THE 2020-2045 REGIONAL TRANSPORTATION PLAN/
SUSTAINABLE COMMUNITIES STRATEGY OF THE
SOUTHERN CALIFORNIA ASSOCIATION OF GOVERNMENTS



## **EXHIBIT A**

Revised Mitigation Monitoring and Reporting Program for the Final Connect SoCal PEIR



SEPTEMBER 3, 2020

STATE CLEARINGHOUSE #20199011061

### **Table of Contents**

Section	<u>n</u>	<u>Page</u>
1.0	PURPOSE	1
2.0	INTRODUCTION	1
	List of Tables	
<u>Table</u>		Page
A-1	Mitigation Monitoring and Reporting Program Matrix	2

# EXHIBIT A – REVISED MITIGATION MONITORING AND REPORTING PROGRAM FOR THE CONNECT SOCAL PLAN

### 1.0 PURPOSE

The Mitigation Monitoring and Reporting Program (MMRP) has been prepared in conformance with Section 21081.6 of the California Environmental Quality Act (CEQA) and Section 15097 of the CEQA Guidelines. It is the intent of this program to: (1) verify satisfaction of the required mitigation measures of the EIR; (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.

### 2.0 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 project 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 EIR identifies programmatic mitigation measures to be implemented by SCAG and identifies project-level mitigation measures that SCAG will encourage local agencies to implement, as appropriate and feasible, as part of 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 Connect SoCal Program EIR, project-level mitigation measures included in this Program EIR (or comparable measures) should be required by the local lead agency as appropriate and feasible. Many lead agencies have existing regulations, policies, and/or standard conditions of approval that address potential impacts. Nothing in the Program EIR 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 Program EIR 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			_
the pla and tec	SCAG shall facilitate minimizing impacts to scenic vistas through cooperation, information sharing regarding locations of designated scenic vistas, and regional program development as part of SCAG's ongoing regional mining efforts, such as web-based planning tools for local government including REVISION, and other GIS tools data services, including, but not limited to, Map Gallery, GIS library, and GIS applications, and direct thrical assistance efforts such as sharing of associated online training materials. Caltrans and lead agencies, such county and city planning departments, shall be consulted during this update process.	Ongoing over the life of the plan	SCAG
Ag vis	In accordance with provisions of sections 15091(a)(2) and 15126.4(a)(1)(B) of the <i>State CEQA Guidelines</i> , a Lead ency for a project can and should consider mitigation measures to address potential aesthetic impacts to scenic tas, as applicable and feasible. Such measures may include the following or other comparable measures ntified by the Lead Agency:	Ongoing over the life of the plan	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)	Design new corridor landscaping to respect existing natural and man-made features and to complement the dominant landscaping of the surrounding areas.		
d)	Replace and renew landscaping along corridors with road widenings, interchange projects, and related improvements.		
e)	Retain or replace trees bordering highways, so that clear-cutting is not evident.		
f)	Provide new corridor landscaping that respects and provides appropriate transition to existing natural and man-made features and is complementary to the dominant landscaping or native habitats of surrounding areas.		
g)	Reduce the visibility of construction staging areas by fencing and screening these areas with low contrast materials consistent with the surrounding environment, and by revegetating graded slopes and exposed earth surfaces at the earliest opportunity;		
h)	Use see-through safety barrier designs (e.g. railings rather than walls)		
Ag sub	In accordance with provisions of sections 15091(a)(2) and 15126.4(a)(1)(B) of the <i>State CEQA Guidelines</i> , a Lead ency for a project can and should consider mitigation measures to address potential aesthetic impacts that ostantially degrade visual character, as applicable and feasible. Such measures may include the following or er comparable measures identified by the Lead Agency:	Ongoing over the life of the plan	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.		

	Mitigation Measure	Mitigation Monitoring Timing	Responsible Monitoring Entity
b)	Design landscaping along highway corridors to add significant natural elements and visual interest to soften the hard-edged, linear transportation corridors.	0 0	<u> </u>
c)	Require development of design guidelines for projects that make elements of proposed buildings/facilities visually compatible or minimize visibility of changes in visual quality or character through use of hardscape and softscape solutions. Specific measures to be addressed include setback buffers, landscaping, color, texture, signage, and lighting criteria.		
d)	Design projects consistent with design guidelines of applicable general plans.		
e)	Require that sites are kept in a blight/nuisance-free condition. Remove blight or nuisances that compromise visual character or visual quality of project areas including graffiti abatement, trash removal, landscape management, maintenance of signage and billboards in good condition, and replace compromised native vegetation and landscape.		
f)	Where sound walls are proposed, require sound wall construction and design methods that account for visual impacts as follows:		
	<ul> <li>use transparent panels to preserve views where sound walls would block views from residences;</li> </ul>		
	— use landscaped earth berm or a combination wall and berm to minimize the apparent sound wall height;		
	<ul> <li>construct sound walls of materials whose color and texture complements the surrounding landscape and development;</li> </ul>		
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.		
coo and and tec	SCAG shall facilitate minimizing impacts on aesthetics related to new sources of light or glare through operation, information sharing regarding guidelines and policies, design approaches, building materials, siting, d technology, such as web-based planning tools for local government including CA LOTS, and other GIS tools d data services, including, but not limited to, Map Gallery, GIS library, and GIS applications, and direct hnical assistance efforts and sharing of associated online training materials. Lead agencies, such as county and y planning departments, shall be consulted during this update process.	Ongoing over the life of the plan	SCAG
Ag sul	In accordance with provisions of sections 15091(a)(2) and 15126.4(a)(1)(B) of the <i>State CEQA Guidelines</i> , a Lead ency for a project can and should consider mitigation measures to address potential aesthetic impacts that ostantially degrade visual character, as applicable and feasible. Such measures may include the following or the comparable measures identified by the Lead Agency:	Ongoing over the life of the plan	Lead Agency
a)	Use lighting fixtures that are adequately shielded to a point below the light bulb and reflector and that prevent unnecessary glare onto adjacent properties.		
b)	Restrict the operation of outdoor lighting for construction and operation activities to the hours of 7:00 a.m. to 10:00 p.m. or as otherwise required by applicable local rules or ordinances.		
c)	Use high pressure sodium and/or cut-off fixtures instead of typical mercury-vapor fixtures for outdoor lighting.		
	Use unidirectional lighting to avoid light trespass onto adjacent properties.		
d)	Ose ununectional lighting to avoid light trespass onto adjacent properties.		

	Mitigation Measure	Mitigation Monitoring Timing	Responsible Monitoring Entity
f)	Provide structural and/or vegetative screening from light-sensitive uses.		
g)	Shield and direct all new street and pedestrian lighting away from light-sensitive off-site uses.		
h)	Use non-reflective glass or glass treated with a non-reflective coating for all exterior windows and glass used on building surfaces.		
i)	Architectural lighting shall be directed onto the building surfaces and have low reflectivity to minimize glare and limit light onto adjacent properties.		
Agriculture	and Forestry		
stal thr	SCAG shall host a Natural & Farm Lands Conservation Working Group which will provide a forum for keholders to share best practices and develop recommendations for natural and agricultural land conservation bughout the region, including the development and implementation of Connect SoCal's Natural and Farm and Sconservation Strategies.	Ongoing over the life of the plan	SCAG
bes bet the pro adv sup	SCAG shall develop a Regional Greenprint, which is a strategic web-based conservation tool that provides the tavailable scientific data and scenario visualizations to help cities, counties and transportation agencies make ter land use and transportation infrastructure decisions and conserve natural and farm lands. SCAG shall use Greenprint to identify priority conservation areas and work with CTCs to develop advanced mitigation grams or include them in future transportation measures by (1) funding pilot programs that encourage vance mitigation including data and replicable processes, (2) participating in state-level efforts that would export regional advanced mitigation planning in the SCAG region, and (3) supporting the inclusion of advance igation programs at county level transportation measures.	Ongoing over the life of the plan	SCAG
stra cou oth	SCAG shall align with funding opportunities and pilot programs to begin implementation of conservation stegies through (1) seeking planning and implementation funds, such as Greenhouse Gas Reduction Funds that all advance local action on acquisition and restoration projects locally and regionally, (2) supporting CTCs and er partners, and (3) continuing policy alignment with the State Wildlife Action Plan 2015 Update and its plementation.	Ongoing over the life of the plan	SCAG
hal Teo	SCAG shall provide incentives to jurisdictions that cooperate across county lines to protect and restore natural bitat corridors, especially where corridors cross county boundaries, as detailed in the Natural & Farm Lands chnical Report strategies of Connect SoCal. SCAG will work with stakeholders to identify incentives and erage resources that help protect habitat corridors.	Ongoing over the life of the plan	SCAG
Ag agr	In accordance with provisions of sections 15091(a)(2) and 15126.4(a)(1)(B) of the <i>State CEQA Guidelines</i> , a Lead ency for a project can and should consider mitigation measures to address potential adverse effects on icultural resources, as applicable and feasible. Such measures may include the following or other comparable asures identified by the Lead Agency:	Ongoing over the life of the plan	Lead Agency
a)	Require project sponsors to mitigate for loss of farmland by providing permanent protection of in-kind farmland in the form of easements, fees, or elimination of development rights/potential.		
b)	Project relocation or corridor realignment to avoid Prime Farmland, Unique Farmland, or Farmland of Local or Statewide Importance.		
c)	Maintain and expand agricultural land protections such as urban growth boundaries.		

	Mitigation Measure	Mitigation Monitoring Timing	Responsible Monitoring Entity
d)	Provide for mitigation fees to support a mitigation bank <sup>1</sup> that invests in farmer education, agricultural infrastructure, water supply, marketing, etc. that enhance the commercial viability of retained agricultural lands.		Ţ,
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.		
Me	Project level mitigation measures can and should be considered by Lead Agencies as applicable and feasible. asures to reduce substantial adverse effects on Williamson Act contracts to the maximum extent practicable, as ermined appropriate by each Lead Agency, may include the following, or other comparable measures:	Ongoing over the life of the plan	Lead Agency
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.		
Me pra	Project level mitigation measures can and should be considered by Lead Agencies as applicable and feasible. asures to reduce substantial adverse effects, through the conversion of Farmland to maximum extent cticable, as determined appropriate by each Lead Agency, may include the following, or other comparable asures:	Ongoing over the life of the plan	Lead Agency
a)	Minimize construction related impacts to agricultural and forestry resources by locating materials and stationary equipment in such a way as to prevent conflict with agriculture and forestry resources.		
Me pra	Project level mitigation measures can and should be considered by Lead Agencies as applicable and feasible. asures to reduce substantial adverse effects, through the conversion of Farmland, to the maximum extent cticable, as determined appropriate by each Lead Agency, may include the following, or other comparable asures:	Ongoing over the life of the plan	Lead Agency
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.		

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

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Impact Sciences, Inc.

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:	Ongoing over the life of the plan	Lead Agency
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.		
Air Quality		
SMM AQ-1: SCAG shall develop the Southern California Disadvantaged Communities Planning Initiative which would provide funds to selected applicants to develop a low-cost, high-impact model which leverages SCAG's staff, data, and outreach resources to deliver context-sensitive plans in high-need, low-resourced active transportation infrastructure and frameworks. As part of the initiative, the model will be operationalized through the development of plans in six communities and refined to provide a sustainable resource for SCAG staff partner with local agencies to develop local active transportation plans.	Ongoing over the life of the plan	SCAG
SMM AQ-2: SCAG shall continue its commitment to analyze public health outcomes as part of Connect SoCal. As part of the public health analysis for the Plan, SCAG shall continue to analyze the Plan's impacts on air quality through its Public Health Working group and continue to support policy change at the city and country level through education programs.	Ongoing over the life of the plan	SCAG
SMM AQ-3: SCAG shall continue to conduct air quality-related technical analyses on the region, specifically in vulnerable areas that are typically environmental justice areas. For example, SCAG staff conducted technical analysis of emissions impacts on populations within 500 feet of freeways and highly travelled corridors in the Connect SoCal Environmental Justice Appendix. SCAG staff shall also continue to work with districts and relevant stakeholders to be informed of any updates new and/or changes to air quality issue areas through various forums like the Environmental Justice Working Group.	Ongoing over the life of the plan	SCAG
<b>PMM AQ-1:</b> In accordance with provisions of sections 15091(a)(2) and 15126.4(a)(1)(B) of the <i>State CEQA Guidelines</i> , a Lead Agency for a project can and should consider mitigation measures to reduce substantial adverse effects related to violating air quality standards. Such measures may include the following or other comparable measures identified by the Lead Agency:	Ongoing over the life of the plan	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.		

Mitigation Measure	Mitigation	Responsible
Willigation Measure	<b>Monitoring Timing</b>	<b>Monitoring Entity</b>

- 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.
- Require contractors to assemble a comprehensive inventory list (i.e., make, model, engine year, horsepower, emission rates) of all heavy-duty off-road (portable and mobile) equipment (50 horsepower and greater) that could be used an aggregate of 40 or more hours for the construction project. Prepare a plan for approval by the applicable air district demonstrating achievement of the applicable percent reduction for a CARB-approved fleet. Daily logging of the operating hours of the equipment should also be required.
- k) Ensure that all construction equipment is properly tuned and maintained.
- 1) Minimize idling time to 5 minutes or beyond regulatory requirements—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 community impacts as a result of 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. Project sponsors should consider developing a goal for the minimization of community impacts.
- p) As appropriate require that portable engines and portable engine-driven equipment units used at the project work site, with the exception of on-road and off-road motor vehicles, obtain CARB Portable Equipment Registration with the state or a local district permit. Arrange appropriate consultations with the CARB or the District to determine registration and permitting requirements prior to equipment operation at the site.
- q) Require projects to use Tier 4 Final equipment or better for all engines above 50 horsepower (hp). In the event that construction equipment cannot meet to Tier 4 Final engine certification, the Project representative or contractor must demonstrate through future study with written findings supported by substantial evidence that is approved by SCAG 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 engines would not be required to mitigate emissions below significance

Mitigation Measure	Mitigation Monitoring Timing	Responsible Monitoring Entity
thresholds. Project sponsors should also consider including ZE/ZNE technologies where appropriate and feasible.		

- r) Projects located within the South Coast Air Basin 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 additional mitigation that can be applied to individual projects.
- 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.
- 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:
  - a. 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.
  - c. Require the use of ground service equipment (GSE) that can operate on battery-power. If electric equipment cannot be obtained, require the use of alternative fuel, the cleanest gasoline equipment, or Tier 4. at a minimum.
- w) As applicable for port projects, the following measures should be considered:
  - a. Develop specific timelines for transitioning to zero emission cargo handling equipment (CHE).
  - b. Develop interim performance standards with a minimum amount of CHE replacement each year to ensure adequate progress.
  - c. 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.
  - d. Install the appropriate infrastructure to provide shore power to operate the ships. Electrical hookups should be appropriately sized.
  - e. 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.
  - f. Encourage the participation in the Green Ship Incentives.
  - g. Offer incentives to encourage the use of on-dock rail.
- x) As applicable for rail projects, the following measures should be considered:
  - a. 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

Mitigation Measure	Mitigation	Responsible
wittigation weasure	Monitoring Timing	Monitoring Entity

installing high efficiency of 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.
  - a. 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.
  - b. Identify the responsible implementing and enforcement agency to ensure that enhanced filtration units are installed on-site before a permit of occupancy is issued.
  - c. Disclose the potential increase in energy costs for running the HVAC system to prospective residents.
  - d. Provide information to residents on where MERV filters can be purchased.
  - e. Provide recommended schedule (e.g., every year or every six months) for replacing the enhanced filtration units.
  - f. Identify the responsible entity such as future residents themselves, Homeowner's Association, or property managers for ensuring enhanced filtration units are replaced on time.
  - g. Identify, provide, and disclose ongoing cost-sharing strategies, if any, for replacing the enhanced filtration units.
  - h. 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 Environmental Justice Toolbox for potential measures to address impacts to low-income and/or minority communities
- 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.
  - Emission control technology shall be operated, maintained, and serviced as recommended by the emission control technology manufacturer.
  - Diesel vehicles, construction equipment, and generators on site shall be fueled with ultra-low sulfur diesel fuel (ULSD) or a biodiesel blend approved by the original engine manufacturer with sulfur content of 15 ppm or less.

Mitigation Measure	Mitigation Monitoring Timing	Responsible Monitoring Entity
<ul> <li>The construction contractor shall maintain a list of all diesel vehicles, construction equipment, and</li> </ul>		

- 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:
  - 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.
  - 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.
- The contractor shall 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.
- The contractor shall 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) Project should exceed Title-24 Building Envelope Energy Efficiency Standards (California Building Standards Code). The following measures can be used to increase energy efficiency:
  - 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
  - Establish methane recovery in Landfills and Wastewater Treatment Plants.
  - Locate project near bike path/bike lane

Mitigation Measure	Mitigation	Responsible
Mitigation Measure	<b>Monitoring Timing</b>	Monitoring Entity

- 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:
  - Marked crosswalks
  - 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:
  - 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
  - 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.

Mitigation Measure	Mitigation Monitoring Timing	Responsible Monitoring Entity
Biological Resources	0 0	<u>_</u>
SMM BIO-1: SCAG shall facilitate reducing future impacts to species identified as a candidate, sensitive, or special status species and its habitats through cooperation, information sharing, and program development. SCAG shall consult with the resource agencies, such as the USFWS, NMFS, USACE, USFS, BLM, and CDFW, as well as local jurisdictions including cities and counties, to incorporate designated critical habitat, federally protected wetlands, the protection of sensitive natural communities and riparian habitats, designated open space or protected wildlife habitat, local policies and tree preservation ordinances, applicable HCPs and NCCPs, or other related planning documents into SCAG's ongoing regional planning efforts and programs such as, web-based planning tools for local government including CA LOTS, and other GIS tools and data services, including, but not limited to, Map Gallery, GIS library, and GIS applications, and direct technical assistance efforts and sharing of associated online Training materials. Planning efforts shall be consistent with the approach outlined in the California Wildlife Action Plan. Additionally, SCAG shall vet and distribute environmental data (i.e. endangered species and important habitat areas) to local jurisdictions.	the plan	SCAG
SMM BIO-2: SCAG shall continue to develop a regional conservation strategy in coordination with local jurisdictions and other stakeholders, including the county transportation commissions. The conservation strategy will build upon existing efforts including those at the sub-regional and local levels to identify potential priority conservation areas. SCAG will also collaborate with stakeholders to establish a new Regional Advanced Mitigation Program (RAMP) initiative to preserve habitat. The RAMP would establish and/or supplement regional conservation and mitigation banks and/or other approaches to offset impacts of transportation and other development projects.	the plan	SCAG
To assist in defining the RAMP, SCAG shall lead a multi-year effort to SCAG shall develop new regional tools, like the Regional Data Platform and Regional Greenprint that will provide an easily accessible resource to help municipalities, conservation groups, developers and researchers prioritize lands for conservation based on best available scientific data. The Regional Greenprint effort shall also produce a whitepaper on the RAMP initiative, which includes approaches for the RAMP in the SCAG region, needed science and analysis, models, challenges and opportunities and recommendations.		
PMM BIO-1: In accordance with provisions of sections 15091(a)(2) and 15126.4(a)(1)(B) of the State CEQA Guidelines, a Lead	Ongoing over the life of	Lead Agency
Agency for a project can and should consider mitigation measures to reduce substantial adverse effects related to threatened and endangered species, as applicable and feasible. Such measures may include the following or other comparable measures identified by the Lead Agency:	=	<i>σ</i> ,
<ul> <li>Require project design to avoid occupied habitat, potentially suitable habitat, and designated critical habitat, wherever practicable and feasible.</li> </ul>		
b) Where avoidance is determined to be infeasible, provide conservation measures to fulfill the requirements of the applicable authorization for incidental take pursuant to Section 7 or 10(a) of the federal ESA, Section 2081 of the California ESA to support issuance of an incidental take permit, and/or as identified in local or regional plans. Conservation strategies to protect the survival and recovery of federally and state-listed endangered and local special status species may include:		
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		

	Mitigation Measure	Mitigation Monitoring Timing	Responsible Monitoring Entity
	v. Habitat restoration		,
•	ri. Establishment of conservation easements		
v	ii. 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.		
1)	Conduct pre-construction surveys to delineate occupied sensitive species' habitat to facilitate avoidance.		
m)	Where projects are determined to be within suitable habitat and may impact listed or sensitive species that have specific field survey protocols or guidelines outlined by the USFWS, CDFW, or other local agency, conduct preconstruction surveys that follow applicable protocols and guidelines and are conducted by qualified and/or certified personnel.		
n)	Project design should address the protection of habitat on both sides of a freeway to improve effectiveness of the crossings.		
o)	Project sponsors shall consider the impacts of nitrogen deposition on sensitive species.		
Ag rip	In accordance with provisions of sections 15091(a)(2) and 15126.4(a)(1)(B) of the <i>State CEQA Guidelines</i> , a Lead ency for a project can and should consider mitigation measures to reduce substantial adverse effects related to arian habitats and other sensitive natural communities, as applicable and feasible. Such measures may include following or other comparable measures identified by the Lead Agency:	Ongoing over the life of the plan	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		

Mitigation Measure	Mitigation	Responsible
wittigation weasure	Monitoring Timing	Monitoring Entity

- 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.
- 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.
- 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-beaming 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.
- Appoint a qualified wetland biologist to monitor construction activities that may occur in or adjacent to sensitive communities.
- Appoint a qualified wetland biologist to monitor implementation of mitigation measures.
- k) Schedule construction activities to avoid sensitive times for biological resources and to avoid the rainy season when erosion and sediment transport is increased.
- When construction activities require stream crossings, schedule work during dry conditions and use rubberwheeled vehicles, when feasible. Have a qualified wetland scientist determine if potential project impacts require a Notification of Lake or Streambed Alteration to CDFW during the planning phase of projects.
- m) Consult with local agencies, jurisdictions, and landowners where such state-designated sensitive or riparian habitats are afforded protection pursuant an adopted regional conservation plan.
- n) Install fencing and/or mark sensitive habitat to be avoided during construction activities.
- o) Salvage and stockpile topsoil (the surface material from 6 to 12 inches deep) and perennial native plants, when recommended by the qualified wetland biologist, for use in restoring native vegetation to areas of temporary disturbance within the project area. Salvage of soils containing invasive species, seeds and/or rhizomes will be avoided as identified by the qualified wetland biologist.
- p) Revegetate with appropriate native vegetation following the completion of construction activities, as identified by the qualified wetland biologist.

	Mitigation Measure	Mitigation Monitoring Timing	Responsible Monitoring Entity
q)	Complete habitat enhancement (e.g., through removal of non-native invasive wetland species and replacement with more ecologically valuable native species).	<u> </u>	
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.		
Ago we	In accordance with provisions of sections 15091(a)(2) and 15126.4(a)(1)(B) of the <i>State CEQA Guidelines</i> , a Lead ency for a project can and should consider mitigation measures to reduce substantial adverse effects related to tlands, as applicable and feasible. Such measures may include the following or other comparable measures ntified by the Lead Agency.	Ongoing over the life of the plan	Lead Agency
a)	Require project design to avoid federally protected aquatic resources consistent with the provisions of Sections 404 and 401 of the CWA, wherever practicable and feasible.		
b)	Where the lead agency has identified that a project, or other regionally significant project, has the potential to impact other wetlands or waters, such as those considered Waters Of the State of California under the State Wetland Definition and Procedures for Dischargers of Dredged or Fill Material to Waters of the State, not protected under Section 404 or 401 of the CWA, seek comparable coverage for these wetlands and waters in consultation with the SWRCB, applicable RWQCB, and CDFW.		
c)	Where avoidance is determined to be infeasible, develop sufficient conservation measures to fulfill the requirements of the applicable authorization for impacts to federal and state protected aquatic resource to support issuance of a permit under Section 404 of the CWA as administered by the USACE. The use of an authorized Nationwide Permit or issuance of an individual permit requires the project applicant to demonstrate compliance with the USACE's Final Compensatory Mitigation Rule. The USACE reviews projects to ensure environmental impacts to aquatic resources are avoided or minimized as much as possible. Consistent with the administration's performance standard of "no net loss of wetlands" a USACE permit may require a project proponent to restore, establish, enhance or preserve other aquatic resources in order to replace those affected by the proposed project. This compensatory mitigation process seeks to replace the loss of existing aquatic resource functions and area. Project proponents required to complete mitigation are encouraged to use a watershed approach and watershed planning information. The new rule establishes performance standards, sets timeframes for decision making, and to the extent possible, establishes equivalent requirements and standards for the three sources of compensatory mitigation:		
	— Permittee-responsible mitigation		
	— Contribution of in-kind in-lieu fees		
	- Use of in-kind mitigation bank credits  Where avoidance is determined to be infeesible and		
d)	<ul> <li>Where avoidance is determined to be infeasible and</li> <li>Where avoidance is determined to be infeasible and proposed projects' impacts exceed an existing</li> <li>Nationwide Permit (NWP) and/or California SWRCB-certified NWP, or applicable County Special Area</li> <li>Management Plan (SAMP), the lead agency should provide USACE and SWRCB (where applicable) an</li> <li>alternative analysis consistent with the Least Environmentally Damaging Practicable Alternatives in this</li> <li>order of priorities:</li> <li>Avoidance</li> </ul>		
	<ul><li>Avoidance</li><li>Impact Minimization</li></ul>		
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		Mitigation Measure	Mitigation Monitoring Timing	Responsible Monitoring Entity
		— On-site alternatives	Ţ - <b>Ū</b>	
		<ul> <li>Off-site alternatives</li> </ul>		
	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.		
SMM BI	rest sup on v and Wo	SCAG shall coordinate with Caltrans and facilitate research, programs and policies to identify, protect and ore natural habitat corridors, especially where corridors cross county boundaries. Additionally, continue port for preserving wildlife corridors and wildlife crossings to minimize the impact of transportation projects wildlife species and habitat fragmentation. SCAG shall disseminate key information related to the preservation implementation of wildlife corridors and crossings by showcasing best practices at SCAG's Natural Lands rking Groups. SCAG shall also distribute wildlife corridors and crossings data to local jurisdictions, so they incorporate said data into their general plans, as applicable.	Ongoing over the life of the plan	SCAG
PMM BI	Age wile	In accordance with provisions of sections 15091(a)(2) and 15126.4(a)(1)(B) of the <i>State CEQA Guidelines</i> , a Lead ency for a project can and should consider mitigation measures to reduce substantial adverse effects related to dlife movement, as applicable and feasible. Such measures may include the following or other comparable asures identified by the Lead Agency:	Ongoing over the life of the plan	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 § 460 of the California Code of Regulations protecting fur-bearing mammals, during the breeding season.		
	d)	Conduct a survey to identify active raptor and other migratory nongame bird nests by a qualified biologist at least two weeks before the start of construction at project sites from February 1 through August 31.		
	e)	Prohibit construction activities with 300 feet of occupied nest of birds afforded protection pursuant to the Migratory Bird Treaty Act, during the breeding season.		
	f)	Ensure that suitable nesting sites for migratory nongame native bird species protected under the Migratory Bird Treaty Act and/or trees with unoccupied raptor nests should only be removed prior to February 1, or following the nesting season.		
	g)	When feasible and practicable, proposed projects will be designed to minimize impacts to wildlife movement and habitat connectivity and preserve existing and functional wildlife corridors.		
	h)	Conduct site-specific analyses of opportunities to preserve or improve habitat linkages with areas on- and off-site.		
	i)	Long linear projects with the possibility of impacting wildlife movement should analyze habitat linkages/wildlife movement corridors on a broad scale to avoid critical narrow choke points that could reduce function of recognized movement corridor.		
	j)	Require review of construction drawings and habitat connectivity mapping by a qualified biologist to		

Mitigation Measure	Mitigation	Responsible
Wittigation Weasure	<b>Monitoring Timing</b>	<b>Monitoring Entity</b>

determine the risk of habitat fragmentation.

- Pursue mitigation banking to preserve habitat linkages and corridors (opportunities to purchase, maintain, and/or restore offsite habitat).
- 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. Retrofitting of existing infrastructure in project areas should also be considered for wildlife crossings for purposes of mitigation.
- Install wildlife fencing where appropriate to minimize the probability of wildlife injury due to direct interaction between wildlife and roads or construction.
- o) Where avoidance is determined to be infeasible, design sufficient conservation measures through coordination with local agencies and the regulatory agency (i.e., USFWS or CDFW) and in accordance with the respective counties and cities general plans to establish plans to mitigate for the loss of fish and wildlife movement corridors and/or wildlife nursery sites. The consideration of conservation measures may include the following measures, in addition to the measures outlined in MM-BIO-1(b), where applicable:
  - Wildlife movement buffer zones
  - Corridor realignment
  - Appropriately spaced breaks in center barriers
  - Stream rerouting
  - Culverts
  - Creation of artificial movement corridors such as freeway under- or overpasses
  - Other comparable measures
- p) Where the lead agency has identified that a RTP/SCS project, or other regionally significant project, has the potential to impact other open space or nursery site areas, seek comparable coverage for these areas in consultation with the USFWS, CDFW, NMFS, or other local jurisdictions.
- 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

	Mitigation Measure	Mitigation Monitoring Timing	Responsible Monitoring Entity
	used on building surfaces.	0	,
	<ul> <li>Architectural lighting shall be directed onto the building surfaces and have low reflectivity to minimize glare and limit light onto adjacent properties.</li> </ul>		
t)	Reduce noise impacts to sensitive species through implementation of mitigation measures such as, but not limited to:		
	<ul> <li>— Install temporary noise barriers during construction.</li> </ul>		
	<ul> <li>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.</li> </ul>		
	— 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 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.		
	<ul> <li>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</li> </ul>		
	<ul> <li>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.</li> </ul>		
	<ul> <li>Use techniques such as grade separation, buffer zones, landscaped berms, dense plantings, sound walls, reduced-noise paving materials, and traffic calming measures.</li> </ul>		
u)	Require large buffers between sensitive uses and freeways.		
v)	Create corridor redundancy to help retain functional connectivity and resilience.		
Ag ord	In accordance with provisions of sections 15091(a)(2) and 15126.4(a)(1)(B) of the <i>State CEQA Guidelines</i> , a Lead ency for a project can and should consider mitigation measures to reduce conflicts with local policies and linances protecting biological resources, as applicable and feasible. Such measures may include the following or er comparable measures identified by the Lead Agency:	Ongoing over the life of the plan	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		

Mitigation Measure	Mitigation	Responsible
Wittigation Weasure	<b>Monitoring Timing</b>	Monitoring Entity

Arboriculture (ISA) certified arborist.

- c) If specific project area trees are designated as "Protected Trees," "Landmark Trees," or "Heritage Trees," obtain approval for encroachment or removals through the appropriate entity, and develop appropriate mitigation measures at that time, to ensure that the trees are replaced. Mitigation trees shall be locally collected native species, as directed by a qualified biologist.
- d) Appoint an ISA certified arborist to monitor construction activities that may occur in areas with trees are designated as "Protected Trees," "Landmark Trees," or "Heritage Trees," to facilitate avoidance of resources not permitted for impact. Before the start of any clearing, excavation, construction or other work on the site, securely fence off every protected tree deemed to be potentially endangered by said site work. Keep such fences in place for duration of all such work. Clearly mark all trees to be removed.
- e) Establish a scheme for the removal and disposal of logs, brush, earth and other debris that will avoid injury to any protected tree. Where proposed development or other site work could encroach upon the protected perimeter of any protected tree, incorporate special measures to allow the roots to breathe and obtain water and nutrients. Minimize any excavation, cutting, filing, or compaction of the existing ground surface within the protected perimeter. Require that no change in existing ground level occur from the base of any protected tree at any time. Require that no burning or use of equipment with an open flame occur near or within the protected perimeter of any protected tree.
- f) Require that no storage or dumping of oil, gas, chemicals, or other substances that may be harmful to trees occur from the base of any protected trees, or any other location on the site from which such substances might enter the protected perimeter. Require that no heavy construction equipment or construction materials be operated or stored within a distance from the base of any protected trees. Require that wires, ropes, or other devices not be attached to any protected tree, except as needed for support of the tree. Require that no sign, other than a tag showing the botanical classification, be attached to any protected tree.
- g) Thoroughly spray the leaves of protected trees with water periodically during construction to 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, require replacement of any tree removed with another tree or trees on the same site deemed adequate by the local agency to compensate for the loss of the tree that is removed. Remove all debris created as a result of any tree removal work from the property within two weeks of debris creation, and such debris shall be properly disposed of in accordance with all applicable laws, ordinances, and regulations. Design projects to avoid conflicts with local policies and ordinances protecting biological resources
- i) Where avoidance is determined to be infeasible, sufficient conservation measures to fulfill the requirements of the applicable policy or ordinance shall be developed, such as to support issuance of a tree removal permit. The consideration of conservation measures may include:
  - Avoidance strategies
  - Contribution of in-lieu fees
  - Planting of replacement trees
  - Re-landscaping areas with native vegetation post-construction

	Mitigation Measure	Mitigation Monitoring Timing	Responsible Monitoring Entity
	Other comparable measures developed in consultation with local agency and certified arborist.	<u> </u>	0 7
Age and	In accordance with provisions of sections 15091(a)(2) and 15126.4(a)(1)(B) of the <i>State CEQA Guidelines</i> , a Lead ency for a project can and should consider mitigation measures to reduce substantial adverse effects on HCPs NCCPs, as applicable and feasible. Such measures may include the following or other comparable measures ntified by the Lead Agency:	Ongoing over the life of the plan	Lead Agency
a)	Consult with the appropriate federal, state, and/or local agency responsible for the administration of HCPs or NCCPs.		
b)	Wherever practicable and feasible, the project shall be designed to avoid lands preserved under the conditions of an HCP or NCCP.		
c)	Where avoidance is determined to be infeasible, sufficient conservation measures to fulfill the requirements of the HCP and/or NCCP, which would include but not be limited to applicable authorization for incidental take pursuant to Section 7 or 10(a) of the federal Endangered Species Act or Section 2081 of the California ESA, shall be developed to support issuance of an incidental take permit or any other permissions required for development within the HCP/NCCP boundaries. The consideration of additional conservation measures would include the measures outlined in SMM-BIO-2, where applicable.		
Cultural Re	sources		
ong and app <u>this</u> dire mat Pre opp cem	1: Impacts to cultural resources shall be minimized through cooperation, information sharing, and SCAG's oing regional planning efforts such as web-based planning tools for local governments including CA LOTS, other GIS tools and data services, including, but not limiting to, Map Gallery, GIS library, and GIS lications (note that no confidential cultural or tribal cultural resource location information will be housed in database. All regulations pertaining to cultural resources site location confidentiality will be respected); and for technical assistance efforts such as Toolbox Tuesday series and sharing of associated online Training erials. SCAG shall consult with resource agencies such as the National Park Service, Office of Historic servation, and Native American Heritage Commission, and with Native American tribes, to identify cortunities for early and effective consultation to identify archaeological sites, historical resources, and leteries to avoid such resources wherever practicable and feasible and reduce or mitigate for conflicts in apatible land use to the maximum extent practicable.	Ongoing over the life of the plan	SCAG
Lea rela	1: In accordance with provisions of sections 15091(a)(2) and 15126.4(a)(1)(B) of the <i>State CEQA Guidelines</i> , a d Agency for a project can and should consider mitigation measures to reduce substantial adverse effects ted to historical resources, as applicable and feasible. Such measures may include the following or other parable measures identified by the Lead Agency:	Ongoing over the life of the plan	Lead Agency
a)	Pursuant to <i>CEQA Guidelines</i> Section 15064.5, conduct a record search during the project planning phase at the appropriate Information Center to determine whether the project area has been previously surveyed and whether historical resources were identified.		
b)	During the project planning phase, retain a qualified architectural historian, defined as an individual who meets the Secretary of the Interior's (SOI) Professional Qualification Standards (PQS) in Architectural History, to conduct historic architectural surveys if a built environment resource greater than 45 years in age may be affected by the project or if recommended by the Information Center.		
c)	Comply with Section 106 of the National Historic Preservation Act (NHPA) including, but not limited to, projects for which federal funding or approval is required for the individual project. This law requires federal		

Mitigation Measure	Mitigation	Responsible
wiitigation weasure	<b>Monitoring Timing</b>	<b>Monitoring Entity</b>

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 possible to ensure the historical significance of the resource is not impaired. The application of the standards should be overseen by an architectural historian or historic architect meeting the SOI PQS. Prior to any construction activities that may affect the historical resource, a report, meeting industry standards, should identify and specify the treatment of character-defining features and construction activities and be provided to the Lead Agency for review and approval.
- e) If a project would result in the demolition or significant alteration of a historical resource eligible for or listed in the National Register of Historic Places (NRHP), California Register of Historical Resources (CRHR), or local register, recordation should take the form of Historic American Buildings Survey (HABS), Historic American Engineering Record (HAER), or Historic American Landscape Survey (HALS) documentation, and should be performed by an architectural historian or historian who meets the SOI PQS. Recordation should meet the SOI Standards and Guidelines for Architectural and Engineering, which defines the products acceptable for inclusion in the HABS/HAER/HALS collection at the Library of Congress. The specific scope and details of documentation should be developed at the project level in coordination with the Lead Agency.
- f) During the project planning phase, obtain a qualified archaeologist, defined as one who meets the SOI PQS for archaeology, to conduct a record search at the appropriate Information Center of the California Historical Resources Information System (CHRIS) to determine whether the project area has been previously surveyed and whether resources were identified.
- g) Contact the NAHC to request a Sacred Lands File search and a list of relevant Native American contacts who may have additional information.
- h) During the project planning phase, obtain a qualified archaeologist or architectural historian (depending on applicability) to conduct archaeological and/or historic architectural surveys as recommended by the qualified professional, the Lead Agency, or the Information Center. In the event the qualified professional or Information Center will make a recommendation on whether a survey is warranted based on the sensitivity of the project area for archaeological resources. Survey shall be conducted where the records indicate that no previous survey has been conducted, or if survey has not been conducted within the past 10 years. If tribal resources are identified during tribal outreach, consultation, or the record search, a Native American representative traditionally affiliated with the project area, as identified by the NAHC, shall be given the opportunity to provide a representative or monitor to assist with archaeological surveys.
- i) If potentially significant archaeological resources are identified through survey, and impacts to these

	Mitigation Measure	Mitigation Monitoring Timing	Responsible Monitoring Entity
qua sigr pos con incl acco and inte occo data the arcl reso curs	ources cannot be avoided, a Phase II Testing and Evaluation investigation should be performed by a alified archaeologist prior to any construction-related ground-disturbing activities to determine inficance. If resources determined significant or unique through Phase II testing, and avoidance is not assible, appropriate resource-specific mitigation measures should be established by the lead agency, in itsultation with consulting tribes, where appropriate, and undertaken by qualified personnel. These might lude a Phase III data recovery program implemented by a qualified archaeologist and performed in ordance with the OHP's Archaeological Resource Management Reports (ARMR): Recommended Contents of Format and Guidelines for Archaeological Research Designs. Additional options can include 1) expretative signage, or 2) educational outreach that helps inform the public of the past activities that turred in this area. Should the project require extended Phase I testing, Phase II evaluation, or Phase III a recovery, a Native American representative traditionally affiliated with the project area, as indicated by NAHC, shall be given the opportunity to provide a representative or monitor to assist with the thaeological assessments. The long-term disposition of archaeological materials collected from a significant ource should be determined in consultation with the affiliated tribe(s), where relevant; this could include ation with a recognized scientific or educational repository, transfer to the tribe, or respectful internment in an area designated by the tribe.		
sub con in a qua trib gra	cases where the project area is developed and no natural ground surface is exposed, sensitivity for surface resources should be assessed based on review of literature, geology, site development history, and isultation with tribal parties. If this archaeological desktop assessment indicates that the project is located an area sensitive for archaeological resources, as determined by the Lead Agency in consultation with a alified archaeologist, the project should retain an archaeological monitor and, in the case of sensitivity for that resources, a tribal monitor, to observe ground disturbing operations, including but not limited to ding, excavation, trenching, or removal of existing features of the subject property. The archaeological mitor should be supervised by an archaeologist meeting the SOI PQS		
feas arcl reg;	nduct construction activities and excavation to avoid cultural resources (if identified). If avoidance is not sible, further work may be needed to determine the importance of a resource. Retain a qualified haeologist, and/or as appropriate, a qualified architectural historian who should make recommendations arding the work necessary to assess significance. If the cultural resource is determined to be significant der state or federal guidelines, impacts to the cultural resource will need to be mitigated.		
arcl con lon cur	p construction activities and excavation in the area where cultural resources are found until a qualified haeologist can determine whether these resources are significant, and tribal consultation can be ducted, in the case of tribal resources. If the archaeologist determines that the discovery is significant, its g-term disposition should be determined in consultation with the affiliated tribe(s); this could include ation with a recognized scientific or educational repository, transfer to the tribe, or respectful internment in an area designated by the tribe.		
Lead Ag related t	n accordance with provisions of sections 15091(a)(2) and 15126.4(a)(1)(B) of the <i>State CEQA Guidelines</i> , a gency for a project can and should consider mitigation measures to reduce substantial adverse effects to human remains, as applicable and feasible. Such measures may include the following or other able measures identified by the Lead Agency:	Ongoing over the life of the plan	Lead Agency
a) In t	the event of discovery or recognition of any human remains during construction or excavation activities ociated with the project, in any location other than a dedicated cemetery, cease further excavation or turbance of the site or any nearby area reasonably suspected to overlie adjacent human remains until the		

	Mitigation Measure	Mitigation Monitoring Timing	Responsible Monitoring Entity
	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.		<u> </u>
b)	If any discovered remains are of Native American origin, as determined by the county Coroner, an experienced osteologist, or another qualified professional:		
	— 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. In some cases, it is necessary for the Lead Agency, qualified archaeologist, or developer to also reach out to the NAHC to coordinate and ensure notification in the event the Coroner is not available.		
	— 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.		
Geology an	d Soils		
info Suc and tecl	ESCAG shall facilitate the minimization of substantial soil erosion or loss of topsoil through cooperation, ormation sharing, and regional program development as part of SCAG's ongoing regional planning efforts. The efforts shall include web-based planning tools for local government including CA LOTS, and other GIS tools I data services, including, but not limited to, Map Gallery, GIS library, and GIS applications, and direct unical assistance efforts such as training series and sharing of associated online training materials. Resource incies, such as the U.S. Geology Survey, shall be consulted during this update process.	Ongoing over the life of the plan	SCAG
Age his	: In accordance with provisions of sections 15091(a)(2) and 15126.4(a)(1)(B) of the <i>State CEQA Guidelines</i> , a Lead ency for a project can and should consider mitigation measures to reduce substantial adverse effects related to corical resources, as applicable and feasible. Such measures may include the following or other comparable asures identified by the Lead Agency:	Ongoing over the life of the plan	Lead Agency
a)	Consistent with the CBC and local regulatory agencies with oversight of development associated with the Plan, ensure that site-specific geotechnical investigations conducted by a qualified geotechnical expert are conducted to ascertain soil types prior to preparation of project designs. These investigations can and should identify areas of potential failure and recommend remedial geotechnical measures to eliminate any problems.		
b)	Consistent with the requirements of the State Water Resources Control Board (SWRCB) for projects over one acre in size, obtain coverage under the General Construction Activity Storm Water Permit (General Construction Permit) issued by the SWRCB and prepare a stormwater pollution prevention plan (SWPPP) and submit the plan for review and approval by the Regional Water Quality Control Board (RWQCB). At a minimum, the SWPPP should include a description of construction materials, practices, and equipment storage and maintenance; a list of pollutants likely to contact stormwater; site-specific erosion and sedimentation control practices; a list of provisions to eliminate or reduce discharge of materials to stormwater; best management practices (BMPs); and an inspection and monitoring program.		

	Mitigation Measure	Mitigation Monitoring Timing	Responsible Monitoring Entity
c)	Consistent with the requirements of the SWRCB and local regulatory agencies with oversight of development associated with the Plan, ensure that project designs provide adequate slope drainage and appropriate landscaping to minimize the occurrence of slope instability and erosion. Design features should include measures to reduce erosion caused by storm water. Road cuts should be designed to maximize the potential for revegetation.	Ų Ū	
d)	Consistent with the CBC and local regulatory agencies with oversight of development associated with the Plan, ensure that, prior to preparing project designs, new and abandoned wells are identified within construction areas to ensure the stability of nearby soils.		
SCA LO' app mat Serv uni	Elimpacts to paleontological resources shall be minimized through cooperation, information sharing, and AC's ongoing regional planning efforts such as web-based planning tools for local governments including CA IS, and other GIS tools and data services, including, but not limiting to, Map Gallery, GIS library, and GIS lications; and direct technical assistance efforts such as training series and sharing of associated online training erials. SCAG shall consult with resource agencies such as the National Park Service, United States Forest vice, and Bureau of Land Management to identify opportunities for early and effective consultation to identify que paleontological resources and unique geological features to avoid such resources wherever practicable and ible and reduce or mitigation for conflicts in compatible land use to the maximum extent practicable.	Ongoing over the life of the plan	SCAG
Lea rela	In accordance with provisions of sections 15091(a)(2) and 15126.4(a)(1)(B) of the State CEQA Guidelines, a d Agency for a project can and should consider mitigation measures to reduce substantial adverse effects ted to paleontological resources. Such measures may include the following or other comparable measures ntified by the Lead Agency:	Ongoing over the life of the plan	Lead Agency
a)	Ensure compliance with the Paleontological Resources Preservation Act, the Federal Land Policy and Management Act, the Antiquities Act, Section 5097.5 of the Public Resources Code (PRC), adopted county and city general plans, and other federal, state and local regulations, as applicable and feasible, by adhering to and incorporating the performance standards and practices from the 2010 Society for Vertebrate Paleontology (SVP) standard procedures for the assessment and mitigation of adverse impacts to paleontological resources.		
b)	Obtain review by a qualified paleontologist (e.g. who meets the SVP standards for a Principal Investigator or Project Paleontologist or the Bureau of Land Management (BLM) standards for a Principal Investigator), to determine if the project has the potential to require ground disturbance of parent material with potential to contain unique paleontological or resources, or to require the substantial alteration of a unique geologic feature. The assessment should include museum records searches, a review of geologic mapping and the scientific literature, geotechnical studies (if available), and potentially a pedestrian survey, if units with paleontological potential are present at the surface.		
c)	Avoid exposure or displacement of parent material with potential to yield unique paleontological resources.		
d)	Where avoidance of parent material with the potential to yield unique paleontological resources is not feasible:		
	1. All on-site construction personnel receive Worker Education and Awareness Program (WEAP) training prior to the commencement of excavation work to understand the regulatory framework that provides for protection of paleontological resources and become familiar with diagnostic characteristics of the materials with the potential to be encountered.		
	2. A qualified paleontologist prepares a Paleontological Resource Management Plan (PRMP) to guide the		

	Mitigation Measure	Mitigation Monitoring Timing	Responsible Monitoring Entity
	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 the SVP or the 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.		
e)	Avoid routes and project designs that would permanently alter unique geological features.		
f)	Salvage and document adversely affected resources sufficient to support ongoing scientific research and education.		
g)	Significant recovered fossils should be prepared to the point of curation, identified by qualified experts, listed in a database to facilitate analysis, and deposited in a designated paleontological curation facility.		
h)	Following the conclusion of the paleontological monitoring, the qualified paleontologist should prepare a report stating that the paleontological monitoring requirement has been fulfilled and summarize the results of any paleontological finds. The report should be submitted to the lead CEQA and the repository curating the collected artifacts, and should document the methods and results of all work completed under the PRMP, including treatment of paleontological materials, results of specimen processing, analysis, and research, and final curation arrangements.		
eenhouse	Gases		
qua imp imp ince	: SCAG, in partnership with local air districts, shall continue to work with the counties and cities to adopt lified GHG reduction plans (e.g., climate action plans [CAPs], develop GHG-reducing planning policies, and element local climate initiatives. These reductions can be achieved through a combination of programs that element plans developed collaboratively, including ZNE in new construction, retrofits of existing buildings, entivizing the development of renewable energy sources that serve both new and existing land uses, as well as issures to reduce GHG emissions form transportation sources.	Ongoing over the life of the plan	SCAG
tool trac coll ide	ditionally, SCAG shall continue to update the Green Region Initiative (GRI) Sustainability Indicators Mapping , which serves as an interactive information resource for jurisdictions within the SCAG region to measure and k sustainability progress in the region across 12 categories and 29 sustainability indicators. The tool fosters aboration through the sharing of best practices across the 191 cities and six counties in the SCAG region, and ntifies opportunities for improving sustainability practices (due to the recent inclusion of SB 535 Disadvantaged numerities data).		
Pro	2: SCAG shall encourage energy efficient design for buildings, through SCAG's Sustainable Communities gram potentially including strengthening local building codes for new construction and renovation to achieve gher level of energy efficiency.	Ongoing over the life of the plan	SCAG

	Mitigation Measure	Mitigation Monitoring Timing	Responsible Monitoring Entity
reg par Dep pra the	SCAG shall continue supporting deployment of zero-emission (ZEV) vehicles and ZEV infrastructure in the on through its Clean Cities Program and Electric Vehicle (EV) Program. This will include working with ners such as universities, utilities, regulating agencies, the private sector, national laboratories and the US artment of Energy, NGOs, and member agencies to share information, resources, and data, to showcase best citices, and to provide support or teaming arrangements to help bring funding, projects, or other resources to region. SCAG shall also support member agencies and other stakeholders in making decisions about and oving barriers to ZEV infrastructure. Potential deliverables include, but are not limited to:	Ongoing over the life of the plan	SCAG
	— EV Charging Station Studies		
	<ul> <li>On-going webinars, meetings, outreach and GRI data to support AB1236 compliance and the forthcoming Hydrogen Permitting Guidebook.</li> </ul>		
	G shall also create the framework for a program to identify funding and provide rebates and/or other funding ight duty ZEVs and supportive infrastructure.		
pro	k: SCAG shall continue to pursue partnerships with SCE, municipal utilities, locally operated electricity viders and CPUC to promote energy efficient development in the SCAG region, through coordinated planning data and information sharing activities.	Ongoing over the life of the plan	SCAG
Age gre	: In accordance with provisions of sections 15091(a)(2) and 15126.4(a)(1)(B) of the <i>State CEQA Guidelines</i> , a Lead ncy for a project can and should consider mitigation measures to reduce substantial adverse effects related to enhouse gas emissions, as applicable and feasible. Such measures may include the following or other parable measures identified by the Lead Agency:	Ongoing over the life of the plan	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) Prohibit gas-powered landscape maintenance equipment.		
	ix) Install electric vehicle charging stations.		
	x) Reduce wood burning stoves or fireplaces.		
	xi) Provide bike lanes accessibility and parking at residential developments.		
b)	Reduce emissions resulting from projects through implementation of project features, project design, or other measures, such as those described in Appendix F of the State CEQA Guidelines.		

Mitigation Measure	Mitigation	Responsible
wittigation weasure	Monitoring Timing	Monitoring Entity

- 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;
  - Use cement blended with the maximum feasible amount of flash or other materials that reduce GHG emissions from cement production;
  - 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:
  - Promote transit-active transportation coordinated strategies;
  - ii) Increase bicycle carrying capacity on transit and rail vehicles;
  - iii) Improve or increase access to transit;
  - iv) Increase access to common goods and services, such as groceries, schools, and day care;
  - v) Incorporate affordable housing into the project;
  - vi) Incorporate the neighborhood electric vehicle network;
  - vii) Orient the project toward transit, bicycle and pedestrian facilities;
  - viii) Improve pedestrian or bicycle networks, or transit service;
  - ix) Provide traffic calming measures;
  - x) Provide bicycle parking;
  - xi) Limit or eliminate park supply through;
    - i. Elimination (or reduction) of minimum parking requirements
    - ii. Creation of maximum parking requirements
    - iii. Provision of shared parking.
  - xii) Unbundle parking costs;

Mitigation Measure	Mitigation	Responsible
Mitigation Measure	Monitoring Timing	Monitoring Entity

- xiii) Provide parking cash-out programs;
- xiv) Implement or provide access to commute reduction program;
- f) Incorporate bicycle and pedestrian facilities into project designs, maintaining these facilities, and providing amenities incentivizing their use; and planning for and building local bicycle projects that connect with the regional network;
- Improving transit access to rail and bus routes by incentives for construction of transit facilities within developments, and/or providing dedicated shuttle service to transit stations; and
- Adopting employer trip reduction measures to reduce employee trips such as vanpool and carpool programs, providing end-of-trip facilities, and telecommuting programs including but not limited to measures that:
  - i) Provide car-sharing, bike sharing, and ride-sharing programs;
  - ii) Provide transit passes;
  - Shift single occupancy vehicle trips to carpooling or vanpooling, for example providing ride-matching services;
  - iv) Provide incentives or subsidies that increase that use of modes other than single-occupancy vehicle;
  - 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.
- Designate a percentage of parking spaces for ride-sharing vehicles or high-occupancy vehicles, and provide adequate passenger loading and unloading for those vehicles;
- Land use siting and design measures that reduce GHG emissions, including:
  - Developing on infill and brownfields sites;
  - ii) Building compact and mixed-use developments near transit;
  - iii) Retaining on-site mature trees and vegetation, and planting new canopy trees;
  - iv) Measures that increase vehicle efficiency, encourage use of zero and low emissions vehicles, or reduce the carbon content of fuels, including constructing or encouraging construction of electric vehicle charging stations or neighborhood electric vehicle networks, or charging for electric bicycles; and
  - v) Measures to reduce GHG emissions from solid waste management through encouraging solid waste recycling and reuse.
- k) Consult the SCAG Environmental Justice Toolbox for potential measures to address impacts to low-income and/or minority communities. The measures provided above are also intended to be applied in low income and minority communities as applicable and feasible.
- Require at least five percent of all vehicle parking spaces include electric vehicle charging stations, or at a minimum, require the appropriate infrastructure to facilitate sufficient electric charging for passenger vehicles and trucks to plug-in.
- m) Encourage telecommuting and alternative work schedules, such as:
  - Staggered starting times

	Mitigation Measure	Mitigation Monitoring Timing	Responsible Monitoring Entity
	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		
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; and		
	v) Educating employees about available alternatives.		
Hazards and	d Hazardous Materials		
con risk Dej	SCAG shall work with the U.S. DOT, the Office of Environmental Service Caltrans, and the private sector to tinue to conduct driver safety training programs and enforce speed limits on roadways. In an effort to reduce as associated with the transport of hazardous materials in the SCAG region, SCAG shall encourage the U.S. coartment of Transportation and the California Highway Patrol to continue to enforce speed limits and existing ulations governing goods movement and hazardous materials transportation.	Ongoing over the life of the plan	SCAG
trar	2: SCAG shall notify member agencies of the importance of ensuring that construction and operation of asportation projects provide for the safe transport and disposal of hazardous waste, consistent with the visions of HMR, 49 CFR Parts 171–180.	Ongoing over the life of the plan	SCAG
eler	SCAG shall coordinate with the Office of Environmental Services to identify any transportation infrastructure ments within the SCAG region where risks to people and property occur at an above-average incident level, entially warranting consideration for remedial design in future regional transportation plans (RTPs).	Ongoing over the life of the plan	SCAG
Age the	In accordance with provisions of sections 15091(a)(2) and 15126.4(a)(1)(B) of the <i>State CEQA Guidelines</i> , a Lead ency for a project can and should consider mitigation measures to reduce substantial adverse effects related to routine transport, use, or disposal of hazardous materials, as applicable and feasible. Such measures may ude the following or other comparable measures identified by the Lead Agency:	Ongoing over the life of the plan	Lead Agency
a)	Where the construction or operation of projects involves the transport of hazardous material, provide a written plan of proposed routes of travel demonstrating use of roadways designated for the transport of such materials.		
b)	Specify Project requirements for interim storage and disposal of hazardous materials during construction and operation. Storage and disposal strategies must be consistent with applicable federal, state, and local statutes and regulations. Specify the appropriate procedures for interim storage and disposal of hazardous materials, anticipated to be required in support of operations and maintenance activities, in conformance with		

	Mitigation Measure	Mitigation Monitoring Timing	Responsible Monitoring Entity
	applicable federal, state, and local statutes and regulations, in the business plan for projects as applicable and appropriate.	Montoring Timing	Wienitering Entity
c)	Submit a Hazardous Materials Business/Operations Plan for review and approval by the appropriate local agency. Once approved, keep the plan on file with the Lead Agency (or other appropriate government agency) and update, as applicable. The purpose of the Hazardous Materials Business/Operations Plan is to ensure that employees are adequately trained to handle the materials and provides information to the local fire protection agency should emergency response be required. The Hazardous Materials Business/Operations Plan should include the following:		
	<ul> <li>The types of hazardous materials or chemicals stored and/or used on-site, such as petroleum fuel products, lubricants, solvents, and cleaning fluids.</li> </ul>		
	<ul> <li>The location of such hazardous materials.</li> </ul>		
	<ul> <li>An emergency response plan including employee training information.</li> </ul>		
	<ul> <li>A plan that describes the way these materials are handled, transported and disposed.</li> </ul>		
d)	Follow manufacturer's recommendations on use, storage, and disposal of chemical products used in construction.		
e)	Avoid overtopping construction equipment fuel gas tanks.		
f)	Properly contain and remove grease and oils during routine maintenance of construction equipment.		
g)	Properly dispose of discarded containers of fuels and other chemicals.		
h)	Prior to shipment remove the most volatile elements, including flammable natural gas liquids, as feasible.		
i)	Identify and implement more stringent tank car safety standards.		
j)	Improve rail transportation route analysis, and modification of routes based on that analysis.		
k)	Use the best available inspection equipment and protocols and implement positive train control.		
1)	Reduce train car speeds to 40 miles per hour when passing through urbanized areas of any size.		
m)	Limit storage of crude oil tank cars in urbanized areas of any size and provide appropriate security in storage yards for all shipments.		
n)	Notify in advance county and city emergency operations offices of all crude oil shipments, including a contact number that can provide real-time information in the event of an oil train derailment or accident.		
0)	Report quarterly hazardous commodity flow information, including classification and characterization of materials being transported, to all first response agencies (49 Code Fed. Regs. 15.5) along the mainline rail routes used by trains carrying crude oil identified.		
p)	Fund training and outfitting emergency response crews that includes the cost of backfilling personnel while in training.		
q)	Undertake annual emergency responses scenario/field based training including Emergency Operations Center Training activations with local emergency response agencies.		

	Mitigation Measure	Mitigation Monitoring Timing	Responsible Monitoring Entity
1	neasures may include the following or other comparable measures identified by the Lead Agency:	0	
	Require implementation of safety standards regarding transport of hazardous materials, including but not limited o the following:		
;	a) Removal of the most volatile elements, including flammable natural gas liquids, prior to shipment;		
1	o) More stringent tank car safety standards;		
	r) Improved rail transportation route analysis, and modification of routes based on that analysis;		
•	d) Utilization of the best available inspection equipment and protocols, and implementation of positive train control;		
(	e) Reduced train car speeds to 40 miles per hour when passing through urbanized areas of any size;		
İ	Limitations on storage of hazardous materials tank cars in urbanized areas of any size and provide appropriate security in storage yards for all shipments;		
:	Advance notification to county and city emergency operations offices of all crude oil and hazardous materials shipments, including a contact number that can provide real-time information in the event of an oil train derailment or accident;		
]	Quarterly hazardous commodity flow information, including classification and characterization of materials being transported, to all first response agencies (49 Code Fed. Regs. 15.5) along the mainline rail routes used by trains carrying hazardous materials.		
-	<b>Z-3:</b> In accordance with provisions of sections 15091(a)(2) and 15126.4(a)(1)(B) of the <i>State CEQA Guidelines</i> , a Lead Agency for a project can and should consider mitigation measures to reduce substantial adverse effects related to the release of hazardous materials within one-quarter mile of schools, as applicable and feasible. Such measures may include the following or other comparable measures identified by the Lead Agency:	Ongoing over the life of the plan	Lead Agency
•	Where the construction and operation of projects involves the transport of hazardous materials, avoid transport of such materials within one-quarter mile of schools, when school is in session, wherever feasible.		
1	Where it is not feasible to avoid transport of hazardous materials, within one-quarter mile of schools on local streets, provide notifications of the anticipated schedule of transport of such materials.		
	<b>Z-4:</b> In accordance with provisions of sections 15091(a)(2) and 15126.4(a)(1)(B) of the <i>State CEQA Guidelines</i> , a Lead Agency for a project can and should consider mitigation measures to reduce substantial adverse effects related to projects that are located on a site which is included on the Cortese List, as applicable and feasible. Such measures may include the following or other comparable measures identified by the Lead Agency:	Ongoing over the life of the plan	Lead Agency
,	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.		
Ì	Where warranted due to the known presence of contaminated materials, submit to the appropriate agency responsible for hazardous materials/wastes oversight a Phase II Environmental Site Assessment report if warranted by a Phase I report for the project site. The reports should make recommendations for remedial action, if appropriate, and be signed by a Registered Environmental Assessor, Professional Geologist, or Professional Engineer.		
•	E) Implement the recommendations provided in the Phase II Environmental Site Assessment report, where such		

Mitigation Measure	Mitigation	Responsible
Miligation Measure	<b>Monitoring Timing</b>	Monitoring Entity

- 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 U.S. EPA to determine the extent of potential contamination beneath all underground storage tanks (USTs), elevator shafts, clarifiers, and subsurface hydraulic lifts when on-site demolition or construction activities would potentially affect a particular development or building.
- Consult with the appropriate local, state, and federal environmental regulatory agencies to ensure sufficient minimization of risk to human health and environmental resources, both during and after construction, posed by soil contamination, groundwater contamination, or other surface hazards including, but not limited to, underground storage tanks, fuel distribution lines, waste pits and sumps.
- g) Obtain and submit written evidence of approval for any remedial action if required by a local, state, or federal environmental regulatory agency.
- h) Cease work if soil, groundwater, or other environmental medium with suspected contamination is encountered unexpectedly during construction activities (e.g., identified by odor or visual staining, or if any underground storage tanks, abandoned drums, or other hazardous materials or wastes are encountered), in the vicinity of the suspect material. Secure the area as necessary and take all appropriate measures to protect human health and the environment, including but not limited to, notification of regulatory agencies and identification of the nature and extent of contamination. Stop work in the areas affected until the measures have been implemented consistent with the guidance of the appropriate regulatory oversight authority.
- i) Soil generated by construction activities should be stockpiled on-site in a secure and safe manner. All contaminated soils determined to be hazardous or non-hazardous waste must be adequately profiled (sampled) prior to acceptable reuse or disposal at an appropriate off-site facility. Complete sampling and handling and transport procedures for reuse or disposal, in accordance with applicable local, state and federal laws and policies.
- j) Groundwater pumped from the subsurface should be contained on-site in a secure and safe manner, prior to treatment and disposal, to ensure environmental and health issues are resolved pursuant to applicable laws and policies. Utilize engineering controls, which include impermeable barriers to prohibit groundwater and vapor intrusion into the building.
- k) As needed and appropriate, prior to issuance of any demolition, grading, or building permit, submit for review and approval by the Lead Agency (or other appropriate government agency) written verification that the appropriate federal, state and/or local oversight authorities, including but not limited to the Regional Water Quality Control Board (RWQCB), have granted all required clearances and confirmed that the all applicable standards, regulations, and conditions have been met for previous contamination at the site.
- 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

	Mitigation Measure	Mitigation Monitoring Timing	Responsible Monitoring Entity
	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.		<u> </u>
n)	Where projects include the demolitions or modification of buildings constructed prior to 1978, complete an assessment for the potential presence or lack thereof of ACM, lead based paint, and any other building materials or stored materials classified as hazardous waste by state or federal law.		
0)	Where the remediation of lead-based paint has been determined to be required, provide specifications to the appropriate agency, signed by a certified Lead Supervisor, Project Monitor, or Project Designer for the stabilization and/or removal of the identified lead paint in accordance with all applicable laws and regulations, including but not necessarily limited to: California Occupational Safety and Health Administration's (Cal OSHA's) Construction Lead Standard, Title 8 California Code of Regulations (CCR) Section 1532.1 and Department of Health Services (DHS) Regulation 17 CCR Sections 35001–36100, as may be amended. If other materials classified as hazardous waste by state or federal law are present, the project sponsor should submit written confirmation to the appropriate local agency that all state and federal laws and regulations should be followed when profiling, handling, treating, transporting, and/or disposing of such materials.		
Av	SESCAG shall continue to collaborate with key stakeholders on regional aviation planning issues through the iation Technical Advisory Committee (ATAC). The ATAC is a partnership between the airports, transportation encies and commissions, experts, and other community members.	Ongoing over the life of the plan	SCAG
Ag im <sub>]</sub> eva	In accordance with provisions of sections 15091(a)(2) and 15126.4(a)(1)(B) of the <i>State CEQA Guidelines</i> , a Lead ency for a project can and should consider mitigation measures to reduce substantial adverse effects which may pair implementation of or physically interfere with an adopted emergency response plan or emergency equation plan, as applicable and feasible. Such measures may include the following or other comparable asures identified by the Lead Agency:	Ongoing over the life of the plan	Lead Agency
a)	Continue to coordinate locally and regionally based on ongoing review and integration of projected transportation and circulation conditions.		
b)	Develop new methods of conveying projected and real time information to citizens using emerging electronic communication tools including social media and cellular networks;		
c)	Continue to evaluate lifeline routes for movement of emergency supplies and evacuation.		
Hydrology	and Water Quality		
pla be con	LESCAG shall continue to work with local jurisdictions and water quality agencies to encourage regional-scale nning for improved water quality management and pollution prevention. Future impacts to water quality shall avoided to the extent practical and feasible through cooperative planning, information sharing, and apprehensive pollution control measure development within the SCAG region. This cooperative planning shall rur as part of current and existing coordination, an integral part of SCAG's ongoing regional planning efforts.	Ongoing over the life of the plan	SCAG
Ag vio sur	In accordance with provisions of sections 15091(a)(2) and 15126.4(a)(1)(B) of the <i>State CEQA Guidelines</i> , a Lead ency for a project can and should consider mitigation measures to reduce substantial adverse effects from lation of any water quality standards or waste discharge requirements or otherwise substantially degrade face or groundwater quality, as applicable and feasible. Such measures may include the following or other nparable measures identified by the Lead Agency:	Ongoing over the life of the plan	Lead Agency

	Mitigation Measure	Mitigation Monitoring Timing	Responsible Monitoring Entity
a)	Complete, and have approved, a Stormwater Pollution Prevention Plan (SWPPP) prior to initiation of construction.	3 0	<u> </u>
b)	Implement Best Management Practices to reduce the peak stormwater runoff from the project site to the maximum extent practicable.		
c)	Comply with the Caltrans storm water discharge permit as applicable; and identify and implement Best Management Practices to manage site erosion, wash water runoff, and spill control.		
d)	Complete, and have approved, a Standard Urban Stormwater Management Plan, prior to occupancy of residential or commercial structures.		
e)	Ensure adequate capacity of the surrounding stormwater system to support stormwater runoff from new or rehabilitated structures or buildings.		
f)	Prior to construction within an area subject to Section 404 of the Clean Water Act, obtain all required permit approvals and certifications for construction within the vicinity of a watercourse:		
g)	Where feasible, restore or expand riparian areas such that there is no net loss of impervious surface as a result of the project.		
h)	Install structural water quality control features, such as drainage channels, detention basins, oil and grease traps, filter systems, and vegetated buffers to prevent pollution of adjacent water resources by polluted runoff where required by applicable urban storm water runoff discharge permits, on new facilities.		
i)	Provide operational best management practices for street cleaning, litter control, and catch basin cleaning are implemented to prevent water quality degradation in compliance with applicable storm water runoff discharge permits; and ensure treatment controls are in place as early as possible, such as during the acquisition process for rights-of-way, not just later during the facilities design and construction phase.		
j)	Comply with applicable municipal separate storm sewer system discharge permits as well as Caltrans' storm water discharge permit including long-term sediment control and drainage of roadway runoff.		
k)	Incorporate as appropriate treatment and control features such as detention basins, infiltration strips, and porous paving, other features to control surface runoff and facilitate groundwater recharge into the design of new transportation projects early on in the process to ensure that adequate acreage and elevation contours are provided during the right-of-way acquisition process.		
1)	Upgrade stormwater drainage facilities to accommodate any increased runoff volumes. These upgrades may include the construction of detention basins or structures that will delay peak flows and reduce flow velocities, including expansion and restoration of wetlands and riparian buffer areas. System designs shall be completed to eliminate increases in peak flow rates from current levels.		
m)	Encourage Low Impact Development (LID) and incorporation of natural spaces that reduce, treat, infiltrate and manage stormwater runoff flows in all new developments, where practical and feasible.		
woi mai pra	SCAG shall build from existing efforts including those at the sub-regional and local level and shall continue to the with local jurisdictions and water agencies, to encourage regional-scale planning for improved stormwater magement and groundwater recharge, including consideration of alternative recharge technologies and extremal cities. Future adverse impacts may be avoided through cooperative planning, information sharing, and apprehensive implementation efforts within the SCAG region.	Ongoing over the life of the plan	SCAG

Mitigation Measure	Mitigation Monitoring Timing	Responsible Monitoring Entity
PMM HYD-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 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:	Ongoing over the life of the plan	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 shall comply with appropriate building codes and standard practices including the Uniform Building Code.		
a) Maximize, where practical and feasible, permeable surface area in existing urbanized areas to protect water quality, reduce flooding, allow for groundwater recharge, and preserve wildlife habitat. Minimize new impervious surfaces, including the use of in-lieu fees and off-site mitigation.		
b) Avoid construction and siting on groundwater recharge areas, to prevent conversion of those areas to impervious surface.		
c) Reduce hardscape to the extent feasible to facilitate groundwater recharge as appropriate.		
<b>SMM HYD-3:</b> SCAG shall build from existing efforts including those at the sub-regional and local level and shall continue to work with local jurisdictions to encourage regional-scale planning for maintaining and/or improving existing drainage patterns. Future adverse impacts may be avoided through cooperative planning, information sharing, and comprehensive implementation efforts within the SCAG region.	Ongoing over the life of the plan	SCAG
SMM HYD-4: SCAG shall continue to work with local jurisdictions and water quality agencies to encourage flood protection and prevent development in flood hazard areas that do not have appropriate protections. This shall be accomplished through cooperation and information sharing regarding specific alignments and rights-of-way planning for RTP projects, and regional program development as part of SCAG's ongoing regional planning efforts. These include but are not limited to web-based data distribution planning tools and sustainability programs in conjunction with local governments. Such services would potentially consist of an inventory of areas located in or near a 100-year flood hazard zone or hazard areas that would potentially be affected by a failure of a levee or dam; or inundation by seiche, tsunami, or mudflow.	Ongoing over the life of the plan	SCAG
PMM HYD-4: In accordance with provisions of sections 15091(a)(2) and 15126.4(a)(1)(B) of the <i>State CEQA Guidelines</i> , a Lead Agency for a project can and should consider mitigation measures capable of avoiding or reducing the potential impacts of locating structures that would impede or redirect flood flows, as applicable and feasible. Such measures may include the following or other comparable measures identified by the Lead Agency:  a) Ensure that all roadbeds for new highway and rail facilities be elevated at least one foot above the 100-year base flood elevation. Since alluvial fan flooding is not often identified on FEMA flood maps, the risk of alluvial fan flooding should be evaluated and projects should be sited to avoid alluvial fan flooding. Delineation of floodplains and alluvial fan boundaries should attempt to account for future hydrologic changes caused by global climate change.	Ongoing over the life of the plan	Lead Agency

	Mitigation Measure	Mitigation Monitoring Timing	Responsible Monitoring Entity
Land Use a	nd Planning	<u> </u>	<u> </u>
age pro	SCAG shall coordinate with local County Transportation Commissions, Caltrans and other implementing encies when siting new facilities in residential areas to facilitate minimizing future impacts of transportation established communities, through cooperation, information sharing, and regional program relopment as part of SCAG's ongoing regional planning efforts to promote best planning practices.	Ongoing over the life of the plan	SCAG
Ag ph	In accordance with provisions of sections 15091(a)(2) and 15126.4(a)(1)(B) of the <i>State CEQA Guidelines</i> , a Lead ency for a project can and should consider mitigation measures to reduce substantial adverse effects that visically divide a community, as applicable and feasible. Such measures may include the following or other inparable measures identified by the Lead Agency:	Ongoing over the life of the plan	Lead Agency
a)	Facilitate good design for 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:		
	<ul> <li>Selecting alignments within or adjacent to existing public rights of way.</li> </ul>		
	<ul> <li>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.</li> </ul>		
	<ul> <li>Wherever feasible incorporate direct crossings, overcrossings, or under crossings at regular intervals for multiple modes of travel (e.g., pedestrians, bicyclists, vehicles).</li> </ul>		
c)	Where it has been determined that it is infeasible to avoid creating a barrier in an established community, consider other measures to reduce impacts, including but not limited to:		
	<ul> <li>Alignment shifts to minimize the area affected.</li> </ul>		
	<ul> <li>Reduction of the proposed right-of-way take to minimize the overall area of impact.</li> </ul>		
	<ul> <li>Provisions for bicycle, pedestrian, and vehicle access across improved roadways.</li> </ul>		
info juri sha rec add app the	SCAG shall continue to promote the Intergovernmental Review (IGR) Program as an internal and external primational tool by reviewing and monitoring all projects submitted to SCAG for review and working with local sadictions to ensure that submitted projects support the most currently adopted Connect SoCal Plan. SCAG all provide comment letters on regionally significant projects to provide policies and goals from Connect SoCal, commend the application of project-level mitigation measures from the Connect SoCal PEIR and provide ditional resources to help the lead agency support or develop projects that are consistent with the Plan, as propriate. The IGR Mapping Tool can also be utilized by local jurisdictions to assess regional impacts. To visit IGR Mapping tool, please go to: https://maps.scag.ca.gov/IGR/. For more information on SCAG's IGR Program, asse visit: <a href="http://www.scag.ca.gov/programs/Pages/IGR.aspx">http://www.scag.ca.gov/programs/Pages/IGR.aspx</a> .	Ongoing over the life of the plan	SCAG
	6CAG shall encourage cities and counties in the region to provide SCAG with electronic versions of their most ent general plan (and associated environmental document) and any updates as they are produced.	Ongoing over the life of the plan	SCAG
to	6CAG shall continue to provide targeted technical services such as GIS and data support for cities and counties update their general plans at least every ten years, as recommended by the Governor's Office of Planning and search.	Ongoing over the life of the plan	SCAG

	Mitigation Measure	Mitigation Monitoring Timing	Responsible Monitoring Entity
	CAG shall provide technical assistance and regional leadership to encourage implementation of the Plan goals strategies that integrate growth and land use planning with the existing and planned transportation network.	Ongoing over the life of the plan	SCAG
Age phy	accordance with provisions of sections 15091(a)(2) and 15126.4(a)(1)(B) of the <i>State CEQA Guidelines</i> , a Leadacy for a project can and should consider mitigation measures to reduce substantial adverse effects that ically divide a community, as applicable and feasible. Such measures may include the following or other parable measures identified by the Lead Agency:	Ongoing over the life of the plan	Lead Agency
a)	When an inconsistency with the adopted general plan policy or land use regulation (adopted for the purpose of avoiding or mitigating an impact) is identified modify the transportation or land use project to eliminate the conflict; or, determine if the environmental, social, economic, and engineering benefits of the project warrant an amendment to the general plan or land use regulation.		
Mineral Res	ources		
dat resc of ide	SCAG shall coordinate with the Department of Conservation, California Geological Survey to maintain a base of (1) available mineral resources in the SCAG region including permitted and unpermitted aggregate arcs and (2) the anticipated 50-year demand for aggregate and other mineral resources. Based on the results his survey, SCAG shall work with local agencies on strategies to address anticipated demand, including tifying future sites that may seek permitting and working with industry experts to identify ways to encourage increase recycling to reduce the demand for aggregate.	Ongoing over the life of the plan	SCAG
Age cou	In accordance with provisions of sections 15091(a)(2) and 15126.4(a)(1)(B) of the <i>State CEQA Guidelines</i> , a Lead ney for a project can and should consider mitigation measures to reduce the use of mineral resources that d be of value to the region, as applicable and feasible. Such measures may include the following or other parable measures identified by the Lead Agency:	Ongoing over the life of the plan	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.		
	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  SMM-NOISE-1: SCAG shall coordinate with CTCs and member agencies as part of SCAG's outreach and techni assistance to local governments to encourage transportation projects and projects involving residential a commercial land uses to mitigate noise and vibration or be developed in areas that are normally acceptable	nd the plan	Monitoring Entity SCAG
SMM-NOISE-1: SCAG shall coordinate with CTCs and member agencies as part of SCAG's outreach and techni assistance to local governments to encourage transportation projects and projects involving residential a	nd the plan	SCAG
assistance to local governments to encourage transportation projects and projects involving residential a	nd the plan	SCAG
conditionally acceptable, consistent with applicable guidelines (i.e., OPR, Caltrans, etc.).		
PMM NOISE-1: In accordance with provisions of sections 15091(a)(2) and 15126.4(a)(1)(B) of the State CEQA Guidelines  Lead Agency for a project can and should consider mitigation measures to reduce substantial adverse effects the physically divide a community, as applicable and feasible. Such measures may include the following or other comparable measures identified by the Lead Agency:	nat the plan	Lead Agency
a) Install temporary noise barriers during construction.		
b) Include permanent noise barriers and sound-attenuating features as part of the project design. Barriers cou be in the form of outdoor barriers, sound walls, buildings, or earth berms to attenuate noise at adjace sensitive uses.		
<ul> <li>Schedule construction activities consistent with the allowable hours pursuant to applicable general plan no element or noise ordinance</li> </ul>	ise	
d) Post procedures and phone numbers at the construction site for notifying the Lead Agency staff, local Pol Department, and construction contractor (during regular construction hours and off-hours), along w permitted construction days and hours, complaint procedures, and who to notify in the event of a problem.	ith	
e) Notify neighbors and occupants within 300 feet of the project construction area at least 30 days in advance anticipated times when noise levels are expected to exceed limits established in the noise element of t general plan or noise ordinance.		
f) Designate an on-site construction complaint and enforcement manager for the project.		
g) Ensure that construction equipment are properly maintained per manufacturers' specifications and fitt with the best available noise suppression devices (e.g., improved mufflers, equipment redesign, use of inta silencers, ducts, engine enclosures, and acoustically attenuating shields or shrouds silencers, wraps). A intake and exhaust ports on power equipment shall be muffled or shielded.	ke	
h) Use hydraulically or electrically powered tools (e.g., jack hammers, pavement breakers, and rock drills) project construction to avoid noise associated with compressed air exhaust from pneumatically power tools. However, where use of pneumatic tools is unavoidable, an exhaust muffler on the compressed exhaust should be used; this muffler can lower noise levels from the exhaust by up to about 10 dBA. Extern jackets on the tools themselves should be used, if such jackets are commercially available, and this councilieve a further reduction of 5 dBA. Quieter procedures should be used, such as drills rather than imprequipment, whenever such procedures are available and consistent with construction procedures.	ed air nal ıld	
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.	ve	
j) Where feasible, improve the acoustical insulation of dwelling units where setbacks and sound barriers do r provide sufficient noise reduction.	not	
k) Using rubberized asphalt or "quiet pavement" to reduce road noise for new roadway segments, roadways	in	

Mitigation Measure	Mitigation Monitoring Timing	Responsible Monitoring Entity

- which widening or other modifications require re-pavement, or normal reconstruction of roadways where repavement is planned
- Projects that require pile driving or other construction noise above 90 dBA in proximity to sensitive receptors, should reduce potential pier drilling, pile driving and/or other extreme noise generating construction impacts greater than 90 dBA; a set of site-specific noise attenuation measures should be completed under the supervision of a qualified acoustical consultant.
- m) Use land use planning measures, such as zoning, restrictions on development, site design, and buffers to ensure that future development is compatible with adjacent transportation facilities and land uses;
- 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.
- Use equipment and trucks with the best available noise control techniques (e.g., improved mufflers, equipment redesign, use of intake silencers, ducts, engine enclosures, and acoustically attenuating shields or shrouds, wherever feasible) for project construction.
- p) Stationary noise sources can and should be located as far from adjacent sensitive receptors as possible and they should be muffled and enclosed within temporary sheds, incorporate insulation barriers, or use other measures as determined by the Lead Agency (or other appropriate government agency) to provide equivalent noise reduction.
- Use of portable barriers in the vicinity of sensitive receptors during construction.
- r) Implement noise control at the receivers by temporarily improving the noise reduction capability of adjacent buildings (for instance by the use of sound blankets), and implement if such measures are feasible and would noticeably reduce noise impacts.
- s) Monitor the effectiveness of noise attenuation measures by taking noise measurements.
- t) Maximize the distance between noise-sensitive land uses and new roadway lanes, roadways, rail lines, transit centers, park-and-ride lots, and other new noise-generating facilities.
- Construct sound reducing barriers between noise sources and noise-sensitive land uses.
- v) Stationary noise sources can and should be located as far from adjacent sensitive receptors as possible and they should be muffled and enclosed within temporary sheds, incorporate insulation barriers, or use other measures as determined by the Lead Agency (or other appropriate government agency) to provide equivalent noise reduction.
- W) Use techniques such as grade separation, buffer zones, landscaped berms, dense plantings, sound walls, reduced-noise paving materials, and traffic calming measures.
- x) Locate transit-related passenger stations, central maintenance facilities, decentralized maintenance facilities, and electric substations away from sensitive receptors to the maximum extent feasible.
- y) Consult the SCAG Environmental Justice Toolbox for potential measures to address impacts to low-income and/or minority communities.

	Mitigation Measure	Mitigation Monitoring Timing	Responsible Monitoring Entity
Lea rela	E-2: In accordance with provisions of sections 15091(a)(2) and 15126.4(a)(1)(B) of the <i>State CEQA Guidelines</i> , and Agency for a project can and should consider mitigation measures to reduce substantial adverse effects atted to violating air quality standards, as applicable and feasible. Such measures may include the following or er comparable measures identified by the Lead Agency:	Ongoing over the life of the plan	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.		
b)	For projects that require pile driving or other construction techniques that result in excessive vibration, such as blasting, determine the threshold levels of vibration and cracking that could damage adjacent historic or other structure, and design means and construction methods to not exceed the thresholds.		
c)	For projects where pile driving would be necessary for construction due to geological conditions, utilize quiet pile driving techniques such as predrilling the piles to the maximum feasible depth, where feasible. Predrilling pile holes will reduce the number of blows required to completely seat the pile and will concentrate the pile driving activity closer to the ground where pile driving noise can be shielded more effectively by a noise barrier/curtain.		
d)	Restrict construction activities to permitted hours in accordance with local jurisdiction regulation.		
e)	Properly maintain construction equipment and outfit construction equipment with the best available noise suppression devices (e.g., mufflers, silences, wraps).		
f)	Prohibit idling of construction equipment for extended periods of time in the vicinity of sensitive receptors.		
Population	and Housing		
that support local growth and	SCAG shall promote the Sustainability Program which will provide technical assistance to local jurisdictions ocal planning and implementation of the Connect SoCal Plan. The program recognizes sustainable solutions to challenges and will result in local plans that promote sustainability through the integration of transportation land use. For more information please visit: scag.ca.gov/Documents/Sustainable%20Communities%20Program%20Guidelines.pdf.	Ongoing over the life of the plan	SCAG
region to bui program. The	SCAG shall provide technical assistance to local governments, transit agencies and developers within the d housing capacity to compete in the statewide Affordable Housing Sustainable Communities (AHSC) grants a AHSC program is one of the few state funding opportunities to address housing shortages within the state. rmation please visit: <a href="http://ahsc.scag.ca.gov/Pages/Home.aspx">http://ahsc.scag.ca.gov/Pages/Home.aspx</a> .	Ongoing over the life of the plan	SCAG
Examples in	SCAG shall host summits that addresses the housing crisis and provides solutions to build more housing. clude the 2016 Housing Summit (http://www.scag.ca.gov/SiteAssets/HousingSummit/index.html) and the al Economic Summit (https://www.scag.ca.gov/calendar/Pages/8thEconomicSummit.aspx).	Ongoing over the life of the plan	SCAG
region for th economic, ed planning. F	SCAG shall continue to produce the biennial Local Profile reports for all member jurisdictions in the SCAG e purpose of data and information sharing. The Local Profiles reports provide a variety of demographic, ucation, housing, and transportation information that local jurisdictions can utilize like project and program for more information about the most recently release 2019 Local Profiles, please visit: <a href="mailto:cag.ca.gov/DataAndTools/Pages/LocalProfiles.aspx">cag.ca.gov/DataAndTools/Pages/LocalProfiles.aspx</a> .	Ongoing over the life of the plan	SCAG
	SCAG shall assist cities to identify funding and financing opportunities and potential partnerships for public improvements for transit-oriented development and other smart growth projects.	Ongoing over the life of the plan	SCAG

	Mitigation Measure	Mitigation Monitoring Timing	Responsible Monitoring Entity
Agency for a	In accordance with provisions of sections 15091(a)(2) and 15126.4(a)(1)(B) of the <i>State CEQA Guidelines</i> , a Lead project can and should consider mitigation measures to reduce the displacement of existing housing, as d feasible. Such measures may include the following or other comparable measures identified by the Lead	Ongoing over the life of the plan	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 existing ROWs, wherever feasible.		
c)	Develop a construction schedule that minimizes potential neighborhood deterioration from protracted waiting periods between right-of-way acquisition and construction.		
d)	Review capacities of available urban infrastructure and augment capacities as needed to accommodate demand in locations where growth is desirable to the local lead Agency and encouraged by the SCS (primarily TPAs, where applicable).		
e)	When General Plans and other local land use regulations are amended or updated, use the most recent growth projections and RHNA allocation plan.		
Public Serv	ces		
	SCAG shall assist planners, first responders, and recovery teams in a supporting role, in three key areas, before ajor emergency and during the recovery period:	Ongoing over the life of the plan	SCAG
•	Provide a policy forum to help develop regional consensus and education on security policies and emergency responses.		
•	Assist in expediting the planning and programming of transportation infrastructure repairs from major disasters.		
•	Encourage integration of transportation security measures into transportation projects early in the project development process by leveraging SCAG's relevant plans, programs, and processes, including regional ITS architecture. An example includes SCAG's participation in the development of the Southern California Catastrophic Earthquake Preparedness Plan. <sup>2</sup>		
reg wh in	SCAG shall facilitate minimizing future impacts to fire protection services through information sharing arding Fire-wise Land Management (data regarding fire-resistant vegetation, fire-resistant materials, locations are development is potentially hazardous in regard to wildfire, and management of brush and other fire risks the immediate vicinity of development in areas with high fire threat) with county and city planning artments.	Ongoing over the life of the plan	SCAG
and pla lim	SCAG shall facilitate minimizing future impacts to library services through cooperation, information sharing, regional program development as part of SCAG's ongoing regional planning efforts, such as web-based uning tools for local government including CA LOTS, and other GIS tools and data services, including, but not ited to Map Gallery, GIS library, and GIS applications, and promote acceptable service ratios regarding library rices.	Ongoing over the life of the plan	SCAG

<sup>&</sup>lt;sup>2</sup> California Emergency Management Agency, *Southern California Catastrophic Earthquake Response Plan*, December 2010 <a href="https://www.caloes.ca.gov/PlanningPreparednessSite/Documents/SoCalCatastrophicConops(Public)2010.pdf">https://www.caloes.ca.gov/PlanningPreparednessSite/Documents/SoCalCatastrophicConops(Public)2010.pdf</a>, accessed October 31, 2019.

Mitigation Measure	Mitigation Monitoring Timing	Responsible Monitoring Entity
SMM PSP-2: SCAG shall help to enhance the region's ability to deter and respond to acts of terrorism, human-caused or natural disasters through regionally cooperative and collaborative strategies. SCAG shall work with local officials to develop regional consensus on regional transportation safety, security, and safety security policies.	Ongoing over the life of the plan	SCAG
<b>SMM PSP-3:</b> SCAG shall help to enhance the region's ability to deter and respond to terrorist incidents, human-caused or natural disasters by strengthening relationship and coordination with transportation. This will be accomplished by the following:	Ongoing over the life of the plan	SCAG
<ul> <li>SCAG shall work with local officials to develop regional consensus on regional transportation safety, security, and safety security policies.</li> </ul>		
<ul> <li>SCAG shall encourage all SCAG elected officials are educated in NIMS.</li> </ul>		
<ul> <li>SCAG shall work with partner agencies, federal, state and local jurisdictions to improve communications and interoperability and to find opportunities to leverage and effectively utilize transportation and public safety/security resources in support of this effort.</li> </ul>		
SMM PSP-4: SCAG shall encourage and provide a forum for local jurisdictions to develop mutual aid agreements for essential government services during any incident recovery.	Ongoing over the life of the plan	SCAG
<b>PMM PSP-1:</b> In accordance with provisions of sections 15091(a)(2) and 15126.4(a)(1)(B) of the <i>State CEQA Guidelines</i> , a Lead Agency for a project can and should consider mitigation measures to reduce substantial adverse effects of constructing new emergency response facilities, as applicable and feasible. Such measures may include the following or other comparable measures identified by the Lead Agency:	Ongoing over the life of the plan	Lead Agency
<ul> <li>Coordinate with emergency response agencies to ensure that there are adequate governmental facilities to maintain acceptable service ratios, response times or other performance objectives for emergency response services and that any required additional construction of buildings is incorporated in to the project description.</li> </ul>		
• Where current levels of services at the project site are found to be inadequate, provide fair share contributions towards infrastructure improvements, as appropriate and applicable, to mitigate identified CEQA impacts.		
<ul> <li>Project sponsors can and should develop traffic control plans for individual projects. Traffic control plans should include information on lane closures and the anticipated flow of traffic during the construction period. The basic objective of each traffic control plan (TCP) is to permit the contractor to work within the public right of way efficiently and effectively while maintaining a safe, uniform flow of traffic. The construction work and the public traveling through the work zone in vehicles, bicycles or as pedestrians must be given equal consideration when developing a traffic control plan.</li> </ul>		
SMM PSS-1: SCAG shall facilitate minimizing future impacts to school services through cooperation, information sharing, and regional program development as part of SCAG's ongoing regional planning efforts, such as web-based planning tools for local government including CA LOTS, and other GIS tools and data services, including, but not limited to, Map Gallery, GIS library, and GIS applications, and direct technical assistance efforts to promote school planning efforts.	Ongoing over the life of the plan	SCAG

Mitigation Measure	Mitigation Monitoring Timing	Responsible Monitoring Entity
PMM PSS-1: In accordance with provisions of sections 15091(a)(2) and 15126.4(a)(1)(B) of the State CEQA Guidelines, a Lead Agency for a project can and should consider mitigation measures to reduce substantial adverse effects of constructing new or physically altered school facilities, as applicable and feasible. Such measures may include the following or other comparable measures identified by the Lead Agency:	Ongoing over the life of the plan	Lead Agency
<ul> <li>a) Where construction or expansion of school facilities is required to meet public school service ratios, require school district fees, as applicable.</li> </ul>		
SMM PSL-1: SCAG shall facilitate minimizing future impacts to library services through cooperation, information sharing, and regional program development as part of SCAG's ongoing regional planning efforts, such as web-based planning tools for local government including CA LOTS, and other GIS tools and data services, including, but not limited to Map Gallery, GIS library, and GIS applications, and promote acceptable service ratios regarding library services.	Ongoing over the life of the plan	SCAG
PMM PSL-1: In accordance with provisions of sections 15091(a)(2) and 15126.4(a)(1)(B) of the <i>State CEQA Guidelines</i> , a Lead Agency for a project can and should consider mitigation measures to reduce substantial adverse effects of construction of new or altered library facilities, as applicable and feasible. Such measures may include the following or other comparable measures identified by the Lead Agency:	Ongoing over the life of the plan	Lead Agency
<ul> <li>a) Where construction or expansion of library facilities is required to meet public library service ratios, require library fees, as appropriate and applicable, to mitigate identified CEQA impacts.</li> </ul>		
Parks and Recreation		
SMM REC-1: SCAG shall continue the commitment to analyze public health outcomes as part of the Regional Transportation Plan/Sustainable Communities Strategy (Plan). As part of the public health analysis for the Plan, SCAG shall continue to analyze resident access to parks and recreational facilities from a county level to help local jurisdictions to improve resident access to parks. SCAG shall communicate the impacts of the Plan through its Public Health Working group, and continue to support policy changes at the city and county level through educational programs.	Ongoing over the life of the plan	SCAG
<b>PMM REC-1:</b> In accordance with provisions of sections 15091(a)(2) and 15126.4(a)(1)(B) of the <i>State CEQA Guidelines</i> , a Lead Agency for a project can and should consider mitigation measures to reduce substantial adverse effects on the use of existing neighborhood and regional parks or other recreational facilities, as applicable and feasible. Such measures may include the following or other comparable measures identified by the Lead Agency:	Ongoing over the life of the plan	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		
iii. Promoting water-efficient land use and development		

Mitigation Measure	Mitigation Monitoring Timing	Responsible Monitoring Entity
v. Including trail systems and trail segments in General Plan recreation standards.	0 0	
Transportation, Traffic, and Safety		
SMM TRA-1: SCAG shall facilitate minimizing VMT and related vehicular delay by minimizing impacts to circulation and access, improve mobility, and encourage transit and Active Transportation via workshops (i.e., Mobility 21 workshop and Regional Transportation Workgroups) and web-based planning tools for local governments, forums with policy makers, and County Transportation Commissions, Planning Agencies, member cities, and state partners.	Ongoing over the life of the plan	SCAG
<b>SMM TRA-2:</b> SCAG shall identify further reduction in VMT set forth by CARB, and fuel consumption that could be obtained through land-use strategies, additional car-sharing programs with linkage to public transportation, additional vanpools, additional bicycle sharing and parking programs, and implementation of a universal employee transit access pass (TAP) program.	Ongoing over the life of the plan	SCAG
SMM TRA-3: SCAG shall continue to facilitate an SB 743 implementation program. Following initiation in 2018, the Sustainable Communities Program will continue to provide direct planning resources to support jurisdictions seeking to establish vehicle miles traveled (VMT) as the metric for evaluating transportation impacts, which will result in more efficient development patterns and support a comprehensive strategy for regional mitigation options. The SB 743 implementation program is a State grant-funded project, co-sponsored by SCAG and LADOT, which seeks to provide technical and mitigation strategy development guidance to local jurisdictions in the six-county SCAG region to facilitate implementation of the VMT-based CEQA transportation impact analysis provisions of SB 743. This coordinated program of technical guidance, evaluation of options, and cooperative engagement with local communities will serve to smooth the transition to the new VMT-reducing development paradigm, helping to ensure a successful region-wide implementation of SB 743 and attainment of the associated GHG reduction goals. Some of the primary features of the scope of work include:	Ongoing over the life of the plan	SCAG
<ul> <li>Evaluate the feasibility of various alternative VMT mitigation options, including local and regional VMT exchange and banking programs.</li> </ul>		
<ul> <li>Establish CEQA nexus to reduce VMT through a VMT mitigation exchange or banking program alternative.</li> </ul>		
<ul> <li>Substantiate the legal basis of a VMT exchange program for satisfying CEQA mitigation requirements.</li> </ul>		
<ul> <li>Collaborate with other communities and jurisdictions to reduce VMT through implementation of a VMT mitigation exchange or bank program.</li> </ul>		
<ul> <li>Improve the dissemination of transportation project VMT mitigation options.</li> </ul>		
<ul> <li>Support a variety of TDM strategies for Transportation Management Organization (TMO) membership agencies.</li> </ul>		
<ul> <li>Provide guidance to facilitate establishment of VMT mitigation exchange or bank programs throughout the region and state</li> </ul>		
SMM TRA-4: SCAG shall continue to analyze and develop potential implementation strategies for a regional, market-based system to price or charge for auto trips during peak hours.	Ongoing over the life of the plan	SCAG
SMM TRA-5: SCAG shall develop a vanpool program for SCAG employees' commute trips.	Ongoing over the life of the plan	SCAG

Mitigation Measure	Mitigation Monitoring Timing	Responsible Monitoring Entity
<b>SMM TRA-6:</b> SCAG shall encourage new developments to incorporate both local and regional transit measures into the project design that promote the use of alternative modes of transportation.	Ongoing over the life of the plan	SCAG
<b>PMM-TRA-1:</b> In accordance with provisions of sections 15091(a)(2) and 15126.4(a)(1)(B) of the <i>State CEQA Guidelines</i> , a Lead Agency for a project can and should consider mitigation measures to reduce substantial adverse effects related to transportation-related impacts, as applicable and feasible. Such measures may include the following or other comparable measures identified by the Lead Agency:	Ongoing over the life of the plan	Lead Agency
<ul> <li>Transportation demand management (TDM) strategies should be incorporated into individual land use and transportation projects and plans, as part of the planning process. Local agencies should incorporate strategies identified in the Federal Highway Administration's publication: 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:</li> </ul>		
<ul> <li>include TDM mitigation requirements for new developments;</li> </ul>		
<ul> <li>incorporate supporting infrastructure for non-motorized modes, such as, bike lanes, secure bike parking, sidewalks, and crosswalks;</li> </ul>		
<ul> <li>provide incentives to use alternative modes and reduce driving, such as, universal transit passes, road and parking pricing;</li> </ul>		
<ul> <li>implement parking management programs, such as parking cash-out, priority parking for carpools and vanpools;</li> </ul>		
<ul> <li>develop TDM-specific performance measures to evaluate project-specific and system-wide performance;</li> </ul>		
<ul> <li>incorporate TDM performance measures in the decision-making process for identifying transportation investments;</li> </ul>		
<ul> <li>implement data collection programs for TDM to determine the effectiveness of certain strategies and to measure success over time; and</li> </ul>		
<ul> <li>— set aside funding for TDM initiatives.</li> </ul>		
— The increase in per capita VMT on facilities experiencing LOS F represents a significant impact compared to existing conditions. To assess whether implementation of these specific mitigation strategies would result in measurable traffic congestion reductions, implementing actions may need to be further refined within the overall parameters of the proposed Plan and matched to local conditions in any subsequent project-level environmental analysis.		
SMM TRA-7: SCAG shall, in cooperation with local and state agencies, identify critical infrastructure needs necessary for: a) emergency responders to enter the region, b) evacuation of affected facilities, and c) restoration of utilities. In	Ongoing over the life of the plan	SCAG

45

addition, SCAG shall establish transportation infrastructure practices that promote and enhance security.

	Mitigation Measure	Mitigation Monitoring Timing	Responsible Monitoring Entity
during,	CAG shall provide a forum for collaboration in planning, communication, and information sharing before, , or after a regional emergency (i.e. seismic activities, wildfires, and other natural disasters). This will be blished by the following:	Ongoing over the life of the plan	SCAG
	CAG shall develop and incorporate strategies and actions pertaining to response and prevention of security cidents and events as part of the on-going regional planning activities.		
	CAG shall offer a regional repository of GIS data for use by local agencies in emergency planning, and sponse, in a standardized format.		
	CAG shall enter into mutual aid agreements with other MPOs (as feasible) to provide this data, in pordination with the California OES in the event that an event disrupts SCAG's ability to function.		
Agency substar	accordance with provisions of sections 15091(a)(2) and 15126.4(a)(1)(B) of the <i>State CEQA Guidelines</i> , a Lead of for a project can and should consider mitigation measures to reduce substantial adverse effects which may nitially impair implementation of an adopted emergency response plan or emergency evacuation plan, as able and feasible. Such measures may include the following or other comparable measures identified by the seency:	Ongoing over the life of the plan	Lead Agency
sta sh ju: ac	rior to construction, project implementation agencies can and should ensure that all necessary local and ate road and railroad encroachment permits are obtained. The project implementation agency can and rould also comply with all applicable conditions of approval. As deemed necessary by the governing risdiction, the road encroachment permits may require the contractor to prepare a traffic control plan in coordance with professional engineering standards prior to construction. Traffic control plans can and rould 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 extent possible.		
_	- Usage of haul routes minimizing truck traffic on local roadways to the extent possible.		
_	Inclusion of detours for bicycles and pedestrians in all areas potentially affected by project construction.		
_	Installation of traffic control devices as specified in the California Department of 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 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.		
_	<ul> <li>Coordination with local transit agencies for temporary relocation of routes or bus stops in work zones, as necessary.</li> </ul>		

	Mitigation Measure	Mitigation Monitoring Timing	Responsible Monitoring Entity
	<ul> <li>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.</li> </ul>		
-	<ul> <li>Enhance emergency preparedness awareness among public agencies and with the public at large.</li> </ul>		
Tribal Cultu	ral Resources		
iden reso	SCAG shall consult with the Native American Heritage Commission, as well as Native American tribes, to iffy opportunities for early and effective consultation to identify tribal cultural resources to avoid such arces wherever practicable and feasible and reduce or mitigate for conflicts in compatible land use to the mum extent practicable.	Ongoing over the life of the plan	SCAG
Ager cultu	n accordance with provisions of sections 15091(a)(2) and 15126.4(a)(1)(B) of the <i>State CEQA Guidelines</i> , a Lead acy for a project can and should consider mitigation measures to reduce substantial adverse effects on tribal ral resources, as applicable and feasible. Such measures may include the following or other comparable sures identified by the Lead Agency:	Ongoing over the life of the plan	Lead Agency
a)	Avoidance and preservation of the resources in place, including, but not limited to, planning and construction to avoid the resources and protect the cultural and natural context, or planning greenspace, parks, or other open space, to incorporate the resources with culturally appropriate protection and management criteria;		
b)	Treating the resource with culturally appropriate dignity taking into account the tribal cultural 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;		
c)	Permanent conservation easements or other interests in real property, with culturally appropriate management criteria for the purposes of preserving or utilizing the resources or places; and protecting the resource.		
Utilities and	Service Systems		
SCA facili com	During the planning, design, and project-level CEQA review process for individual development projects, G shall coordinate with waste management agencies and the appropriate local and regional jurisdictions to tate the development of measures and to encourage diversion of solid waste such as recycling and posting programs, as needed. This includes discouraging siting of new landfills unless all other waste ction and prevention actions have been fully explored to minimize impacts to neighborhoods.	Ongoing over the life of the plan	SCAG
juris	2: SCAG shall coordinate with waste management agencies, and the appropriate local and regional dictions, measures to facilitate and encourage diversion of solid waste such as recycling and composting rams.	Ongoing over the life of the plan	SCAG
Lead appl Lead	In accordance with provisions of sections 15091(a)(2) and 15126.4(a)(1)(B) of the <i>State CEQA Guidelines</i> , a Agency for a project can and should consider mitigation measures to reduce the generation of solid waste, as cable and feasible. Such measures may include the following or other comparable measures identified by the Agency:  Trate green building measures with CALGreen (California Building Code Title 24) into project design,	Ongoing over the life of the plan	Lead Agency

Mitigation Measure	Mitigation	Responsible
	Monitoring Timing	<b>Monitoring Entity</b>

including but not limited to the following:

- Reuse and minimization of construction and demolition (C&D) debris and diversion of C&D waste from landfills to recycling facilities.
- Inclusion of a waste management plan that promotes maximum C&D diversion.
- Source reduction through (1) use of materials that are more durable and easier to repair and maintain, (2) design to generate less scrap material through dimensional planning, (3) increased recycled content, (4) use of reclaimed materials, and (5) use of structural materials in a dual role as finish material (e.g., stained concrete flooring, unfinished ceilings, etc.).
- d) Reuse of existing structure and shell in renovation projects.
- e) Development of indoor recycling program and space.
- f) Discourage the siting of new landfills unless all other waste reduction and prevention actions have been fully explored. If landfill siting or expansion is necessary, site landfills with an adequate landfill-owned, undeveloped land buffer to minimize the potential adverse impacts of the landfill in neighboring communities.
- g) Discourage exporting of locally generated waste outside of the SCAG region during the construction and implementation of a project. Encourage disposal within the county where the waste originates as much as possible. Promote green technologies for long-distance transport of waste (e.g., clean engines and clean locomotives or electric rail for waste-by-rail disposal systems) and consistency with SCAQMD and Connect SoCal policies can and should be required.
- h) Encourage waste reduction goals and practices and look for opportunities for voluntary actions to exceed the 80 percent waste diversion target.
- Encourage the development of local markets for waste prevention, reduction, and recycling practices by supporting recycled content and green procurement policies, as well as other waste prevention, reduction and recycling practices.
- j) Develop ordinances that promote waste prevention and recycling activities such as: requiring waste prevention and recycling efforts at all large events and venues; implementing recycled content procurement programs; and developing opportunities to divert food waste away from landfills and toward food banks and composting facilities.
- Develop and site composting, recycling, and conversion technology facilities that have minimum environmental and health impacts.
- l) Integrate reuse and recycling into residential industrial, institutional and commercial projects.
- m) Provide education and publicity about reducing waste and available recycling services.
- n) Implement or expand city or county-wide recycling and composting programs for residents and businesses. This could include extending the types of recycling services offered (e.g., to include food and green waste recycling) and providing public education and publicity about recycling services.

Mitigation Measure	Mitigation Monitoring Timing	Responsible Monitoring Entity
SMM-USWW-1: SCAG shall work with local jurisdictions and wastewater agencies to encourage regional-scale planning for improved wastewater and stormwater management. Future impacts to wastewater and stormwater facilities shall be avoided to the extent practical and feasible through cooperative planning, information sharing, and comprehensive pollution control measure development within the SCAG region. This cooperative planning shall occur as part of current and existing coordination, an integral part of SCAG's ongoing regional planning efforts.	Ongoing over the life of the plan	SCAG
<b>PMM-USWW-1:</b> In accordance with provisions of sections 15091(a)(2) and 15126.4(a)(1)(B) of the <i>State CEQA Guidelines</i> , a Lead Agency for a project can and should consider mitigation measures to reduce substantial adverse effects on utilities and service systems, particularly for construction of wastewater facilities, as applicable and feasible. Such measures may include the following or other comparable measures identified by the Lead Agency:	Ongoing over the life of the plan	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. There CEQA determinations must ensure that the proposed development can be served by its existing or planned treatment capacity. If adequate capacity does not exist, project sponsors shall coordinate with the relevant service provider to ensure that adequate public services and utilities could accommodate the increased demand, and if not, infrastructure improvements for the appropriate public service or utility shall be identified in each project's CEQA documentation. The relevant public service provider or utility shall be responsible for undertaking project-level review as necessary to provide CEQA clearance for new facilities.		
SMM USWS-1: SCAG shall coordinate with local agencies as part of SCAG's Sustainability Program regarding the implementation of Urban Greening, Greenbelts and Community Separator land use strategies. Primary features of land use strategies address the following:	Ongoing over the life of the plan	SCAG
Increased trail and greenway connectivity;		
<ul> <li>Improved water quality, groundwater recharge and watershed health;</li> </ul>		
<ul> <li>Strategies for stormwater and rainwater collection, infiltration, treatment and release;</li> </ul>		
Reduce urban runoff;		
Expand the urban forest;		
<ul> <li>Provision of wildlife habitat and increased biodiversity;</li> </ul>		
<ul> <li>Expand recreation opportunities and beautification;</li> </ul>		
Preserving agrarian economies;		
Restore severed wildlife corridors.		
<b>PMM USWS-1</b> : In accordance with provisions of sections 15091(a)(2) and 15126.4(a)(1)(B) of the <i>State CEQA Guidelines</i> , a Lead Agency for a project can and should consider mitigation measures to ensure sufficient water supplies, as applicable and feasible. Such measures may include the following or other comparable measures identified by the Lead Agency:	Ongoing over the life of the plan	Lead Agency
a) Reduce exterior consumptive uses of water in public areas, and should promote reductions in private homes and businesses, by shifting to drought-tolerant native landscape plantings, using weather-based irrigation systems, educating other public agencies about water use, and installing related water pricing incentives.		
b) Promote the availability of drought-resistant landscaping options and provide information on where these can be purchased. Use of reclaimed water especially in median landscaping and hillside landscaping can and		

	Mitigation Measure	Mitigation Monitoring Timing	Responsible Monitoring Entity
	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.		
Wildfire			
reg dev	SCAG shall facilitate minimizing future impacts to fire protection services through information sharing arding Fire-wise Land Management (vegetation data, fire-resistant building materials, locations where relopment is vulnerable to wildfire, and best practices for safe land management) with county and city nning departments.	Ongoing over the life of the plan	SCAG
hov (or	AG shall provide an annual forum (or forums) aimed at increased wildfire resilience. Forums shall focus on whigh wildfire risk towns, cities, and counties in the region can adopt a wildland-urban interface (WUI) code similar code) specifically designed to mitigate the risks from wildfire to life and property. Topics to be dressed will include best practices around:		
	<ul> <li>Structure density and location: number of structures allowed in areas at risk from wildfire, plus setbacks (distance between structures and distance between other features such as slopes).</li> </ul>		
	<ul> <li>Building materials and construction: roof assembly and covering, eaves, vents, gutters, exterior walls, windows, non-combustible building materials, and non-combustible surface.</li> </ul>		
	<ul> <li>Vegetation management: tree thinning, spacing, limbing, and trimming; removal of any vegetation growing under tree canopies (typically referred to as "ladder fuels"), surface vegetation removal, and brush clearance; vegetation conversion, fuel modifications, and landscaping.</li> </ul>		
	<ul> <li>Emergency vehicle access and evacuation routes: driveways, turnarounds, emergency access roads, marking of roads, and property address markers.</li> </ul>		
	<ul> <li>Water supply: approved water sources and adequate water supply.</li> </ul>		
	<ul> <li>Fire protection: automatic sprinkler system, spark arresters, and propane tank storage.</li> </ul>		
exa	e outcome of the forum shall be a summary of actionable items for local planners. Furthermore, SCAG shall mine wildfire risk management strategies in areas where at-risk critical electrical infrastructure is located based CPUC and CAL FIRE maps.		
hel dis wil	SCAG, in partnership with technical experts and stakeholders shall launch or continue existing initiatives to p local towns, cities, and counties to protect Southern California communities and economies from the ruption of wildfire occurrences. Initiatives could include but not be limited to seminars that review the risk of dfire and approaches for preparation, including strengthening of infrastructure, emergency services, ergency evacuation plans and reviewing building safety codes.	Ongoing over the life of the plan	SCAG
juri	SCAG shall develop a Regional Climate Adaptation Framework, which will assist local and regional sdictions in managing the negative impacts of wildfires and other hazards caused by climate change. The mate Adaptation Framework will integrate existing State initiatives, policies, and guidance into the regional	Ongoing over the life of the plan	SCAG

	Mitigation Measure	Mitigation Monitoring Timing	Responsible Monitoring Entity
The juri juri infi me reg reg res	mework, helping to connect local and regional land use and transportation planning with State policy goals. It is framework will specifically provide communication & outreach strategies and templates for local institutions; toolkits for local jurisdictions to support project implementation, land use, and transportation restructure decisions; resources for cities to comply with Senate Bill 379; resources and templates for other tropolitan planning organizations (MPOs); tools and metrics for tracking implementation progress; and a cional framework and coordination strategy. SCAG shall also assist local jurisdictions with wildfire safety uirements for General Plan Updates by providing the most recent fire-risk data and maps from state-wide ources, including isolated areas that could be subject to fire risk with limited egress routes based on the asportation modeling components of SCAG's Regional Climate Adaptation Framework.	<b>V</b>	Ü
Ag	In accordance with provisions of sections 15091(a)(2) and 15126.4(a)(1)(B) of the <i>State CEQA Guidelines</i> , a Lead ency for a project can and should consider mitigation measures to wildfire risk, as applicable and feasible. Such asures may include the following or other comparable measures identified by the Lead Agency:	Ongoing over the life of the plan	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 feature, such as:		
	<ul><li>Ember-resistant vents</li></ul>		
	<ul><li>Fire-resistant roofs</li></ul>		
	<ul> <li>Surrounding defensible space</li> </ul>		
	Proper maintenance and upkeep of structures and surrounding area		
Ag	In accordance with provisions of sections 15091(a)(2) and 15126.4(a)(1)(B) of the <i>State CEQA Guidelines</i> , a Lead ency for a project can and should consider mitigation measures to wildfire risk, as applicable and feasible. Such asures may include the following or other comparable measures identified by the Lead Agency:	Ongoing over the life of the plan	Lead Agency
a)	New development or infrastructure activity within very high hazard severity zones or SRAs shall be required to:		
	<ul> <li>Submit a fire protection plan including the designation of fire watch staff;</li> </ul>		
	<ul> <li>Maintain water and other fire suppression equipment designated solely for firefighting on site for any</li> </ul>		

Mitigation Measure	Mitigation Monitoring Timing	Responsible Monitoring Entity
construction and maintenance activities;		
<ul> <li>Locate construction and maintenance equipment in designated "safe areas" such that they do not discharge combustible materials; and</li> </ul>		
<ul> <li>Designate trained fire watch staff during project construction to reduce risk of fire hazards.</li> </ul>		



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**EXHIBIT A - REVISED MITIGATION MONITORING AND** REPORTING FOR THE FINAL CONNECT SOCAL PEIR SEPTEMBER 3, 2020

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