Connect SoCal

The Southern California Association of Governments' 2024–2050 Regional Transportation Plan/ Sustainable Communities Strategy

EXHIBIT A MITIGATION MONITORING AND REPORTING PROGRAM

Final Program Environmental Impact Report

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EXHIBIT A
Mitigation Monitoring and Reporting Program

A.1 Purpose
A.2 Introduction

A.1 PURPOSE

The Mitigation Monitoring and Reporting Program (MMRP) has been prepared in conformance with California Environmental Quality Act (CEQA) Section 21081.6 of the CEQA Guidelines and Section 15097. It is the intent of this program to (1) verify satisfaction of the required mitigation measures of the Connect SoCal 2024 Program Environmental Impact Report (2024 PEIR); (2) provide a methodology to document implementation of the required mitigation measures; (3) provide a record of the Monitoring Program; (4) identify monitoring responsibility; (5) establish administrative procedures for the clearance of mitigation measures; (6) establish the frequency and duration of monitoring; and (7) utilize existing review processes wherever feasible.

A.2 INTRODUCTION

This Mitigation Monitoring and Reporting Program describes the procedures that will be used to implement the mitigation measures adopted in connection with the approval of the Plan and the methods of monitoring such actions. This MMRP takes the form of a table that identifies the responsible entity for monitoring each mitigation measure and the timing of each measure.

This 2024 PEIR identifies programmatic mitigation measures to be implemented by SCAG and identifies project-level mitigation measures that SCAG will encourage local agencies to implement, as feasible and appropriate, as part of subsequent project-specific environmental review.

SCAG has no authority to impose mitigation measures on individual projects for which it is not the lead agency. However, for projects seeking to use CEQA streamlining and/or tier from the 2024 PEIR, project-level mitigation measures included in this 2024 PEIR (or comparable measures) should be required by the local lead agency as feasible and appropriate. Many lead agencies have existing regulations, policies, and/or standard conditions of approval that address potential impacts. Nothing in the 2024 PEIR is intended to supersede existing regulations and policies of individual jurisdictions. Since SCAG has no authority to impose mitigation measures, mitigation measures to be implemented by local jurisdictions are subject to a lead agency's independent discretion as to whether measures are applicable to projects in their respective jurisdictions. Lead agencies may use, amend, or not use measures identified in this 2024 PEIR as appropriate to address project-specific conditions. The determination of significance and identification of appropriate mitigation is solely the responsibility of the lead agency.

TABLE A-1 **Mitigation Monitoring and Reporting Program Matrix**

MITIGATION MEASURE		MITIGATION MONITORING TIMING	RESPONSIBLE MONITORING ENTITY
Aesthetics			
SMM GEN-1:	SCAG shall continue to facilitate interagency cooperation, information sharing, and regional program development, such as through existing planning tools to support local jurisdictions including various applications offered through the SCAG Regional Data Platform (RDP), SoCal Atlas, HELPR, and other GIS resources and data services. For more information, please contact SCAG's Local Information Services Team (LIST) at list@scag.ca.gov.	Ongoing over the life of the plan	SCAG
PMM AES-1:	In accordance with provisions of CEQA Guidelines Sections 15091(a)(2) and 15126.4(a)(1)(B), 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: 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) Replace and renew landscaping along corridors with road widenings, interchange projects, and related improvements. d) Retain or replace trees bordering highways, so that clear-cutting is not evident. e) Provide new corridor landscaping that provides appropriate transitions to existing natural and man-made features and is complementary to the dominant landscaping or native habitats of surrounding areas. f) 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. g) Use see-through safety barrier designs (e.g., railings rather than walls), as appropriate.	Ongoing over the life of the plan	Lead Agency
PMM AES-2:	In accordance with provisions of CEQA Guidelines Sections 15091(a)(2) and 15126.4(a)(1)(B), 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: 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 substantial natural elements and visual interest to soften the hard-edged, linear transportation corridors. c) Develop 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	Ongoing over the life of the plan	Lead Agency

MITIGATION MEASURE		MITIGATION MONITORING TIMING	RESPONSIBLE MONITORING ENTITY
	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) Keep sites 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, account for visual impacts during sound wall construction and design methods as follows: – 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 dominant landscaping of surrounding areas.		
PMM AES-3:	In accordance with provisions of CEQA Guidelines Sections 15091(a)(2) and 15126.4(a)(1)(B), 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: a) Use lighting fixtures that are 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 a.m. to 10 p.m. c) Use energy-efficient, low-glare 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 that 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) Direct architectural lighting onto the building surfaces and have low reflectivity to minimize glare and limit light spillover onto adjacent properties.	Ongoing over the life of the plan	Lead Agency

MITIGATION MEASURE		MITIGATION MONITORING TIMING	RESPONSIBLE MONITORING ENTITY
Agriculture and Forestry			
SMM AG-1:	SCAG shall provide support for local jurisdictions looking to pursue farmland conservation planning, including through information sharing and advice on grant opportunities pertinent to supporting local agency's workplans and/or actions in natural and agricultural land conservation, such as the Sustainable Agricultural Lands Conservation program.	Ongoing over the life of the plan	SCAG
SMM AG-2:	SCAG shall continue to facilitate regional collaboration forums, such as the Natural & Farm Lands Conservation Working Group, for stakeholders to share best practices and develop recommendations for natural and agricultural land conservation throughout the region. The collaboration forums with help identify opportunities to leverage resources that protect and restore natural habitat corridors, especially, where corridors cross county boundaries.	Ongoing over the life of the plan	SCAG
SMM AG-3:	SCAG shall develop and support a Regional Greenprint, which is a web-based tool that provides the best available scientific data and scenario visualizations to support local jurisdictions and transportation agencies make better land use and transportation infrastructure decisions and conserve natural and farm lands. SCAG shall provide the Greenprint as a publicly available tool to assist local jurisdictions and transportation agencies identify priority conservation areas and work with CTCs to develop advanced mitigation programs for their future plans and projects. SCAG shall support by (1) leveraging funding to encourage advance mitigation, (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.	Ongoing over the life of the plan	SCAG
PMM AG-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 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: a) Provide permanent protection of in-kind farmland in the form of easements, fees, or elimination of development rights/potential to mitigate for loss of farmland. 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 bank 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.	Ongoing over the life of the plan	Lead Agency

MITIGATION MEASURE		MITIGATION MONITORING TIMING	RESPONSIBLE MONITORING ENTITY
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: 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.	Ongoing over the life of the plan	Lead Agency
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 forest land to maximum extent practicable, as determined appropriate by each lead agency, may include the following, or other comparable measures: a) Minimize construction related impacts to forestry resources by locating materials and stationary equipment in such a way as to prevent conflict with forestry resources. b) Acquire conservation easements for the loss of forestland. c) Coordinate with responsible agencies including the United States Forest Service and Bureau of Land Management, as appropriate, regarding applicable requirements for transportation and urban land use projects within designated National Monuments in the SCAG region.	Ongoing over the life of the plan	Lead Agency
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: a) Design proposed projects to minimize, to the greatest extent feasible, the loss of the highest valued agricultural land. 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. 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.	Ongoing over the life of the plan	Lead Agency

MITIGATION MEASURE		MITIGATION MONITORING TIMING	RESPONSIBLE MONITORING ENTITY
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: 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.	Ongoing over the life of the plan	Lead Agency
Air Quality			
SMM AQ-1:	SCAG shall continue to support and provide information on regional air quality planning and related issue areas in the region. SCAG staff shall also continue to work with the U.S. Environmental Protection Agency, California Air Resources Board, and the air districts within the SCAG region and provide updates to relevant stakeholders on regional air quality planning and related issue areas through regional collaboration forums such as SCAG's Transportation Conformity Working Group.	Ongoing over the life of the plan	SCAG
PMM AQ-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 significant adverse effects related to violating air quality standards. Such measures may include the following or other comparable measures identified by the lead agency: 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.	Ongoing over the life of the plan	Lead Agency

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j) 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 [hp] 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 and ensure safety at construction sites. p) Obtain CARB Portable Equipment Registration with the state or a local district permit for 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. Arrange appropriate consultations with CARB or the local air district to determine registration and permitting requirements prior to equipment operation at the site. q) Use Tier 4 Final equipment or better for all engines above 50 hp. In the event that construction equipment cannot meet to Tier 4 Final or better engine certification, the Project representative or contractor must demonstrate through future study with written findings supported by substantial evidence that is approved by the project's lead agency before using other technologies/strategies. Alternative applicable strategies may include, but would not be limited to, construction equipment with Tier 4 Interim or reduction in the number and/or horsepower rating of construction equipment and/or limiting the number of construction equipment operating at the same time. All equipment must be tuned and maintained in compliance with the manufacturer's recommended maintenance schedule and specifications. All maintenance records for each equipment and their contractor(s) should make available for inspection and remain on-site for a period of at least two years from completion of construction, unless the individual project can demonstrate that Tier 4 Final or better engines would not be required to mitigate emissions below significance thresholds. Project sponsors should also consider including ZE/ZNE technologies where appropriate and feasible or higher tier standard diesel equipment as it becomes developed and feasible. r) Projects located within the South Coast Air Basin and the Coachella Valley should consider applying for South Coast AQMD "SOON" funds which provides funds to applicable fleets for the purchase of commercially available low-emission heavy-duty engines to achieve near-term reduction of NOx emissions from in-use off-road diesel vehicles. s) Projects located within AB 617 communities should review the applicable Community Emissions Reduction Plan (CERP) for identification of additional feasible mitigation that can be applied to individual projects.		

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t) Where applicable, projects should provide information about air quality related programs to schools, including the Environmental Justice Community Partnerships (EJCP), Clean Air Ranger Education (CARE), and Why Air Quality Matters programs. u) Projects should work with local cities and counties to install adequate signage that prohibits truck idling in certain locations (e.g., near schools and sensitive receptors). v) As applicable for airport projects, the following measures should be considered: – Considering operational improvements to reduce taxi time and auxiliary power unit usage, where feasible. Additionally, consider single engine taxing, if feasible as allowed per Federal Aviation Administration guidelines. – Set goals to achieve a reduction in emissions from aircraft operations over the lifetime of the proposed project. – Use ground service equipment (GSE) that can operate on battery-power. If using electric equipment is not feasible, require the use of alternative fuel, the cleanest gasoline equipment, or Tier 4 Final, at a minimum. w) As applicable for port projects, the following measures should be considered: – Develop specific timelines for transitioning to zero-emissions cargo handling equipment (CHE). – Develop interim performance standards with a minimum amount of CHE replacement each year to ensure adequate progress. – Use short side electric power for ships, which may include tugboats and other ocean-going vessels or develop incentives to gradually ramp up the usage of shore power. – Install the appropriate infrastructure to provide shore power to operate the ships. Electrical hookups should be appropriately sized. – Maximize participation in the Port of Los Angeles' Vessel Speed Reduction Program or the Port of Long Beach's Green Flag Initiation Program in order to reduce the speed of vessel transiting within 40 nautical miles of Point Fermin. – Encourage the participation in the Green Ship Incentives. – Offer incentives to encourage the use of on-dock rail. x) As applicable for rail projects, the following measures should be considered: – Provide the highest incentives for electric locomotives and then locomotives that meet Tier 5 emission standards with a floor on the incentives for locomotives that meet Tier 4 emission standards. y) Projects that will introduce sensitive receptors within 500 feet of freeways and other sources should consider installing high-efficiency or enhanced filtration units, such as Minimum Efficiency Reporting Value (MERV) 13 or better. Installation of enhanced filtration units can be verified during occupancy inspection prior to the issuance of an occupancy permit. z) Develop an ongoing monitoring, inspection, and maintenance program for the MERV filters.		

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– Disclose potential health impacts to prospective sensitive receptors from living in close proximity to freeways or other sources of air pollution and the reduced effectiveness of air filtration systems when windows are open or residents are outside. – Identify the responsible implementing and enforcement agency to ensure that enhanced filtration units are installed on-site before a permit of occupancy is issued. – Disclose the potential increase in energy costs for running the HVAC system to prospective residents. – Provide information to residents on where MERV filters can be purchased. – Provide recommended schedule (e.g., every year or every six months) for replacing the enhanced filtration units. – Identify the responsible entity such as future residents themselves, Homeowner's Association, or property managers for ensuring enhanced filtration units are replaced on time. – Identify, provide, and disclose ongoing cost-sharing strategies, if any, for replacing the enhanced filtration units. – Set criteria for assessing progress in installing and replacing the enhanced filtration units; and – Develop a process for evaluating the effectiveness of the enhanced filtration units. aa) Consult the SCAG Equity Resources for Action (ERA) Toolbox available on the SCAG's Environmental Justice webpage for potential measures to address impacts to low-income and/or communities of color. bb) The following criteria related to diesel emissions shall be implemented on by individual project sponsors as appropriate and feasible: – Diesel nonroad vehicles on site for more than 10 total days shall have either (1) engines that meet EPA on road emissions standards or (2) emission control technology verified by EPA or CARB to reduce PM emissions by a minimum of 85%. – Diesel generators on site for more than 10 total days shall be equipped with emission control technology verified by EPA or CARB to reduce PM emissions by a minimum of 85%. – Nonroad diesel engines on site shall be Tier 2 or higher. – Diesel nonroad construction equipment on site for more than 10 total days shall have either (1) engines meeting EPA Tier 4 nonroad emissions standards or (2) emission control technology verified by EPA or CARB for use with nonroad engines to reduce PM emissions by a minimum of 85% for engines for 50 hp and greater and by a minimum of 20% for engines less than 50 hp. – The construction contractor shall maintain a list of all diesel vehicles, construction equipment, and generators to be used on site. The list shall include the following: i. Contractor and subcontractor name and address, plus contact person responsible for the vehicles or equipment. ii. Equipment type, equipment manufacturer, equipment serial number, engine manufacturer, engine model year, engine certification (Tier rating), horsepower, engine serial number, and expected fuel usage and hours of operation.		

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iii. For the emission control technology installed: technology type, serial number, make, model, manufacturer, EPA/CARB verification number/level, and installation date and hour-meter reading on installation date. – Establish generator sites and truck-staging zones for vehicles waiting to load or unload material on site. Such zones shall be located where diesel emissions have the least impact on abutters, the general public, and especially sensitive receptors such as hospitals, schools, daycare facilities, elderly housing, and convalescent facilities. – Maintain a monthly report that, for each on road diesel vehicle, nonroad construction equipment, or generator onsite, includes: i. Hour-meter readings on arrival on-site, the first and last day of every month, and on off-site date. ii. Any problems with the equipment or emission controls. iii. Certified copies of fuel deliveries for the time period that identify: 1. Source of supply 2. Quantity of fuel 3. Quantity of fuel, including sulfur content (percent by weight) cc) Promote energy efficiency and exceed Title-24 Building Envelope Energy Efficiency Standards (California Building Standards Code): – Install programmable thermostat timers – Obtain Third-party HVAC commissioning and verification of energy savings (to be grouped with exceedance of Title 24). – Install energy efficient appliances (Typical reductions for energy-efficient appliances can be found in the Energy Star and Other Climate Protection Partnerships Annual Reports.) – Install higher efficacy public street and area lighting – Limit outdoor lighting requirements – Replace traffic lights with LED traffic lights – Establish onsite renewable or carbon neutral energy systems – generic, solar power and wind power – Utilize a combined heat and power system dd) Promote transportation efficiency. The following measures can be used to increase transportation efficiency: – Locate project near bike path/bike lane – Provide pedestrian network improvements, such as interconnected street network, narrower roadways and shorter block lengths, sidewalks, accessibility to transit and transit shelters, traffic calming measures, parks and public spaces, minimize pedestrian barriers. – Provide traffic calming measures, such as: i. Marked crosswalks		

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ii. Count-down signal timers iii. Curb extensions iv. Speed tables v. Raised crosswalks vi. Raised intersections vii. Median islands viii. Tight corner radii ix. Roundabouts or mini-circles x. On-street parking xi. Chicanes/chokers – Create urban non-motorized zones – Provide bike parking in non-residential and multi-unit residential projects – Dedicate land for bike trails – Limit parking supply through: i. Elimination (or reduction) of minimum parking requirements ii. Creation of maximum parking requirements iii. Provision of shared parking – Require residential area parking permit. – Provide ride-sharing programs i. Designate a certain percentage of parking spacing for ride sharing vehicles ii. Designating adequate passenger loading and unloading and waiting areas for ride-sharing vehicles iii. Providing a web site or messaging board for coordinating rides iv. Permanent transportation management association membership and finding requirement. ee) Lengthen the construction period during smog season (May through October) by extending the construction hours per workday or number of days worked per week, to minimize the number of vehicles and equipment operating at the same time. ff) Install signage containing the complaint number of the local air district where construction activities are located at the construction sites.		

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PMM AQ-2:	For projects subject to California Environmental Quality Act (CEQA) review (i.e., non-exempt projects) and located within the jurisdiction of the South Coast Air Quality Management District (SCAQMD) and within one-quarter mile (1,320 feet) of a sensitive land use, project leads, should prepare an air quality analysis that evaluates potential localized project air quality impacts in conformance with SCAQMD methodology for assessing localized significance thresholds (LST) air quality impacts. If air pollutants are determined to have the potential to exceed the SCAQMD-adopted thresholds of significance, the project should incorporate feasible mitigation measures to reduce air pollutant emissions.	Ongoing over the life of the plan	Lead Agency
PMM AQ-3:	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 related to other emissions (such as those leading to odors) adversely affecting a substantial number of people. Such measures may include the following or other comparable measures identified by the lead agency: a) Implement an odor management plan that consistent with the requirements from the local air quality management district or air pollution control district. b) Implement an odor control technique(s) or strategy(ies) consistent with the requirements from the local air quality management district or air pollution control district. Odor control techniques or strategies may include air filters, air scrubbers, enclosures, buzzer zones, physical barriers, housekeeping practices, or other techniques or strategies.	Ongoing over the life of the plan	Lead Agency
Biological Resources			
SMM BIO-1:	SCAG shall support research, programs, and policies that identify, protect, and restore natural habitat corridors and continue support for preserving wildlife corridors and wildlife crossings through information sharing, such as showcasing best practices and regional collaboration forums like SCAG's Natural and Farm Lands Conservation Working Group.	Ongoing over the life of the plan	SCAG
PMM BIO-1:	In accordance with provisions of Sections 15091(a)(2) and 15126.4(a)(1)(B) of the CEQA Guidelines, a lead agency for a project can and should consider mitigation measures to reduce substantial adverse effects related to threatened and endangered species, and species that meet the definition of "rare" as defined in CEQA Guidelines Section 15380(b)(2). Such measures may include the following or other comparable measures identified by the lead agency: a) Avoid occupied habitat and potentially suitable habitat for threatened, endangered, or rare species, as well as designated critical habitat in project design, wherever practicable and feasible. Where projects are determined to contain 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, prior to construction, conduct preconstruction focused species surveys that follow applicable protocols and guidelines and are conducted by qualified and/or certified personnel. If sensitive plants or wildlife are present, identify and implement species-specific measures to avoid, minimize, and mitigate for potential impacts in consultation with USFWS or CDFW. b) Where avoidance is determined to be infeasible for species protected under FESA, CESA, or local/regional species habitat conservation plan, provide conservation measures to result in no net loss of sensitive	Ongoing over the life of the plan	Lead Agency

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habitats and open space and 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: 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 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. 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) Project design should address the protection of habitat on both sides of a freeway to improve effectiveness of the crossings and may use alternatives to hydrocarbon-based asphalt paving to mitigate for potential hydrocarbon and heavy metal contamination.		

MITIGATION MEASURE		MITIGATION MONITORING TIMING	RESPONSIBLE MONITORING ENTITY
PMM BIO-2:	In accordance with provisions of Sections 15091(a)(2) and 15126.4(a)(1)(B) of the CEQA Guidelines, 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: 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 pursuant to the MBTA during the breeding season. 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. Where practicable and feasible, require upland buffers that sufficiently minimize impacts to riparian corridors. 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 biologist to monitor construction activities that may occur in or adjacent to sensitive communities. j) Appoint a qualified 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 or regulatory specialist	Ongoing over the life of the plan	Lead Agency

MITIGATION MEASURE		MITIGATION MONITORING TIMING	RESPONSIBLE MONITORING ENTITY
	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 to an adopted regional conservation plan. n) Install temporary construction 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 ecologist/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 ecologist/biologist. p) Revegetate with appropriate indigenous native vegetation following the completion of construction activities. as identified by the qualified ecologist/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.		
PMM BIO-3:	In accordance with provisions of Sections 15091(a)(2) and 15126.4(a)(1)(B) of the CEQA Guidelines, 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. a) Conduct an aquatic resources delineation by a qualified biologist or regulatory specialist to identify and map the extent of state and federally protected aquatic resources. Avoid state and federally protected aquatic resources in project design, consistent with the provisions of Sections 404 and 401 of the CWA and Section 1600 of Fish and Game Code, 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 of wetlands 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 or SAA by the CDFW. The use of an authorized Nationwide Permit or issuance of an individual permit requires the project applicant to demonstrate compliance with USACE's Final Compensatory Mitigation Rule or the CDFW SAA conditions. The USACE reviews projects to ensure environmental impacts to aquatic resources are avoided or minimized as much as feasible. Consistent with the administration's performance standard of "no net loss of wetlands" a USACE permit may require a project proponent to restore, establish,	Ongoing over the life of the plan	Lead Agency

MITIGATION MEASURE		MITIGATION MONITORING TIMING	RESPONSIBLE MONITORING ENTITY
	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 rule establishes performance standards, sets timeframes for decision making, and to the maximum extent feasible, establishes equivalent requirements and standards for the three sources of compensatory mitigation: – Permittee-responsible mitigation – Contribution of in-lieu fees – Use of in-kind mitigation bank credits 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: – Avoidance – Impact Minimization – On-site alternatives – Off-site alternatives 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.		
PMM BIO-4:	In accordance with provisions of Sections 15091(a)(2) and 15126.4(a)(1)(B) of the CEQA Guidelines, 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: 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 Section 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.	Ongoing over the life of the plan	Lead Agency

MITIGATION MEASURE	MITIGATION MONITORING TIMING	RESPONSIBLE MONITORING ENTITY
e) Prohibit construction activities within 300 feet, or modified as appropriate by a qualified biologist, 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, minimize impacts to wildlife movement and habitat connectivity and preserve existing and functional wildlife corridors in project design. 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) Review 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 directional 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 temporal or permanent 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 PMM-BIO-1(b), where applicable: – 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		

MITIGATION MEASURE	MITIGATION MONITORING TIMING	RESPONSIBLE MONITORING ENTITY
– Acquire contiguous adjacent land parcels to be protected in perpetuity from encroachment and development – Other comparable measures p) Where the lead agency has identified that an RTP/SCS project, or other regionally significant project, has the potential to impact open space or wildlife nursery site areas that are not designated as such by federal, state, or local jurisdictions, seek comparable coverage for these areas in consultation with the USFWS, CDFW, NMFS, or other local jurisdictions. q) Incorporate applicable and appropriate guidance (e.g., FHWA-HEP-16-059), as well as best management practices, to benefit pollinators with a focus on native plants. r) Implement berms and sound/sight barriers at all wildlife crossings to encourage wildlife to utilize crossings. Sound and lighting should also be minimized in developed areas, particularly those that are adjacent to or go through natural habitats. s) Reduce lighting impacts on sensitive species through implementation of mitigation measures such as but not limited to: – Use high-pressure sodium and/or cut-off fixtures instead of typical mercury-vapor fixtures for outdoor lighting. – Design exterior lighting to confine illumination to the project site. – Provide structural and/or vegetative screening from light-sensitive uses. – Use non-reflective glass or glass treated with a non-reflective coating for all exterior windows and glass used on building surfaces. – Direct architectural lighting onto the building surfaces and have low reflectivity to minimize glare and limit light onto adjacent properties. t) Reduce noise impacts to sensitive species through implementation of mitigation measures such as, but not limited to: – Install temporary noise barriers during construction. – 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. – Provide structural and/or vegetative screening from light-sensitive uses. – 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. – 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 unavoidable, an exhaust muffler on the compressed air exhaust should be used; this muffler can lower noise levels from the exhaust by up to		

MITIGATION MEASURE		MITIGATION MONITORING TIMING	RESPONSIBLE MONITORING ENTITY
	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. – 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 – 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. – Use techniques such as grade separation, buffer zones, landscaped berms, dense plantings, sound walls, reduced-noise paving materials, and traffic calming measures. u) Include large buffers between sensitive uses and freeways. v) Create wildlife corridor redundancy to help retain functional connectivity and resilience. w) To the extent practicable, avoid construction during dawn and dusk, when wildlife activity is highest. y) If protected terrestrial wildlife enter work areas during construction, temporarily halt work to allow wildlife to move through the work area unharmed. A qualified biologist may relocate non-listed wildlife species out of the work area.		
PMM BIO-5:	In accordance with provisions of Sections 15091(a)(2) and 15126.4(a)(1)(B) of the CEQA Guidelines, 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: 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 sourced native species, as directed by a qualified biologist. d) Appoint an ISA certified arborist to monitor construction activities that may occur in areas where trees are designated as "Protected Trees," "Landmark Trees," or "Heritage Trees," to avoid 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.	Ongoing over the life of the plan	Lead Agency

MITIGATION MEASURE	MITIGATION MONITORING TIMING	RESPONSIBLE MONITORING ENTITY
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) No storage or dumping of oil, gas, chemicals, or other substances that may be harmful to trees to occur from the base of any protected trees, or any other location on the site from which such substances might enter the protected perimeter. No heavy construction equipment or construction materials to be operated or stored within a distance from the base of any protected trees. Wires, ropes, or other devices not to 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 prevent buildup of dust and other pollution that would inhibit leaf transpiration, as directed by the certified arborist. 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, replace 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 or as determined by the local jurisdictions, 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. i) Where avoidance is determined to be infeasible, develop sufficient conservation measures to fulfill the requirements of the applicable policy or ordinance, such as to support issuance of a tree removal permit. The consideration of conservation measures may include: – 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.		

MITIGATION MEASURE		MITIGATION MONITORING TIMING	RESPONSIBLE MONITORING ENTITY
Cultural Resources			
SMM CUL-1:	SCAG shall encourage local jurisdictions to identify opportunities for early consultation with resource agencies such as the National Park Service, Office of Historic Preservation, and Native American Heritage Commission, as well as Native American tribes, for identification and avoidance of archaeological sites, historical resources, cemeteries, and tribal cultural resources, wherever practicable and feasible and reduce or mitigate for conflicts in compatible land use to the maximum extent practicable.	Ongoing over the life of the plan	SCAG
PMM CUL-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 related to historical resources. Such measures may include the following or other comparable measures identified by the lead agency: a) Pursuant to CEQA Guidelines Section 15064.5, conduct a record search during the project planning phase at the appropriate Information Center to determine whether the Plan 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 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: – 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 to the maximum extent feasible 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 Secretary of the Interior's 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.	Ongoing over the life of the plan	Lead Agency

MITIGATION MEASURE	MITIGATION MONITORING TIMING	RESPONSIBLE MONITORING ENTITY
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 Secretary of the Interior's PQS. Recordation should meet the Secretary of the Interior's 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 Secretary of the Interior's 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 Plan 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 Plan 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 are determined significant or unique through Phase II testing, and avoidance is not feasible, 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 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 Secretary of the Interior's PQS. 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		

MITIGATION MEASURE		MITIGATION MONITORING TIMING	RESPONSIBLE MONITORING ENTITY
	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. 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.		
PMM CUL-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 related to human remains. Such measures may include the following or other comparable measures identified by the lead agency: 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. b. If any discovered remains are of Native American origin: – 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. – 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.	Ongoing over the life of the plan	Lead Agency

MITIGATION MEASURE		MITIGATION MONITORING TIMING	RESPONSIBLE MONITORING ENTITY
Geology and Soils			
PMM GEO-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 minimize the potential for adverse effects associated with surface fault rupture, seismic ground shaking, seismic-related ground failure, liquefaction, and landslides for projects located on sites with unusual geologic conditions, the following measures shall be considered: • Use interim precautionary steps during construction to maintain ground surface and slope stability; • Incorporate design and structural features that exceed the requirements of the applicable building code(s) as appropriate; and • Utilize innovative design techniques for buildings and other structural elements located on sites with unique geologic conditions to ensure that projects do not exacerbate risks associated with existing conditions.	Ongoing over the life of the plan	Lead Agency
PMM GEO-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 related to geologic hazards. Such measures may include the following or other comparable measures identified by the Lead Agency: a) While compliance with the various municipal regional stormwater permits (MS4) is required by law, not all areas are necessarily covered. For those areas that are not covered under a municipal stormwater permit (MS4), 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 stormwater. Road cuts should be designed to maximize the potential for revegetation.	Ongoing over the life of the plan	Lead Agency
PMM GEO-3:	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 related to paleontological resources. Such measures may include the following or other comparable measures identified by the Lead Agency: a) For sites where the presence of paleontological resources is considered possible, as appropriate obtain review by a qualified paleontologist (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. b) Avoid exposure or displacement of parent material with potential to yield unique paleontological resources.	Ongoing over the life of the plan	Lead Agency

MITIGATION MEASURE		MITIGATION MONITORING TIMING	RESPONSIBLE MONITORING ENTITY
	c) Where avoidance of parent material with the potential to yield unique paleontological resources is not feasible: 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 resources 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 paleontological resources are encountered during construction, use a qualified paleontologist to oversee the implementation of the PRMP. 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 SVP or BLM to determine if unique paleontological resources are encountered during such activities, consistent with the specified or comparable protocols. 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. d) Avoid routes and project designs that would permanently alter unique geological features. e) Salvage and document adversely affected resources sufficient to support ongoing scientific research and education. f) 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. g) 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 CEQA lead agency 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.		
Greenhouse Gas Emissions			
SMM GHG-1:	SCAG, in partnership with local air districts, shall continue to work with local jurisdictions to adopt qualified GHG reduction plans (e.g., climate action plans [CAPs]), develop GHG-reducing planning policies, and support local implementation of climate initiatives.	Ongoing over the life of the plan	SCAG
SMM GHG-2:	SCAG shall measure and track sustainability progress in the region and foster collaboration through the sharing of best practices across the 191 cities and six counties in the SCAG region (including across SB 535 Disadvantaged Communities) and identify opportunities for improving sustainability practices.	Ongoing over the life of the plan	SCAG

MITIGATION MEASURE		MITIGATION MONITORING TIMING	RESPONSIBLE MONITORING ENTITY
PMM GHG-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 related to greenhouse gas emissions. Such measures may include the following or other comparable measures identified by the lead agency: a) Integrate green building measures consistent with CALGreen (California Building Code Title 24), local building codes and other applicable laws, into project design including: 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) Use no gas-powered landscape maintenance equipment. ix) Install alternative fuel (i.e., electric, hydrogen-fueled, etc.) vehicle charging and fueling stations. x) Reduce wood burning stoves or fireplaces. xi) Provide bike lanes accessibility and parking at residential developments. xii) Encourage projects to reduce natural gas infrastructure in buildings and/or reduce the use of natural gas appliances, with exceptions for limited uses. 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: 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 that reduce GHG emissions from cement production;	Ongoing over the life of the plan	Lead Agency

MITIGATION MEASURE	MITIGATION MONITORING TIMING	RESPONSIBLE MONITORING ENTITY
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. 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: 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, day care, and medical care; v) Incorporate housing, including affordable housing, into the project; vi) Incorporate a 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; f) Incorporate bicycle and pedestrian facilities into project designs, maintain these facilities, and provide amenities incentivizing their use; and plan for and construct local bicycle projects that connect with the regional network; g) Improve 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; h) Adopt employer trip reduction measures to reduce employee trips such as vanpool and carpool programs, provide end-of-trip facilities, and telecommuting programs including but not limited to measures that: i) Provide car-sharing, bike sharing, and ride-sharing programs; ii) Provide transit passes;		

MITIGATION MEASURE	MITIGATION MONITORING TIMING	RESPONSIBLE MONITORING ENTITY
iii) Shift single occupancy vehicle trips to carpooling or vanpooling, for example by providing ride-matching services; iv) Provide incentives or subsidies that increase 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: 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 alternative fuel (e.g., electric, hydrogen-fueled, etc.) vehicle charging and fueling stations or neighborhood alternative fuel vehicle networks, or charging for electric bicycles; v) Measures to reduce GHG emissions from solid waste management through encouraging solid waste recycling and reuse; and vi) Establish methane recovery in Landfills and Wastewater Treatment Plants, where applicable. k) Consult the SCAG Equity Resources for Action (ERA) Toolbox available on SCAG's Environmental Justice webpage for potential measures to address impacts to low-income and/or communities of color. l) Require at least five percent of all new vehicle parking spaces include alternative fuel (e.g., electric, hydrogen-fueled, etc.) vehicle charging and fueling stations, or at a minimum, install the appropriate infrastructure to facilitate sufficient electric charging for passenger vehicles and trucks to plug-in. Encourage electric vehicle capable (branch circuit and raceway) or ready (charging outlet) spaces to accommodate future growth in electric vehicles. m) Encourage telecommuting and alternative work schedules, such as: i) Staggered starting times ii) Flexible schedules iii) Compressed work weeks n) Implement commute trip reduction marketing, such as: i) New employee orientation of trip reduction and alternative mode options ii) Event promotions iii) Publications		

MITIGATION MEASURE		MITIGATION MONITORING TIMING	RESPONSIBLE MONITORING ENTITY
	o) Implement preferential parking permit program p) Implement school pool and bus programs q) Price workplace parking, such as: i) Explicitly charging for parking for its employees ii) Implementing above market rate pricing iii) Validating parking only for invited guests iv) Not providing employee parking and transportation allowances v) Educating employees about available alternatives.		
Hazards and Hazardous Materials			
SMM HAZ-1:	SCAG shall work with the Caltrans and the California Highway Patrol to continue to reduce risks associated with the transport of hazardous materials in the SCAG region, through its Consultation role assisting in the development of routes designated for hazardous materials, specifically related to radioactive materials.	Ongoing over the life of the plan	SCAG
SMM HAZ-2:	SCAG shall continue to collaborate with 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 within the SCAG region.	Ongoing over the life of the plan	SCAG
PMM HAZ-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 related to the routine transport, use, or disposal of hazardous materials and hazardous materials releases, as applicable and feasible. Such measures may include the following or other comparable measures identified by the Lead Agency: a) Reduce train speeds when train cars contain hazardous material to 40 miles per hour when passing through urbanized areas of any size. b) Limit storage of crude oil tank cars in urbanized areas of any size and provide appropriate security in storage yards for all shipments. c) Notify in advance county and city emergency operations offices of all crude oil rail transports, including a contact number that can provide real-time information in the event of an oil train derailment or accident. d) 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. e) Fund training and outfitting emergency response crews that includes the cost of backfilling personnel while in training. f) Undertake annual emergency responses scenario/field-based training including Emergency Operations Center Training activations with local emergency response agencies.	Ongoing over the life of the plan	Lead Agency

MITIGATION MEASURE		MITIGATION MONITORING TIMING	RESPONSIBLE MONITORING ENTITY
PMM HAZ-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 related to the release of hazardous materials within 0.25 miles of schools, as applicable and feasible. Such measures may include the following or other comparable measures identified by the Lead Agency: Require implementation of safety standards regarding transport of hazardous materials, including but not limited to the following: a) Where the construction and operation of projects involves the transport of hazardous materials, avoid transport of such materials within 0.25 miles of schools, when school is in session, wherever feasible. b) Where it is not feasible to avoid transport of hazardous materials, within 0.25 miles of schools on local streets, provide notifications of the anticipated schedule of transport of such materials.	Ongoing over the life of the plan	Lead Agency
PMM HAZ-3:	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 related to projects that are located on a site that is included on the Cortese List of hazardous waste and substances sites, as applicable and feasible. Such measures may include the following or other comparable measures identified by the Lead Agency: 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) If warranted by the Phase I report, submit to the appropriate agency responsible for hazardous materials/wastes oversight a Phase II Environmental Site Assessment report for the project site. The reports should make recommendations for remedial action, if appropriate, and be signed by a 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. 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 USEPA to determine the extent of potential contamination beneath all underground storage tanks, 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 (including dewatering effluent), or	Ongoing over the life of the plan	Lead Agency

MITIGATION MEASURE	MITIGATION MONITORING TIMING	RESPONSIBLE MONITORING ENTITY
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 (including dewatering effluent), 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 (including dewatering effluent) 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, have granted all required clearances and confirmed that the all applicable standards, regulations, and conditions have been met for previous contamination at the site. 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, LBP, and any other building materials or stored materials classified as hazardous waste by state or federal law. o) Where the remediation of LBP 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		

MITIGATION MEASURE		MITIGATION MONITORING TIMING	RESPONSIBLE MONITORING ENTITY
	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 Construction Lead Standard, CCR Title 8 Section 1532.1 and Department of Health Services 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.		
PMM HAZ-4:	In accordance with provisions of Sections 15091(a)(2) and 15126.4(a)(1)(B) of the CEQA Guidelines, a lead agency for a project can and should consider mitigation measures to reduce substantial adverse effects that 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: • Continue to coordinate locally and regionally based on ongoing review and integration of projected transportation and circulation conditions. • Develop new methods of conveying projected and real time information to citizens using emerging electronic communication tools including social media and cellular networks; • Continue to evaluate lifeline routes for movement of emergency supplies and evacuation. • 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: – 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 maximum extent feasible. – Usage of designated haul routes to minimize truck traffic on local roadways to the maximum extent feasible. – 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 Transportation Manual of Traffic Controls for Construction and Maintenance Work Zones. – 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	Ongoing over the life of the plan	Lead Agency

MITIGATION MEASURE		MITIGATION MONITORING TIMING	RESPONSIBLE MONITORING ENTITY
	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.		
Hydrology and Water Quality			
SMM HYD-1:	SCAG shall continue to facilitate regional forums for collaboration opportunities, such as through the Sustainable & Resilient Communities Working Group, to share best practices and develop recommendations to create resilient communities in the region. SCAG shall continue to work with stakeholders and the public to encourage regional-scale planning that addresses regional shocks and stressors, such as improved water quality, groundwater, stormwater management, pollution prevention, flooding, wildfire prevention, disaster emergency services, emergency evacuation plans, wildfire resiliency, and earthquake preparedness to the extent practical and feasible through cooperative planning, information sharing, and encouragement of comprehensive control measure development within the SCAG region.	Ongoing over the life of the plan	SCAG
PMM HYD-1:	In accordance with provisions of CEQA Guidelines Sections 15091(a)(2) and 15126.4(a)(1)(B), 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. While compliance with the various municipal regional stormwater permits (MS4s) is required by law, not all areas are necessarily covered under a permit. For those areas that are not covered under a municipal stormwater permit (MS4), such measures may include the following or other comparable measures identified by the lead agency: a) Implement best management practices to reduce the peak stormwater runoff from the project site to the maximum extent practicable. b) Complete, and have approved, a Standard Urban Stormwater Management Plan, prior to occupancy of residential or commercial structures. c) Ensure adequate capacity of the surrounding stormwater system to support stormwater runoff from new or rehabilitated structures or buildings. d) Where feasible, restore or expand riparian areas such that there is no net loss of impervious surface as a result of the project.	Ongoing over the life of the plan	Lead Agency

MITIGATION MEASURE		MITIGATION MONITORING TIMING	RESPONSIBLE MONITORING ENTITY
	e) 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 stormwater runoff discharge permits, on new facilities. f) 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 stormwater 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. g) 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. h) 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. i) Encourage low-impact development and incorporation of natural spaces that reduce, treat, infiltrate, and manage stormwater runoff flows in all new developments, where practical and feasible:		
PMM HYD-2:	In accordance with provisions of CEQA Guidelines Sections 15091(a)(2) and 15126.4(a)(1)(B), 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: a) Avoid designs that require continual dewatering where feasible. 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 comply with appropriate building codes and standard practices including the CBC. b) Maximize, where practical and feasible, permeable surface area to protect water quality and allow for groundwater recharge. Minimize new impervious surfaces, including the use of in-lieu fees and off-site mitigation. c) Avoid construction and siting on groundwater recharge areas, where feasible, to prevent conversion of those areas to impervious surface.	Ongoing over the life of the plan	Lead Agency
PMM HYD-3:	In accordance with provisions of CEQA Guidelines Sections 15091(a)(2) and 15126.4(a)(1)(B), 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: a) Ensure that all roadbeds for new highway and rail facilities be elevated at least one foot above the 100-year base flood elevation. In areas affected by coastal flooding, new projects should be designed for	Ongoing over the life of the plan	Lead Agency

MITIGATION MEASURE		MITIGATION MONITORING TIMING	RESPONSIBLE MONITORING ENTITY
	resilience against 3.5 feet of sea-level rise, as per California Ocean Protection Council's strategic guidance. 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.		
Land Use and Planning			
SMM LU-1:	SCAG shall continue to coordinate with local County Transportation Commissions, Caltrans, and other local jurisdictions when siting new facilities in residential areas to facilitate minimizing future impacts 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.	Ongoing over the life of the plan	SCAG
SMM LU-2:	SCAG shall continue to use the Intergovernmental Review (IGR) Program as an information sharing tool by providing information to regionally significant projects as defined in CEQA Guidelines Section 15206 to facilitate consideration of the most currently adopted Connect SoCal 2024. SCAG shall continue to review regionally significant projects submitted to SCAG to include them in the IGR Bi-Monthly Reports that are published on SCAG's IGR Program website at: https://scag.ca.gov/igr-bi-monthly-report. For more information on SCAG's IGR Program, please visit: http://www.scag.ca.gov/programs/Pages/IGR.aspx.	Ongoing over the life of the plan	SCAG
SMM LU-3:	SCAG shall continue to support local jurisdictions when they update their general plans at least every ten years, as recommended by the Governor's Office of Planning and Research through the use of the multiple planning and analytical tools provided by SCAG such as the Regional Data Platform and other GIS software. Additionally, SCAG shall continue to facilitate information sharing, such as through the Toolbox Tuesday program to provide webinars on technical information and tools that may be useful for local jurisdictions to assist with their general plan updates, and funding programs, such as Regional Early Action Planning grants and Call for Projects.	Ongoing over the life of the plan	SCAG
PMM LU-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 that physically divide a community, as applicable and feasible. Such measures may include the following or other comparable measures identified by the lead agency: a) Facilitate connections in communities that have been physically divided through land use projects that build upon and improve existing circulation patterns. b) Encourage implementing agencies to orient transportation projects to minimize impacts on existing communities by: – 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.	Ongoing over the life of the plan	Lead Agency

MITIGATION MEASURE		MITIGATION MONITORING TIMING	RESPONSIBLE MONITORING ENTITY
	– 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: – 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.		
PMM LU-2:	In accordance with provisions of CEQA Guidelines Sections 15091(a)(2) and 15126.4(a)(1)(B), a lead agency for a project can and should consider mitigation measures to reduce substantial adverse effects that are due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect, as applicable and feasible. 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, measures may include the following or other comparable measures identified by the lead agency: a) Modify the transportation or land use project to eliminate or reduce 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 and process said amendment.	Ongoing over the life of the plan	Lead Agency
Mineral Resources			
PMM MIN-1:	In accordance with provisions of CEQA Guidelines Sections 15091(a)(2) and 15126.4(a)(1)(B), 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: 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: 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.	Ongoing over the life of the plan	Lead Agency

MITIGATION MEASURE		MITIGATION MONITORING TIMING	RESPONSIBLE MONITORING ENTITY
	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.		
Noise			
PMM NOI-1:	In accordance with provisions of Sections 15091(a)(2) and 15126.4(a)(1)(B) of the CEQA Guidelines, a Lead Agency for a project can and should consider mitigation measures to reduce ambient noise levels in the vicinity of the project, as applicable and feasible. Such measures may include the following or other comparable measures identified by the Lead Agency: a) Install temporary noise barriers during construction between noise sources and noise-sensitive land uses and species. b. Include permanent noise barriers and sound-attenuating features as part of the project design between noise sources and noise-sensitive land uses and species. Barriers could be in the form of outdoor barriers, sound walls, buildings, landscaped berms, dense planting, or earth berms to attenuate noise at adjacent sensitive uses. Sound-attenuating features could be in the form of grade separation, buffer zones, reduced-noise paving materials, and traffic calming measures. 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 is 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 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.	Ongoing over the life of the plan	Lead Agency

MITIGATION MEASURE		MITIGATION MONITORING TIMING	RESPONSIBLE MONITORING ENTITY
	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. 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. n. 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. o. Stationary noise sources can and should be located as far from adjacent sensitive receptors and species to the maximum extent feasible 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. p. Use of portable barriers in the vicinity of sensitive receptors during construction. q. 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. r. Monitor the effectiveness of noise attenuation measures by taking noise measurements. s. 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.		
PMM NOI-2:	In accordance with provisions of Sections 15091(a)(2) and 15126.4(a)(1)(B) of the CEQA Guidelines, a Lead Agency for a project can and should consider mitigation measures to reduce substantial adverse effects related to groundborne vibration. Such measures may include the following or other comparable measures identified by the Lead Agency: 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.	Ongoing over the life of the plan	Lead Agency

MITIGATION MEASURE		MITIGATION MONITORING TIMING	RESPONSIBLE MONITORING ENTITY
	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 and reduce the vibration occurrences and magnitude. d. Perform construction activities within 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).		
Population and Housing			
SMM POP-1:	SCAG shall continue to facilitate collaboration forums, such as through SCAG's Housing Working Group, and host public outreach events in various formats that respond to issues that shape the housing crisis and share information on sustainable housing development and potential funding opportunities.	Ongoing over the life of the plan	SCAG
SMM POP-2:	SCAG shall continue to produce a variety of demographic, economic, education, housing, public health, and transportation information to facilitate data exchange for local jurisdictions across the region, through existing web-based planning tools, such as SCAG Regional Data Platform (RDP). Local jurisdictions may utilize these tools for a variety of planning and community outreach purposes including project and program planning and grant development.	Ongoing over the life of the plan	SCAG
PMM POP-1:	In accordance with provisions of Sections 15091(a)(2) and 15126.4(a)(1)(B) of the CEQA Guidelines, 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 following or other comparable measures identified by the lead agency: 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 of existing ROWs, wherever feasible. c) Develop a construction schedule that minimizes potential neighborhood deterioration from protracted waiting periods between ROW 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.	Ongoing over the life of the plan	Lead Agency

MITIGATION MEASURE		MITIGATION MONITORING TIMING	RESPONSIBLE MONITORING ENTITY
Public Services			
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 or physically altered fire and police facilities, as applicable and feasible. Such measures may include the following or other comparable measures identified by the lead agency: a) Coordinate with fire and police protection services agencies to ensure that there are adequate facilities to maintain acceptable service ratios, response times or other performance objectives for fire and police protection services and that any required additional construction of buildings is incorporated into 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 for fire and police protection services facilities, as appropriate and applicable, to mitigate identified CEQA impacts.	Ongoing over the life of the plan	Lead Agency
PMM PS-2:	In accordance with provisions of Sections 15091(a)(2) and 15126.4(a)(1)(B) of the 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: • Where construction or expansion of school facilities is required to meet public school service ratios, support expansion of such facilities, for example by ensuring safe routes to schools.	Ongoing over the life of the plan	Lead Agency
Parks and Recreation			
SMM REC-1:	SCAG shall continue to encourage and recommend approaches to help local jurisdictions improve residential access to, and use of, existing neighborhood and regional parks through information sharing and regional forums for collaboration, such as the Equity Working Group.	Ongoing over the life of the plan	SCAG
PMM REC-1:	In accordance with provisions of CEQA Guidelines Sections 15091(a)(2) and 15126.4(a)(1)(B), 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: 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: i. Increasing the accessibility to natural areas for outdoor recreation ii. Utilizing “green” development techniques	Ongoing over the life of the plan	Lead Agency

MITIGATION MEASURE		MITIGATION MONITORING TIMING	RESPONSIBLE MONITORING ENTITY
	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.		
	Transportation		
SMM TRA-1:	SCAG shall facilitate the reduction of vehicle miles traveled (VMT) and impacts to circulation and access through mobility improvements and by encouraging transit/rail and active transportation use via stakeholder forums (e.g., quarterly Safe and Active Streets Working Group meetings, bimonthly Regional Transit Technical Advisory Committee meetings, monthly Active Transportation Program check-ins with County Transportation Commissions). These objectives will also be facilitated through the hosting of regional forums for policy makers, County Transportation Commissions, planning agencies, local jurisdictions, and state partners to promote information sharing.	Ongoing over the life of the plan	SCAG
SMM TRA-2:	SCAG shall continue to support development of local and regional SB 743 implementation programs.	Ongoing over the life of the plan	SCAG
SMM TRA-3:	SCAG shall continue to develop and support its program for reducing average daily number of SCAG employees' commute vehicle trips.	Ongoing over the life of the plan	SCAG
PMM TRA-1:	In accordance with provisions of sections 15091(a)(2) and 15126.4(a)(1)(B) of the CEQA Guidelines, a lead agency for a project can and should consider mitigation measures to reduce substantial adverse effects related to transportation impacts. Such measures may include the following or other comparable measures identified by the lead agency: For future land use development projects, lead agencies to encourage the incorporation of transit, bicycle, pedestrian, and micro-mobility facilities, features, and services in project designs, as well as encourage developers to provide information regarding the availability of these facilities and services to residents, tenants, and owners in order to facilitate increased access to and utilization of transit and active transportation services and facilities.	Ongoing over the life of the plan	Lead Agency
PMM TRA-2:	In accordance with provisions of sections 15091(a)(2) and 15126.4(a)(1)(B) of the CEQA Guidelines, a lead agency for a project can and should consider mitigation measures to reduce substantial adverse effects related to transportation impacts. Such measures may include the following or other comparable measures identified by the lead agency: • Transportation demand management (TDM) strategies should be incorporated into individual land use and transportation projects and plans, as part of the planning process. Local jurisdictions should incorporate strategies identified in the Federal Highway Administration's publication: Integrating Demand Management into the Transportation Planning Process: A Desk Reference (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: – Include TDM mitigation requirements for new developments;	Ongoing over the life of the plan	Lead Agency

MITIGATION MEASURE		MITIGATION MONITORING TIMING	RESPONSIBLE MONITORING ENTITY
	– 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		
PMM TRA-3:	In accordance with provisions of sections 15091(a)(2) and 15126.4(a)(1)(B) of the CEQA Guidelines, a lead agency for a project can and should consider mitigation measures to reduce substantial adverse effects related to transportation impacts. Such measures may include the following or other comparable measures identified by the lead agency: Prepare a sight distance analysis as needed for locations where sight lines could be impeded. The sight distance analysis to be prepared according to the jurisdiction's applicable Municipal Code requirements and the Caltrans Highway Design Manual (HCM) standards and guidelines, and should recommend safety improvements as appropriate such as limited use areas (e.g., low-height landscaping), on-street parking restrictions (e.g., red curb), and any turning restrictions (e.g., right-in/right-out).	Ongoing over the life of the plan	Lead Agency
	Tribal Cultural Resources		
PMM TCR-1:	In accordance with provisions of Sections 15091(a)(2) and 15126.4(a)(1)(B) of the CEQA Guidelines, 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: a) Avoid and/or preserve 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) Treat the resource with culturally appropriate dignity taking into account the tribal cultural 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;	Ongoing over the life of the plan	Lead Agency

MITIGATION MEASURE		MITIGATION MONITORING TIMING	RESPONSIBLE MONITORING ENTITY
	c) Provide 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. d) If tribal cultural resources are found, then the lead agency should consider tribal construction monitoring.		
	Utilities and Service Systems		
SMM USSW-1:	SCAG shall continue to provide support for coordinating with waste management agencies, and appropriate local and regional jurisdictions, and sharing information to facilitate and encourage diversion of solid waste where applicable, appropriate, and feasible.	Ongoing over the life of the plan	SCAG
PMM UTIL-1:	In accordance with provisions of sections 15091(a)(2) and 15126.4(a)(1)(B) of the CEQA Guidelines, 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. • During the design and CEQA review of individual future projects, implementing agencies and projects sponsors shall determine whether sufficient wastewater capacity exists for the proposed projects. The proposed development can and should 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.	Ongoing over the life of the plan	Lead Agency
PMM UTIL-2:	In accordance with provisions of sections 15091(a)(2) and 15126.4(a)(1)(B) of the CEQA Guidelines, 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: a) Reduce exterior consumptive uses of water in public areas, and 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 how these can be obtained. Use of reclaimed water especially in median landscaping and hillside landscaping can and should be implemented where feasible. 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.	Ongoing over the life of the plan	Lead Agency

MITIGATION MEASURE		MITIGATION MONITORING TIMING	RESPONSIBLE MONITORING ENTITY
PMM UTIL-3:	In accordance with provisions of sections 15091(a)(2) and 15126.4(a)(1)(B) of the CEQA Guidelines, 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: Integrate green building measures consistent with CALGreen (California Building Code Title 24) into project design including, but not limited to the following: a) Reuse and minimize construction and demolition (C&D) debris and diversion of C&D waste from landfills to recycling facilities. b) Include 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 existing structure and shell in renovation projects. e) Develop 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 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 where appropriate and feasible. h) Encourage waste reduction goals and practices and look for opportunities for voluntary actions to exceed the 80 percent state 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 additional 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.	Ongoing over the life of the plan	Lead Agency

MITIGATION MEASURE		MITIGATION MONITORING TIMING	RESPONSIBLE MONITORING ENTITY
	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.		
	Wildfire		
SMM WF-1:	SCAG shall continue to provide a regional forum for collaboration in planning, communication, and information sharing on best practices around wildfire resilience.	Ongoing over the life of the plan	SCAG
PMM WF-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 wildfire risk, as applicable and feasible. Such measures may include the following or other comparable measures identified by the Lead Agency: 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. 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. g) Include external sprinklers with an independent water source to reduce flammability of structures. h) Include local solar power paired with batteries to reduce power flow in electricity lines. i) For developments in high fire-prone areas, have a fire protection plan for residents and businesses. j) Provide fire hazard and fire safety education for homeowners in or near fire hazard areas. k) Developments in fire-prone areas should have fire-resistant features, such as: 1) Ember-resistant vents 2) Fire-resistant roofs 3) Surrounding defensible space 4) Proper maintenance and upkeep of structures and surrounding area	Ongoing over the life of the plan	Lead Agency

MITIGATION MEASURE		MITIGATION MONITORING TIMING	RESPONSIBLE MONITORING ENTITY
	l) Explore and implement new strategies and better roadway easement management to minimize fire ignitions along roadways. m) Coordinate with CAL FIRE, local Fire Safe Councils, and homeowners' associations to implement FireWise Communities, implement restoration projects that remove highly flammable non-native grasses, and improve habitat via restoration projects at the Wildland Urban Interface.		
PMM WF-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 wildfire risk, as applicable and feasible. Such measures may include the following or other comparable measures identified by the Lead Agency: a) New development or infrastructure activity within very high hazard severity zones or SRAs to: 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.	Ongoing over the life of the plan	Lead Agency

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