP-1: In accordance with provisions of sections 15091(a)(2) and 15126.4(a)(1)(B) of the <i>State CEQA Guidelines</i>, a Lead Agency for a project can and should consider mitigation measures to reduce the displacement of existing housing, as applicable and feasible. Such measures may include the</p>	<p>Significant and unavoidable</p>

Significance Threshold and Project Impacts	Mitigation Measures	Residual Impact
	<p>following or other comparable measures identified by the Lead Agency:</p> <ul style="list-style-type: none"> a) Evaluate alternate route alignments and transportation facilities that minimize the displacement of homes and businesses. Use an iterative design and impact analysis where impacts to homes or businesses are involved to minimize the potential of impacts on housing and displacement of people. b) Prioritize the use existing ROWs, wherever feasible. c) Develop a construction schedule that minimizes potential neighborhood deterioration from protracted waiting periods between right-of-way acquisition and construction. d) Review capacities of available urban infrastructure and augment capacities as needed to accommodate demand in locations where growth is desirable to the local lead Agency and encouraged by the SCS (primarily TPAs, where applicable). e) When General Plans and other local land use regulations are amended or updated, use the most recent growth projections and RHNA allocation plan. 	
FIRE SERVICES		
<p>Impact PSF-1: Result in substantial adverse physical impacts associated with the provision of new or physically altered fire protection facilities, need for new or physically altered fire protection facilities, the construction of which could cause significant environmental impacts in order to maintain acceptable service ratios, response times, or other performance objectives.</p>	<p><i>SCAG Mitigation Measures</i> See SMM PSP-1 through SMM PSP-4.</p> <p>SMM PSF-1: SCAG shall assist planners, first responders, and recovery teams in a supporting role, in three key areas, before a major emergency and during the recovery period:</p> <ul style="list-style-type: none"> • Provide a policy forum to help develop regional consensus and education on security policies and emergency responses. • Assist in expediting the planning and programming of transportation infrastructure repairs from major disasters. • Encourage integration of transportation security measures into transportation projects early in the project development process by leveraging SCAG’s relevant plans, programs, and processes, including regional ITS architecture. An example includes SCAG’s participation in the development of the Southern California Catastrophic Earthquake Preparedness Plan. <p>SMM PSF-2: SCAG shall facilitate minimizing future impacts to fire protection services through information sharing regarding Fire-wise Land Management (data regarding fire-resistant vegetation, fire-resistant materials, locations where development is potentially hazardous in regard to wildfire, and management of brush and other fire risks in the immediate vicinity of development in areas with high fire threat) with county and city planning departments.</p> <p><i>Project Mitigation Measures</i> See PMM-PSP-1.</p>	<p>Significant and unavoidable</p>

Significance Threshold and Project Impacts	Mitigation Measures	Residual Impact
POLICE SERVICES		
<p>Impact PSP-1: Result in substantial adverse physical impacts associated with the provision of new or physically altered police facilities, need for new or physically altered police facilities, the construction of which could cause significant environmental impacts in order to maintain acceptable service ratios, response times, or other performance objectives.</p>	<p><i>SCAG Mitigation Measures</i></p> <p>See SMM PSF-1.</p> <p>SMM PSP-1: SCAG shall facilitate minimizing future impacts to library services through cooperation, information sharing, and regional program development as part of SCAG's ongoing regional planning efforts, such as web-based planning tools for local government including CA LOTS, and other GIS tools and data services, including, but not limited to Map Gallery, GIS library, and GIS applications, and promote acceptable service ratios regarding library services.</p> <p>SMM PSP-2: SCAG shall help to enhance the region's ability to deter and respond to acts of terrorism, human-caused or natural disasters through regionally cooperative and collaborative strategies. SCAG shall work with local officials to develop regional consensus on regional transportation safety, security, and safety security policies.</p> <p>SMM PSP-3: SCAG shall help to enhance the region's ability to deter and respond to terrorist incidents, human-caused or natural disasters by strengthening relationship and coordination with transportation. This will be accomplished by the following:</p> <ul style="list-style-type: none"> • SCAG shall work with local officials to develop regional consensus on regional transportation safety, security, and safety security policies. • SCAG shall encourage all SCAG elected officials are educated in NIMS. • SCAG shall work with partner agencies, federal, state and local jurisdictions to improve communications and interoperability and to find opportunities to leverage and effectively utilize transportation and public safety/security resources in support of this effort. <p>SMM PSP-4: SCAG shall encourage and provide a forum for local jurisdictions to develop mutual aid agreements for essential government services during any incident recovery.</p> <p><i>Project Mitigation Measures</i></p> <p>PMM PSP-1: In accordance with provisions of sections 15091(a)(2) and 15126.4(a)(1)(B) of the State CEQA Guidelines, a Lead Agency for a project can and should consider mitigation measures to reduce substantial adverse effects of constructing new emergency response facilities, as applicable and feasible. Such measures may include the following or other comparable measures identified by the Lead Agency:</p> <ol style="list-style-type: none"> a) Coordinate with emergency response agencies to ensure that there are adequate governmental facilities to maintain acceptable service ratios, response times or other performance objectives for emergency response services and that any required additional construction of buildings is incorporated in to the project description. b) Where current levels of services at the project site are found to be inadequate, provide fair share contributions towards infrastructure improvements, as appropriate and applicable, to mitigate identified CEQA impacts. c) Project sponsors can and should develop traffic control plans for individual projects. Traffic control plans should include information on lane closures and the anticipated flow of traffic during the construction period. The basic objective of each traffic control plan (TCP) is to permit the contractor to work within the public right of way efficiently and effectively while 	<p>Significant and unavoidable</p>

Significance Threshold and Project Impacts	Mitigation Measures	Residual Impact
	maintaining a safe, uniform flow of traffic. The construction work and the public traveling through the work zone in vehicles, bicycles or as pedestrians must be given equal consideration when developing a traffic control plan.	
SCHOOLS		
<p>Impact PSS-1: Result in substantial adverse physical impacts associated with the provision of new or physically altered educational facilities, need for new or physically altered educational facilities, the construction of which could cause significant environmental impacts in order to maintain acceptable service ratios, response times, or other performance objectives.</p>	<p><i>SCAG Mitigation Measure</i></p> <p>SMM PSS-1: SCAG shall facilitate minimizing future impacts to school services through cooperation, information sharing, and regional program development as part of SCAG’s ongoing regional planning efforts, such as web-based planning tools for local government including CA LOTS, and other GIS tools and data services, including, but not limited to, Map Gallery, GIS library, and GIS applications, and direct technical assistance efforts to promote school planning efforts.</p> <p><i>Project Mitigation Measure</i></p> <p>PMM PSS-1: In accordance with provisions of sections 15091(a)(2) and 15126.4(a)(1)(B) of the State CEQA Guidelines, a Lead Agency for a project can and should consider mitigation measures to reduce substantial adverse effects of constructing new or physically altered school facilities, as applicable and feasible. Such measures may include the following or other comparable measures identified by the Lead Agency:</p> <ul style="list-style-type: none"> a) Where construction or expansion of school facilities is required to meet public school service ratios, require school district fees, as applicable. 	Significant and unavoidable
LIBRARY SERVICES		
<p>Impact PSL-1: Result in substantial adverse physical impacts associated with the provision of new or physically altered library facilities, need for new or physically altered library facilities, the construction of which could cause significant environmental impacts in order to maintain acceptable service ratios, response times, or other performance objectives.</p>	<p><i>SCAG Mitigation Measures</i></p> <p>SMM PSL-1 SCAG shall facilitate minimizing future impacts to library services through cooperation, information sharing, and regional program development as part of SCAG’s ongoing regional planning efforts, such as web-based planning tools for local government including CA LOTS, and other GIS tools and data services, including, but not limited to Map Gallery, GIS library, and GIS applications, and promote acceptable service ratios regarding library services.</p> <p><i>Project Mitigation Measure</i></p> <p>PMM PSL-1: In accordance with provisions of sections 15091(a)(2) and 15126.4(a)(1)(B) of the State CEQA Guidelines, a Lead Agency for a project can and should consider mitigation measures to reduce substantial adverse effects of construction of new or altered library facilities, as applicable and feasible. Such measures may include the following or other comparable measures identified by the Lead Agency:</p> <ul style="list-style-type: none"> a) Where construction or expansion of library facilities is required to meet public library service ratios, require library fees, as appropriate and applicable, to mitigate identified CEQA impacts. 	Significant and unavoidable
RECREATION		
<p>Impact REC-1: Potential to increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated.</p>	<p><i>SCAG Mitigation Measure</i></p> <p>See SMM USWS-1.</p> <p>SMM REC-1: SCAG shall continue the commitment to analyze public health outcomes as part of the Regional Transportation Plan/Sustainable Communities Strategy (Plan). As part of the public health analysis for the Plan, SCAG shall continue to analyze resident access to parks and recreational facilities from</p>	Significant and unavoidable

Significance Threshold and Project Impacts	Mitigation Measures	Residual Impact
	<p>a county level to help local jurisdictions to improve resident access to parks. SCAG shall communicate the impacts of the Plan through its Public Health Working group, and continue to support policy changes at the city and county level through educational programs.</p> <p><i>Project Level Mitigation Measures</i></p> <p>PMM REC-1: In accordance with provisions of sections 15091(a)(2) and 15126.4(a)(1)(B) of the <i>State CEQA Guidelines</i>, a Lead Agency for a project can and should consider mitigation measures to reduce substantial adverse effects on the use of existing neighborhood and regional parks or other recreational facilities, as applicable and feasible. Such measures may include the following or other comparable measures identified by the Lead Agency:</p> <ul style="list-style-type: none"> a) Prior to the issuance of permits, where projects require the construction or expansion of recreational facilities or the payment of equivalent Quimby fees, consider increasing the accessibility to natural areas and lands for outdoor recreation from the proposed project area, in coordination with local and regional open space planning and/or responsible management agencies. b) Prior to the issuance of permits, where projects require the construction or expansion of recreational facilities or the payment of equivalent Quimby fees, encourage patterns of urban development and land use which reduce costs on infrastructure and make better use of existing facilities, using strategies such as: <ul style="list-style-type: none"> i. Increasing the accessibility to natural areas for outdoor recreation ii. Utilizing “green” development techniques iii. Promoting water-efficient land use and development iv. Encouraging multiple uses, such as the joint use of schools v. Including trail systems and trail segments in General Plan recreation standards 	
<p>Impact REC-2: Result in substantial adverse physical impacts associated with the provision of new or physically altered park facilities, need for new or physically altered park facilities, the construction of which could cause significant environmental impacts in order to maintain acceptable service ratios, or other performance objectives.</p> <p>Include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment.</p>	<p><i>SCAG Mitigation Measure</i></p> <p>See SMM REC-1.</p> <p><i>Project Level Mitigation Measures</i></p> <p>See PMM REC-1, PMM AQ-2, and PMM NOISE-1.</p>	<p>Significant and unavoidable</p>

Significance Threshold and Project Impacts	Mitigation Measures	Residual Impact
TRANSPORTATION, TRAFFIC, AND SAFETY		
<p>Impact TRA-1: Conflict with a program, plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle, and pedestrian facilities.</p>	<p>No mitigation is required</p>	<p>Less than significant</p>
<p>Impact TRA-2: Conflict or be inconsistent with <i>CEQA Guidelines</i> section 15064.3(b).</p>	<p><i>SCAG Mitigation Measures</i></p> <p>SMM TRA-1: SCAG shall facilitate minimizing VMT and related vehicular delay by minimizing impacts to circulation and access, improve mobility, and encourage transit and Active Transportation via workshops (i.e., Mobility 21 workshop and Regional Transportation Workgroups) and web-based planning tools for local governments, forums with policy makers, and County Transportation Planning Agencies, member cities, and state partners.</p> <p>SMM TRA-2: SCAG shall identify further reduction in VMT, and fuel consumption that could be obtained through land-use strategies, additional car-sharing programs with linkage to public transportation, additional vanpools, additional bicycle sharing and parking programs, and implementation of a universal employee transit access pass (TAP) program.</p> <p>SMM TRA-3: SCAG shall initiate and facilitate an SB 743 implementation program. The grant-funded project, co-sponsored by SCAG and LADOT, seeks to provide technical and mitigation strategy development guidance to local jurisdictions in the six-county SCAG region to facilitate implementation of the VMT-based CEQA transportation impact analysis provisions of SB 743. This coordinated program of technical guidance, evaluation of options, and cooperative engagement with local communities will serve to smooth the transition to the new VMT-reducing development paradigm, helping to ensure a successful region-wide implementation of SB 743 and attainment of the associated GHG reduction goals. Some of the primary features of the scope of work include:</p> <ul style="list-style-type: none"> • Evaluate the feasibility of various alternative VMT mitigation options, including local and regional VMT exchange and banking programs. • Establish CEQA nexus to reduce VMT through a VMT mitigation exchange or banking program alternative. • Substantiate the legal basis of a VMT exchange program for satisfying CEQA mitigation requirements. • Collaborate with other communities and jurisdictions to reduce VMT through implementation of a VMT mitigation exchange or bank program. • Improve the dissemination of transportation project VMT mitigation options. • Support a variety of TDM strategies for Transportation Management Organization (TMO) membership agencies. • Provide guidance to facilitate establishment of VMT mitigation exchange or bank programs throughout the region and state <p>SMM TRA-4: SCAG shall continue to analyze and develop potential implementation strategies for a regional, market-based system to price or charge for auto trips during peak hours.</p> <p>SMM TRA-5: SCAG shall develop a vanpool program for SCAG employees' commute trips.</p>	<p>Significant and unavoidable</p>

Significance Threshold and Project Impacts	Mitigation Measures	Residual Impact
	<p>SMM-TRA-6: SCAG shall encourage new developments to incorporate both local and regional transit measures into the project design that promote the use of alternative modes of transportation.</p> <p><i>Project Level Mitigation Measures</i></p> <p>PMM-TRA-1: In accordance with provisions of sections 15091(a)(2) and 15126.4(a)(1)(B) of the <i>State CEQA Guidelines</i>, a Lead Agency for a project can and should consider mitigation measures to reduce substantial adverse effects related to transportation-related impacts. Such measures may include the following or other comparable measures identified by the Lead Agency:</p> <ul style="list-style-type: none"> • Transportation demand management (TDM) strategies should be incorporated into individual land use and transportation projects and plans, as part of the planning process. Local agencies should incorporate strategies identified in the Federal Highway Administration’s publication: <i>Integrating Demand Management into the Transportation Planning Process: A Desk Reference</i> (August 2012) into the planning process (FHWA 2012). For example, the following strategies may be included to encourage use of transit and non-motorized modes of transportation and reduce vehicle miles traveled on the region’s roadways: <ul style="list-style-type: none"> – include TDM mitigation requirements for new developments; – incorporate supporting infrastructure for non-motorized modes, such as, bike lanes, secure bike parking, sidewalks, and crosswalks; – provide incentives to use alternative modes and reduce driving, such as, universal transit passes, road and parking pricing; – implement parking management programs, such as parking cash-out, priority parking for carpools and vanpools; – develop TDM-specific performance measures to evaluate project-specific and system-wide performance; – incorporate TDM performance measures in the decision-making process for identifying transportation investments; – implement data collection programs for TDM to determine the effectiveness of certain strategies and to measure success over time; and – set aside funding for TDM initiatives. – The increase in per capita VMT on facilities experiencing LOS F represents a significant impact compared to existing conditions. To assess whether implementation of these specific mitigation strategies would result in measurable traffic congestion reductions, implementing actions may need to be further refined within the overall parameters of the proposed Plan and matched to local conditions in any subsequent project-level environmental analysis. 	
<p>Impact TRA-3: Substantially increase hazards due to geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment).</p>	<p>No mitigation is required</p>	<p>Less than significant</p>

Significance Threshold and Project Impacts	Mitigation Measures	Residual Impact
<p>Impact TR-4: Result in inadequate emergency access.</p> <p>Impact WF-1: Substantially impair an adopted emergency response plan or emergency evacuation plan.</p>	<p><i>SCAG Mitigation Measures</i></p> <p>SMM TRA-7: SCAG shall, in cooperation with local and state agencies, identify critical infrastructure needs necessary for: a) emergency responders to enter the region, b) evacuation of affected facilities, and c) restoration of utilities. In addition, SCAG shall establish transportation infrastructure practices that promote and enhance security.</p> <p>SMM TRA-8: SCAG shall provide the means for collaboration in planning, communication, and information sharing before, during, or after a regional emergency. This will be accomplished by the following:</p> <ul style="list-style-type: none"> • SCAG shall develop and incorporate strategies and actions pertaining to response and prevention of security incidents and events as part of the on-going regional planning activities. • SCAG shall offer a regional repository of GIS data for use by local agencies in emergency planning, and response, in a standardized format. • SCAG shall enter into mutual aid agreements with other MPOs (as feasible) to provide this data, in coordination with the California OES in the event that an event disrupts SCAG's ability to function. <p><i>Project Level Mitigation Measures</i></p> <p>PMM TRA-2: In accordance with provisions of sections 15091(a)(2) and 15126.4(a)(1)(B) of the <i>State CEQA Guidelines</i>, a Lead Agency for a project can and should consider mitigation measures to reduce substantial adverse effects which may substantially impair implementation of an adopted emergency response plan or emergency evacuation plan, as applicable and feasible. Such measures may include the following or other comparable measures identified by the Lead Agency:</p> <ul style="list-style-type: none"> • Prior to construction, project implementation agencies can and should ensure that all necessary local and state road and railroad encroachment permits are obtained. The project implementation agency can and should also comply with all applicable conditions of approval. As deemed necessary by the governing jurisdiction, the road encroachment permits may require the contractor to prepare a traffic control plan in accordance with professional engineering standards prior to construction. Traffic control plans can and should include the following requirements: <ul style="list-style-type: none"> – Identification of all roadway locations where special construction techniques (e.g., directional drilling or night construction) would be used to minimize impacts to traffic flow. – Development of circulation and detour plans to minimize impacts to local street circulation. This may include the use of signing and flagging to guide vehicles through and/or around the construction zone. – Scheduling of truck trips outside of peak morning and evening commute hours. – Limiting of lane closures during peak hours to the extent possible. – Usage of haul routes minimizing truck traffic on local roadways to the extent possible. – Inclusion of detours for bicycles and pedestrians in all areas potentially affected by project construction. – Installation of traffic control devices as specified in the California Department of 	<p>Significant and unavoidable</p>

Significance Threshold and Project Impacts	Mitigation Measures	Residual Impact
	<p>Transportation Manual of Traffic Controls for Construction and Maintenance Work Zones.</p> <ul style="list-style-type: none"> - Development and implementation of access plans for highly sensitive land uses such as police and fire stations, transit stations, hospitals, and schools. The access plans would be developed with the facility owner or administrator. To minimize disruption of emergency vehicle access, affected jurisdictions can and should be asked to identify detours for emergency vehicles, which will then be posted by the contractor. Notify in advance the facility owner or operator of the timing, location, and duration of construction activities and the locations of detours and lane closures. - Storage of construction materials only in designated areas. - Coordination with local transit agencies for temporary relocation of routes or bus stops in work zones, as necessary. - Ensure the rapid repair of transportation infrastructure in the event of an emergency through cooperation among public agencies and by identifying critical infrastructure needs necessary for: a) emergency responders to enter the region, b) evacuation of affected facilities, and c) restoration of utilities. - Enhance emergency preparedness awareness among public agencies and with the public at large. 	

TRIBAL CULTURAL RESOURCES

<p>Impact TCR-1: Cause a substantial adverse change in the significance of a tribal cultural resource defined in Public Resources Code section 21074 that is:</p> <ul style="list-style-type: none"> a) Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code section 5020.1(k), or b) A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1. 	<p><i>SCAG Mitigation Measure</i></p> <p>SMM TCR-1: Impacts to tribal cultural resources shall be minimized through cooperation, information sharing, and SCAG's ongoing regional planning efforts such as web-based planning tools for local governments including CA LOTS, and other GIS tools and data services, including, but not limiting to, Map Gallery, GIS library, and GIS applications; and direct technical assistance efforts such as Toolbox Tuesday series and sharing of associated online Training materials. SCAG shall consult with the Native American Heritage Commission, as well as Native American tribes, to identify opportunities for early and effective consultation to identify tribal cultural resources to avoid such resources wherever practicable and feasible and reduce or mitigate for conflicts in compatible land use to the maximum extent practicable.</p> <p><i>Project Level Mitigation Measures</i></p> <p>See PMM CULT-1.</p> <p>PMM TCR-1: In accordance with provisions of sections 15091(a)(2) and 15126.4(a)(1)(B) of the <i>State CEQA Guidelines</i>, a Lead Agency for a project can and should consider mitigation measures to reduce substantial adverse effects on tribal cultural resources. Such measures may include the following or other comparable measures identified by the Lead Agency:</p> <ul style="list-style-type: none"> a) Avoidance and preservation of the resources in place, including, but not limited to, planning and construction to avoid the resources and protect the cultural and natural context, or planning greenspace, parks, or other open space, to incorporate the resources with culturally appropriate protection and management criteria b) Treating the resource with culturally appropriate dignity taking into account the tribal cultural 	<p>Significant and unavoidable</p>
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Significance Threshold and Project Impacts	Mitigation Measures	Residual Impact
	<p>values and meaning of the resource, including, but not limited to, the following: protecting the cultural character and integrity of the resource; protecting the traditional use of the resource; and protecting the confidentiality of the resource;</p> <p>c) Permanent conservation easements or other interests in real property, with culturally appropriate management criteria for the purposes of preserving or utilizing the resources or places; and protecting the resource.</p>	
SOLID WASTE		
<p>Impact USSW-1: Generate solid waste in excess of state or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals</p> <p>Impact USSW-2: Comply with federal, state, and local management and reduction statutes and regulations related to solid waste.</p>	<p><i>SCAG Mitigation Measures</i></p> <p>SMM USSW-1: During the planning, design, and project-level CEQA review process for individual development projects, SCAG shall coordinate with waste management agencies and the appropriate local and regional jurisdictions to facilitate the development of measures and to encourage diversion of solid waste such as recycling and composting programs, as needed. This includes discouraging siting of new landfills unless all other waste reduction and prevention actions have been fully explored to minimize impacts to neighborhoods.</p> <p>SMM USSW-2: SCAG shall coordinate with waste management agencies, and the appropriate local and regional jurisdictions, measures to facilitate and encourage diversion of solid waste such as recycling and composting programs.</p> <p><i>Project Level Mitigation Measures</i></p> <p>PMM USSW-2: In accordance with provisions of sections 15091(a)(2) and 15126.4(a)(1)(B) of the <i>State CEQA Guidelines</i>, a Lead Agency for a project can and should consider mitigation measures to reduce the generation of solid waste, as applicable and feasible. Such measures may include the following or other comparable measures identified by the Lead Agency:</p> <p>Integrate green building measures consistent with CALGreen (California Building Code Title 24) into project design including, but not limited to the following:</p> <ul style="list-style-type: none"> a) Reuse and minimization of construction and demolition (C&D) debris and diversion of C&D waste from landfills to recycling facilities. b) Inclusion of a waste management plan that promotes maximum C&D diversion. c) Source reduction through (1) use of materials that are more durable and easier to repair and maintain, (2) design to generate less scrap material through dimensional planning, (3) increased recycled content, (4) use of reclaimed materials, and (5) use of structural materials in a dual role as finish material (e.g., stained concrete flooring, unfinished ceilings, etc.). d) Reuse of existing structure and shell in renovation projects. e) Development of indoor recycling program and space. f) Discourage the siting of new landfills unless all other waste reduction and prevention actions have been fully explored. If landfill siting or expansion is necessary, site landfills with an adequate landfill-owned, undeveloped land buffer to minimize the potential adverse impacts of the landfill in neighboring communities. g) Discourage exporting of locally generated waste outside of the SCAG region during the construction and implementation of a project. Encourage disposal within the county where the 	<p>Significant and unavoidable</p>

Significance Threshold and Project Impacts	Mitigation Measures	Residual Impact
	<p>waste originates as much as possible. Promote green technologies for long-distance transport of waste (e.g., clean engines and clean locomotives or electric rail for waste-by-rail disposal systems) and consistency with SCAQMD and Connect SoCal policies can and should be required.</p> <ul style="list-style-type: none"> h) Encourage waste reduction goals and practices and look for opportunities for voluntary actions to exceed the 80 percent waste diversion target. i) Encourage the development of local markets for waste prevention, reduction, and recycling practices by supporting recycled content and green procurement policies, as well as other waste prevention, reduction and recycling practices. j) Develop ordinances that promote waste prevention and recycling activities such as: requiring waste prevention and recycling efforts at all large events and venues; implementing recycled content procurement programs; and developing opportunities to divert food waste away from landfills and toward food banks and composting facilities. k) Develop and site composting, recycling, and conversion technology facilities that have minimum environmental and health impacts. l) Integrate reuse and recycling into residential industrial, institutional and commercial projects. m) Provide education and publicity about reducing waste and available recycling services. n) Implement or expand city or county-wide recycling and composting programs for residents and businesses. This could include extending the types of recycling services offered (e.g., to include food and green waste recycling) and providing public education and publicity about recycling services. 	

WASTEWATER		
<p>Impact USWW-1: Require or result in the relocation or construction of new or expanded wastewater treatment or storm drainage facilities, the construction or relocation of which could cause significant environmental effects.</p>	<p><i>SCAG Mitigation Measures</i></p> <p>SMM USWW-1: SCAG shall work with local jurisdictions and wastewater agencies to encourage regional-scale planning for improved wastewater and stormwater management. Future impacts to wastewater and stormwater facilities shall be avoided to the extent practical and feasible through cooperative planning, information sharing, and comprehensive pollution control measure development within the SCAG region. This cooperative planning shall occur as part of current and existing coordination, an integral part of SCAG’s ongoing regional planning efforts.</p> <p><i>Project Level Mitigation Measures</i></p> <p>See PMM-HYD-1.</p> <p>PMM USWW-1: In accordance with provisions of sections 15091(a)(2) and 15126.4(a)(1)(B) of the <i>State CEQA Guidelines</i>, a Lead Agency for a project can and should consider mitigation measures to reduce substantial adverse effects on utilities and service systems, particularly for construction of wastewater facilities, as applicable and feasible. Such measures may include the following or other comparable measures identified by the Lead Agency:</p> <ul style="list-style-type: none"> • During the design and CEQA review of individual future projects, implementing agencies and projects sponsors shall determine whether sufficient wastewater capacity exists for the 	<p>Significant and unavoidable</p>

Significance Threshold and Project Impacts	Mitigation Measures	Residual Impact
	<p>proposed projects. There CEQA determinations must ensure that the proposed development can be served by its existing or planned treatment capacity. If adequate capacity does not exist, project sponsors shall coordinate with the relevant service provider to ensure that adequate public services and utilities could accommodate the increased demand, and if not, infrastructure improvements for the appropriate public service or utility shall be identified in each project's CEQA documentation. The relevant public service provider or utility shall be responsible for undertaking project-level review as necessary to provide CEQA clearance for new facilities.</p>	
<p>Impact USWW-2: Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments.</p>	<p><i>SCAG Mitigation Measures</i> See SMM UWW-1, SMM HYD-1 through SMM HYD-3.</p> <p><i>Project Level Mitigation Measures</i> See PMM UWW-1.</p>	<p>Significant and unavoidable</p>
<p>WATER SUPPLY</p>		
<p>Impact USWS-1: Require or result in the relocation or construction of new or expanded water facilities, the construction or relocation of which could cause significant environmental effects.</p>	<p><i>SCAG Mitigation Measure</i></p> <p>SMM USWS-1: SCAG shall coordinate with local agencies as part of SCAG's Sustainability Program regarding the implementation of Urban Greening, Greenbelts and Community Separator land use strategies. Primary features of land use strategies address the following:</p> <ul style="list-style-type: none"> • Increased trail and greenway connectivity; • Improved water quality, groundwater recharge and watershed health; • Reduce urban runoff; • Expand the urban forest; • Provision of wildlife habitat and increased biodiversity; • Expand recreation opportunities and beautification; • Preserving agrarian economies; • Restore severed wildlife corridors. <p><i>Project Level Mitigation Measures</i></p> <p>PMM USSW-1: In accordance with provisions of sections 15091(a)(2) and 15126.4(a)(1)(B) of the <i>State CEQA Guidelines</i>, a Lead Agency for a project can and should consider mitigation measures to ensure sufficient water supplies, as applicable and feasible. Such measures may include the following or other comparable measures identified by the Lead Agency:</p> <ol style="list-style-type: none"> a) Reduce exterior consumptive uses of water in public areas, and should promote reductions in private homes and businesses, by shifting to drought-tolerant native landscape plantings, using weather-based irrigation systems, educating other public agencies about water use, and installing related water pricing incentives. b) Promote the availability of drought-resistant landscaping options and provide information on where these can be purchased. Use of reclaimed water especially in median landscaping and 	<p>Significant and unavoidable</p>

Significance Threshold and Project Impacts	Mitigation Measures	Residual Impact
	<p>hillside landscaping can and should be implemented where feasible.</p> <ul style="list-style-type: none"> c) Implement water conservation best practices such as low-flow toilets, water-efficient clothes washers, water system audits, and leak detection and repair. d) For projects located in an area with existing reclaimed water conveyance infrastructure and excess reclaimed water capacity, use reclaimed water for non-potable uses, especially landscape irrigation. For projects in a location planned for future reclaimed water service, projects should install dual plumbing systems in anticipation of future use. Large developments could treat wastewater onsite to tertiary standards and use it for non-potable uses onsite. 	
<p>Impact USWS-2: Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years.</p>	<p><i>SCAG Mitigation Measure</i> See SMM USSW-1. <i>Project Level Mitigation Measures</i> See PMM-USWS-1.</p>	<p>Significant and unavoidable</p>
<p>WILDFIRE</p>		
<p>Impact WF-2: Due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby expose project occupants to, pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire.</p> <p>Impact HAZ-7: Expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires.</p>	<p><i>SCAG Mitigation Measures</i></p> <p>SMM WF-1: SCAG shall facilitate minimizing future impacts to fire protection services through information sharing regarding Fire-wise Land Management (vegetation data, fire-resistant building materials, locations where development is vulnerable to wildfire, and best practices for safe land management) with county and city planning departments. Furthermore, SCAG shall examine wildfire risk management strategies in areas where at-risk critical electrical infrastructure is located based on CPUC and CAL FIRE maps.</p> <p>SMM WF-2: SCAG, in partnership with technical experts and stakeholders shall launch or continue existing initiatives to help local cities and counties to protect Southern California communities and economies from the disruption of wildfire occurrences. Initiatives could include but not be limited to seminars that review the risk of wildfire and approaches for preparation, including strengthening of infrastructure, emergency services, emergency evacuation plans and reviewing building safety codes.</p> <p>SMM WF-3: SCAG shall develop a regional resilience program and identify specific strategies to reduce vulnerabilities from natural disasters related to land based or atmospheric hazards, climate change, wildfire and other extreme weather events.</p> <p><i>Project Level Mitigation Measures</i></p> <p>PMM WF-1: In accordance with provisions of sections 15091(a)(2) and 15126.4(a)(1)(B) of the <i>State CEQA Guidelines</i>, a Lead Agency for a project can and should consider mitigation measures to wildfire risk, as applicable and feasible. Such measures may include the following or other comparable measures identified by the Lead Agency:</p> <ul style="list-style-type: none"> a) Launch fire prevention education for local cities and counties such that local fire agencies, homeowners, as well as commercial and industrial businesses are aware of potential sources of fire ignition and the related procedures to curb or lessen any activities that might initiate fire ignition. 	<p>Significant and unavoidable</p>

Significance Threshold and Project Impacts	Mitigation Measures	Residual Impact
	<ul style="list-style-type: none"> b) Ensure structures in high fire risk areas are built to current state and federal standards which serve to greatly increase the chances the structure will survive a wildfire and also allow for people to shelter-in-place. c) Improve road access for emergency response and evacuation so people can evacuate safely and timely when necessary. d) Improve, and educate regarding, local emergency communications and notifications with residents and businesses. e) Enforce defensible space regulations to keep overgrown and unmanaged vegetation, accumulations of trash and other flammable material away from structures. f) Provide public education about wildfire risk and fire prevention measures, and safety procedures and practices to allow for safe evacuation and/or options to shelter-in-place 	
<p>Impact WF-3: Require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risks or that may result in temporary or ongoing impacts to the environment.</p>	<p><i>SCAG Mitigation Measures</i> See SMM-WF-1, SMM WF-2, SMM AG-4, and SMM BIO-3.</p> <p><i>Project Mitigation Measures</i> See PMM HAZ-4.</p> <p>PMM WF-2: In accordance with provisions of sections 15091(a)(2) and 15126.4(a)(1)(B) of the <i>State CEQA Guidelines</i>, a Lead Agency for a project can and should consider mitigation measures to wildfire risk, as applicable and feasible. Such measures may include the following or other comparable measures identified by the Lead Agency:</p> <ul style="list-style-type: none"> a) New development or infrastructure activity within very high hazard severity zones or SRAs shall be required to: <ul style="list-style-type: none"> 1) Submit a fire protection plan including the designation of fire watch staff; 2) Maintain water and other fire suppression equipment designated solely for firefighting on site for any construction and maintenance activities; 3) Locate construction and maintenance equipment in designated “safe areas” such that they do not discharge combustible materials; and 4) Designate trained fire watch staff during project construction to reduce risk of fire hazards. 	<p>Significant and unavoidable</p>
<p>Impact WF-4: Expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope stability, or drainage changes.</p>	<p><i>SCAG Mitigation Measures</i> See SMM-WF-1, SMM WF-2, SMM HYD-3, SMM GEO-1 and SMM GEO-2.</p> <p><i>Project Level Mitigation Measures</i> See PMM WF-1, PMM WF-2, PMM HYD-1, and PMM HAZ-4.</p>	<p>Significant and unavoidable</p>