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August 14, 2018

In Reply Refer To:
HDA-CA

Mr. Hasan Ikhrata, Executive Director
Southern California Association of Governments
900 Wilshire Blvd., Suite 1700
Los Angeles, CA 90017

SUBJECT: SCAG 2018 Planning Certification Final Report

Dear Mr. Ikhrata:

Enclosed is the Final Report for the quadrennial certification review of the transportation planning process for the Los Angeles, California Transportation Management Area (TMA) that is carried out by the Southern California Association of Governments (SCAG). The FHWA and FTA jointly certify that SCAG's transportation planning process substantially meets the requirements of 23 Code of Federal Regulations (CFR) § 450, 49 CFR § 613, and all other requirements.

We thank you and your staff for the time and assistance provided during the course of the certification review process. If you have any questions or request further information, feel free to contact Michael Morris of the FHWA California Division's Cal-South Office at (213) 894-4014, or by email at michael.morris@dot.gov; or Adam Stephenson of the FTA's Los Angeles Metro Office at (213) 202-3957, or by email at adam.stephenson@dot.gov.

Sincerely,

Edward Carranza Jr.
Acting Regional Administrator
Federal Transit Administration

Vincent P. Mammano
Division Administrator
Federal Highway Administration

Enclosure

SOUTHERN CALIFORNIA ASSOCIATION OF GOVERNMENTS

Final Report
August 2018

Transportation Planning

Federal Certification Review

Prepared by:

The Federal Highway Administration
California Division

The Federal Transit Administration
Region IX

Table of Contents

Executive Summary 3
Table 1: Findings, Corrective Actions, Recommendations, and Best Practices Summary 4

Certification Review Introduction, Purpose, and Process 11

Description and Overview of SCAG 13

Certification Review Results 14

Conclusion 50

Appendices:
Appendix A: Certification Review Site Visit Participants *51*
Appendix B: Interviewed Local Elected, Transit Operator, and Native American Tribal Government Officials *53*
Appendix C: SCAG Organizational Structure *54*
Appendix D: Public Meeting Notices *55*
Appendix E: Certification Review Concurrence and Closure *56*

Executive Summary

Federal regulations require the United States Department of Transportation (USDOT) – specifically the Federal Highway Administration (FHWA) and the Federal Transit Administration (FTA) – to jointly review and evaluate the metropolitan transportation planning process of all urbanized areas that have populations totaling 200,000 or greater every four years. The Southern California Association of Governments (SCAG) Metropolitan Planning Area's (MPA) last transportation planning process certification review was completed in August 2014.

For this cycle, a Federal review team – of FHWA and FTA staff – conducted a desk audit and site visit. The desk audit was completed first, and included an in-depth review of SCAG's metropolitan transportation planning process and products. SCAG's staff gave web-links to work products and comprehensive narratives in response to the review team's request for information. After completion of the desk audit, the review team conducted a site visit on April 3 – 5, 2018. This process included discussions between the review team and SCAG staff, a public listening session, and interviews with SCAG local elected, transit, and Native American Tribal Government officials. Overall, SCAG's 2018 certification review focused on assessing SCAG's compliance with metropolitan transportation planning provisions of the Fixing America's Surface Transportation (FAST) Act requirements, and strategic FHWA and FTA initiatives. The specific focus areas evaluated were:

- Congestion Management Process (CMP)
- Organizational Structure, Board Membership, and Planning Boundaries
- Metropolitan Planning Agreements, Contracts, and Consultation Coordination with Federal, State, and Local Agencies
- Regional Transportation Plan (RTP)
- Federal Transportation Improvement Program (FTIP)
- Listing of Obligated Projects
- Overall Work Program (OWP)
- Self-Certification
- Planning and Environmental Linkages (PEL)
- Regional Models of Cooperation (RMOC)
- Public Involvement, Visualization, Title VI and Non-discrimination, American's with Disabilities Act (ADA), Environmental Justice (EJ), and Limited English Proficiency (LEP)
- Travel Demand Forecasting
- Management and Operations (M&O) and Intelligent Transportation Systems (ITS)
- Pedestrian and Non-Motorized Transportation
- Transportation Planning Safety and Security
- Freight and Goods Movement
- Performance-Based Management, Planning, and Programming
- Financial Planning and Fiscal Constraint

- Financial Controls, Procurement, Consultant Selection, and Audits
- Land Use, Livability, and Environmental Mitigation
- Air Quality Conformity

The body of this report contains applicable findings, corrective actions, recommendations, and best practices observed. Findings are statements of fact, based on USDOT observations made during the site visit and review of planning documents. Corrective actions detail areas of concern where the MPO's practices unsuccessfully meet Federal requirements, and if left unaddressed MPO program restrictions may be imposed. Recommendations give potential MPO practice improvements from the review team's perspective, and best practices highlight items found as exceptional. A summary of the results is given in Table 1. In specific, this review concluded with recommendations in 11 of the focus areas and six best practices.

Review Outcome

FHWA and FTA jointly certify that the metropolitan transportation planning process performed by SCAG substantially meets the requirements of 23 Code of Regulations (CFR) § 450 and all other applicable requirements. Further details on all findings, recommendations, and best practices can be found in the relevant sections of this report.

Table 1: Findings, Corrective Actions, Recommendations, and Best Practices Summary

Focus Area	Findings	Corrective Actions	Recommendations	Best Practices
CMP (23 USC § 134, 23 CFR § 450.322)	SCAG's CMP developed based on the eight-step approach and is integrated into the RTP and FTIP. The CMP process details goals and investment strategies and is comprehensive. Requirements satisfied	-	The review team appreciated the comprehensiveness of SCAG's CMP. For recommendation, SCAG is encouraged to integrate adequacy of analysis documentation conducted by regional project sponsors. These details have the potential to give SCAG increased insight into how the CMP is functioning regionally and input on process effectiveness overall SCAG also is encouraged to integrate performance based planning and programming requirements into its CMP process to characterize existing and anticipated conditions on the regional transportation system; track progress toward meeting regional objectives; identify specific locations with congestion to address; assess congestion mitigation strategies, programs, and projects; and communicate system performance, often via visualization, to decision-makers, the public, and MPO member agencies	-
Organizational Structure, Board Membership, and Planning Boundaries	SCAG convenes the General Assembly to determine the course of action, budget, and policy for the upcoming year. SCAG's Regional Council (Board) serves as the primary governing decision making body of the agency and meets monthly.	-	A small portion of the Santa Barbara urbanized area (UZA) extends into Ventura County and includes the community of Mussel Shoals. SCAG is unaware of an existing Memorandum of	-

(23 USC § 134, 23 CFR §§ 450.310 and 450.312)	SCAG's Executive Administration Committee deals with human resources, budgets, finance, operations, communications, and other matters. SCAG has three major policy committees and its MPA extends over the six counties of Imperial, Los Angeles, Orange, Riverside, San Bernardino, and Ventura. There are 191 cities that make up SCAG's region which covers more than 38,000 square miles. Requirements satisfied		Agreement (MOA) with the Santa Barbara County Association of Governments (SBCAG) as to the planning responsibilities for this area. The review team encourages SCAG to partner with SBCAG to complete an agreement for an understanding of accountability, since Ventura County is within SCAG's MPA	
Metropolitan Planning Agreements, Contracts, and Consultation Coordination with Federal, State, and Local Agencies (23 USC § 134, 23 CFR §§ 450.314, 450.316, and 450.324)	SCAG has existing agreements with transit operators, the county transportation commissions, the Southern California Regional Rail Authority/Metrolink, and the California Department of Transportation (Caltrans). Each of these agreements are in process of being updated to incorporate federal FAST Act requirements. SCAG's region has many federal lands and other lands administered by the National Park Service and Bureau of Land Management. SCAG collaborated with the United States Department of Agriculture's (USDA) Forest Service to host a workshop in April 2016 for facilitating transportation planning at the San Gabriel Mountains National Monument. SCAG's region has 17 Native American Tribal Governments and the MPO hosted two Native American Tribal Government consultation workshops during development of the RTP. Requirements satisfied, except for the requirement necessitating documentation of roles, responsibilities, and key decision points for consultations with FLMA	-	The review team encourages SCAG to complete its current process of documenting Native American Tribal Governments and FLMA consultation procedures before the next OWP annual meeting	All working groups that SCAG holds are exemplary as to how the MPO brings together diverse sets of people clustered around the region for collaborated consensus. SCAG's working groups are a success and inspiration, and the review team recognizes them as a best practice
RTP (23 USC § 134, 23 CFR § 450.324)	SCAG's RTP gives a regional vision through 2040, includes all regionally significant projects, and was developed and adopted by the MPO Board. Policy options, a transportation needs analysis, alternative transportation options, and available financial resources are targeted in the document. Requirements satisfied	-	-	The review team recognizes SCAG's RTP for two best practices, including its Sustainability Planning Grant Program and its 'REVISION' performance monitoring tool. Specific details of the grant program and performance monitoring tool are referenced in the RTP "other comments" section of this report
FTIP (23 USC § 134, 23 CFR § 450.326)	SCAG's FTIP gives a complete list of transportation investment priorities in the region and is developed through a bottom-up process to be consistent with the MPO's RTP. SCAG produces a biennial FTIP update and the document has a financial plan that demonstrates fiscal constraint. The document shows an emphasis on transportation system maintenance, a growing commitment to active transportation, and projected benefits to SCAG's regional and local economy. FTIP public comments were accepted for 30-days, which is a reasonable opportunity given to receive input. Requirements satisfied	-	-	-
Listing of Obligated Projects (23 USC § 134, 23 CFR § 450.334)	SCAG publishes an annual listing of obligated projects that includes investments for highway improvements, transit, rail and bus facilities, high occupancy vehicle (HOV) lanes, bicycle and pedestrian transportation facilities, signal synchronization, intersection improvements, freeway ramps, etc. The report's information is derived from Caltrans, FHWA, FTA, and SCAG data	-	-	-

	sources and production is issued in accordance with public participation criteria for the FTIP. Requirements satisfied			
OWP (23 USC § 134, 23 CFR § 450.308)	SCAG's OWP each year identifies work to be accomplished, discusses planning priorities, regional needs, and the specific programs to meet needs. The OWP serves as a management tool for the Regional Council, policy committees, working groups, and staff, and gives local and state agencies a focal point for improving regional coordination and reducing work duplication. The document complies with federal and state statutes, including the FAST Act, and focuses on RTP development. Requirements satisfied	-	-	-
Self-Certification (23 CFR § 450.336)	SCAG produces a self-certification every year and certifies that its transportation planning process is being carried out in accordance with all applicable requirements. Requirements satisfied	-	To strengthen the connection of self-certification with the OWP, the review team encourages SCAG to make efforts to heighten the awareness of self-certification requirements with the Regional Council and its various committees	-
PEL (23 USC § 168, 23 CFR §§ 450.212, 450.312, and Appendix A to 23 CFR § Part 450)	SCAG's website shares information, resources, and best practices for the linkage of planning and NEPA in major transportation corridor studies and area plans. SCAG addresses PEL by incorporating problem statements, purpose and need, corridor definitions, descriptions of transportation modes, and alternatives identification into corridor studies that are drafted in the region. SCAG focuses on early coordination, public involvement, and purpose and need statement guidance, in which each are considered throughout development and implementation of the RTP. Requirements satisfied	-	For relevance to the FAST Act, the review team recommends SCAG update its website to include updated guidance and resources on linking planning and NEPA, and to reflect refinements to PEL requirements. SCAG is encouraged to review FHWA's Environmental Review Toolkit as a resource for information: https://www.environment.fhwa.dot.gov/env_initiatives/pel.aspx. The Center for Environmental Excellence by the American Association of State Highway and Transportation Officials (AASHTO) is also a good source that contains PEL related information SCAG additionally is encouraged to pursue opportunities for FHWA technical assistance (e.g. peer exchange, workshop facilitation, individualized training, etc.) to help its staff and partner agencies enhance PEL implementations. As another resource, a PEL project manager can be contacted to discuss next steps and opportunities: https://www.environment.fhwa.dot.gov/env_initiatives/pel/request_pel_info.aspx	-
RMOC (23 CFR §§ 450.300, 450.310, 450.312, 450.314, 450.318, and 450.322	SCAG engages in quarterly meetings with SANDAG, OCTA, and Caltrans, where planning staff meet to discuss projects and other items for coordination. SCAG coordinates other RMOC activities that are documented in the MPO's OWP. Requirements met	-	-	-
Public Involvement, Visualization, Title VI and Non-discrimination, ADA, EJ, and LEP (23 USC § 324, 29 USC § 794, 42	2014 public participation plan (PPP) update being processed, which explains how SCAG operates, establishes core values for public participation, and sets forth goals and strategies for increasing public information and engagement in the planning process. A standalone interactive webpage was developed that includes various visuals and breakout pages that were created for RTP major topics that utilize various visual cues,	-	As a challenge to further SCAG's public involvement, the MPO is encouraged to increase its transparency and general presence in service as a transportation planning advocate to the public. Example results could include that most of SCAG's residents know how to engage in the planning process that shapes their area, or many residents know other entity	The review team acknowledges SCAG's robust and comprehensive public outreach effectiveness in engaging stakeholders to include community members from all backgrounds and areas

USC §§ 12101 and 2000d, 49 USC § 5332, 23 CFR §§ 450.220, 450.316, 450.322, 450.324, and 450.336, Executive Order (E.O.) 12898 and E.O. 13166)	http://scagrtpscs.net/pages/default.aspx. Title VI Assurances given to USDOT, and to Caltrans for assisting State compliance. A process to investigate Title VI complaints is in place. SCAG's nondiscrimination policy is included in each of the agency's contracts and bid advertisements. For ADA compliance, SCAG includes related information in the RTP. For EJ, SCAG developed a policy to ensure it is as an integral part of the transportation planning process. In address of LEP, SCAG developed a language assistance plan for LEP populations. Requirements satisfied		facts, i.e. like the organization being the largest MPO in the country	within the geographically expansive region, as a best practice. Its investment into SCAG-TV, an archive of recorded meetings and public information videos on demand that also provides a live web stream of Regional Council meetings, and its videoconferencing capabilities at its five Regional Offices and sites in the Coachella Valley, City of Palmdale, and South Bay Cities Council of Governments, is commendable
Travel Demand Forecasting (23 USC § 134, 23 § CFR 450.324)	To support the transportation planning process SCAG developed and maintains an activity based model (ABM), trip based model, sub-regional modeling development tool (SMDT), heavy-duty truck (HDT) model, and the air quality emission factors (EMFAC) model. SCAG uses these models to forecast surface transportation system conditions, and to support air quality analyses. Requirements satisfied	-	As the Transportation Research Board's (TRB) Special Report 288 states, "There is no single approach to travel forecasting or a set of procedures that is 'correct' for all applications or all MPOs"; therefore, the review team encourages SCAG to continue using the latest reasonable assumptions, a realistic model structure, solid data for model development support, and validation with a proper balance between model complexity, data availability, agency resources (funding, computing, and staffing) and analysis needs. SCAG can benefit by coordinating the models and all other data collection activities and by using a suite of tools that satisfy transportation planning and operational essentials The review team is satisfied with SCAG's intent to keep both the trip based model and ABM. As such, SCAG is encouraged to simultaneously update its trip based model and ABM for ensured future comparative analysis research compatibility The review team was also satisfied with the understanding that SCAG staff demonstrated in terms of the importance of the travel demand model in regional transportation planning. We encourage SCAG to consistently assess how their travel models can help plan for future regional priorities	-
M&O and ITS (23 USC § 134, 23 CFR §§ 450.306, 450.324, and 450.326)	SCAG's RTP discusses transportation network strategies that intends for an integrated and multimodal approach addressed by an array of M&O systems, and the financial plan gives details of reasonably available costs and revenues of system-level estimates to operate. SCAG's Regional ITS Architecture is viewable at: http://www.scag.ca.gov/programs/Pages/IntelligentTransportation.aspx, which was last updated in 2011 to address specific elements such as goods movement, active transportation, positive train	-	The MPO is encouraged to collaborate with the county transportation commissions to develop greater consistency in how managed lanes operate to establish uniform criteria for motorists' understanding and usability of managed lane facilities across county lines. SCAG also has a new role under the FAST Act to "consult" with agencies implementing express-lanes regarding the setting of tolls. The FHWA will collaborate	The review team recognizes SCAG for its development of a draft plan ("ConOps") for regional managed lanes network implementations as a best practice. This plan evaluates the entire managed lanes network in SCAG's region, primarily HOV lanes, and

	control, and express-lanes. The architecture, however, is currently in process of being updated and expected to be completed in the summer of 2018. Requirements satisfied		with SCAG to clarify the specific activities required	identifies which HOVs would be best for conversion to high occupancy toll (HOT) lanes. To serve its intended purpose, this plan should be finalized and published as soon as possible
Pedestrian and Non-Motorized Transportation (23 USC §§ 134 and 217, 23 CFR §§ 450.300, 450.306, 450.316, and 450.324)	SCAG's RTP discusses active transportation, which refers to human powered transportation and low-speed electronic assist devices. Examples of active transportation in SCAG's region include bicycle, tricycle, wheelchair, scooter, skates, skateboard, push scooter, trailer, and hand cart. Walking and bicycling are essential pieces of SCAG's regional transportation system. Nearly everyone is a pedestrian at some point during the day, and bicycling increases the mobility for those with zero access to motor vehicles dramatically. Active transportation is low cost, free of greenhouse gases, and can help reduce roadway congestion along with expanded transit ridership. Requirements met	-	-	The review team recognizes SCAG's "Go Human Campaign" (*Go* Human) as a best practice. *Go Human* received FHWA's 2017 Transportation Planning Excellence Award, and is an outreach and advertising campaign to reduce traffic collisions in Southern California. The campaign uses education, advocacy, information sharing, and events that help residents re-envision their streets and communities. The primary goals of *Go Human* are to reduce collisions involving pedestrians and bicyclist while increasing the levels of walking and biking in SCAG's region. By combining the reach of an advertising campaign with the impact of tangible demonstration projects and empowerment toolkit trainings, *Go Human* is raising awareness and empowering champions to promote long-term change. It provides a model for supporting and scaling local activities for regional impact
Transportation Planning Safety and Security (23 USC §§ 134 and 148, 23 CFR §§ 450.306, 450.324, and 450.326)	Caltrans released a SHSP update in 2015 with new goals, actions, and challenge areas to further improve transportation-related safety. SCAG's RTP prioritizes safety and mobility for regional residents, and incorporates a comprehensive Transportation Safety and Security Appendix that provides details on SCAG challenge areas consistent with those included in the 2015 SHSP. SCAG supports local transportation safety improvements including the City of Los Angeles' "Vision Zero" policy that promotes smart behaviors and roadway design that anticipates mistakes so collisions are survivable with injury-free results. Good planning helps minimize catastrophic event impacts and SCAG is committed to working with local governments to ensure the region is prepared. SCAG's RTP also	-	SCAG is encouraged to engage in the SHSP process as much as practicable since approximately 40 percent of California's motor vehicle fatalities occur in SCAG's region. SCAG should review the SHSP Implementation Plan and partner with California safety stakeholders in important challenge areas, and participate on the steering committee. The SHSP's homepage is available at: http://www.dot.ca.gov/trafficops/shsp/	-

	incorporates an action plan and policies detailing eight measures that the agency will undertake in regional transportation security planning. Requirements satisfied			
Freight and Goods Movement (23 USC §§ 134 and 167, 23 CFR §§ 450.306 and 450.316)	SCAG's goods movement system relies on a complex infrastructure that supports multiple modes of transportation. SCAG supports a world-class, coordinated Southern California goods movement system that accommodates growth in the throughput of freight to the region and nation in ways that support the region's economic vitality, attainment of clean air standards, and community quality of life. SCAG conducted an industrial warehousing study in April 2018 to receive input on emerging supply trends. SCAG's RTP recognizes the role of the region in serving as the largest international trade gateway in the United States with trade moving through the San Pedro Bay Ports, and an international land border crossings in Imperial County. Requirements satisfied	-	SCAG is encouraged to better promote freight and goods movement activities occurring in Southern California's region through increasing the availability of freight and goods movement information available on the agency's website, e.g. make available a link that discusses the Global Freight Council	-
Performance-Based Management, Planning, and Programming (23 USC § 134, 23 CFR §§ 450.206, 450.216, 450.218, 450.306, 450.314, 450.324, 450.326, and 490)	Investments identified in SCAG's RTP, when fully implemented, are expected to achieve several performance outcomes that reflect air quality, economic activity and job creation, sustainability, and EJ benefits. SCAG indicated a commitment to build on successes through refining and enhancing performance measures to meet regional priorities. Primary performance goals of SCAG's RTP are focused on outcomes that strengthen the land-use/transportation connection and the region's physical health. The set of performance measures being used to evaluate SCAG's RTP are viewable at: http://scagrtpscs.net/Documents/2016/final/f2016RTPSCS_PerformanceMeasures.pdf. SCAG's Board adopted transportation safety performance measure targets in 2018 that supported Caltrans' adopted statewide targets. SCAG is processing integration of discussion on performance measure targets, as required by several upcoming deadlines, into the FTIP for the various targets chosen. Requirements met	-	SCAG is recommended to integrate Federal performance based planning and programming requirements as one of its highest priorities. By the next RTP and FTIP update cycle, the MPO is encouraged to reflect an evolving and complete integration of Federal requirements into development of the RTP and FTIP, in terms of helping to inform investment priorities and decision making processes SCAG is encouraged to continue its coordination with Caltrans on performance targets as this would help the State realize achievement of their safety targets. Information on calendar year 2018 statewide safety performance targets can be viewed at: http://www.dot.ca.gov/traffificops/shsp/docs/Safety-Performance-Management-Targets-for-2018.docx The review team recommends that SCAG develop freight-related performance measures for its MPA and link integrated discussions into the MPOs OWP, FTIP, and RTP	-
Financial Planning/Fiscal Constraint (23 USC § 134, 23 CFR §§ 450.324 and 450.326)	SCAG's RTP identifies how much funding the MPO reasonably expects will be available to support the region's surface transportation investments. The financially constrained portion of the RTP includes both a "traditional" core revenue forecast comprised of existing local, state, and federal sources, and more innovative but reasonably available sources of revenue to implement a program of infrastructure improvements to keep freight and people moving. SCAG's financial plan further documents progress made since past RTPs and describes steps to be taken for obtaining needed revenues to implement the region's transportation vision. Requirements met	-	-	-
Financial Controls, Procurement,	SCAG is aware of the Uniform Administrative Requirements. A single audit is conducted annually for protocol evaluation. The financial	-	-	-

Consultant Selection, and Audits (2 CFR § 200, 23 CFR §§ 172.5 and 172.9)	system has budgeting and accounting components with internal controls documented in the agency's Procurement Policy & Procedures Manual. SCAG's procurement manual discusses approval authority, roles and responsibilities, agreement types, methods, other informal/formal solicitation process requirements, overall administration, and other requirements; it was last updated in 2016. The manual will be updated again following completion of Caltrans' audit. Requirements satisfied			
Land Use, Livability, and Environmental Mitigation (23 USC § 134, 23 CFR §§ 450.306, 450.316, 450.322, 450.324)	Land use and livability strategies discussed in SCAG's RTP, and patterns are based on local general plans as well as input from local governments. SCAG is committed to preserving growth forecasts given by local jurisdictions at the jurisdictional level. SCAG developed an overall land use pattern that respects local control, but also incorporates best practices for achieving state-mandated reductions in greenhouse gas emissions through decreases in per capita vehicle miles traveled (VMT) regionally. There are several local and habitat conservation plans, and state/federal park designated areas, that give protection for a significant amount of SCAG's regional natural and farm lands. SCAG additionally accounts for land use and sustainability actions via "Toolbox Tuesday" events, green region indicators, and in receipt of sustainability planning grants. Requirements satisfied	-	-	-
Air Quality Conformity (42 USC §§ 7401 and 7506, 23 CFR §§ 450.312, 450.314, 450.322, 450.324, 450.326, 450.328, 450.330, and 450.332, and 40 CFR Part 93)	SCAG hosts the Transportation Conformity Working Group (TCWG), which is a monthly forum that convenes for supporting interagency coordination to maintain transportation conformity and help improve air quality in the SCAG's region. TCWG members include the EPA, FHWA, FTA, Caltrans, Air Resource Board (ARB), Air Quality Management Districts (AQMD), SCAG, County Transportation Commissions, and other stakeholders. SCAG's RTP has a 20-year minimum period consistent with the agency's FTIP that allocates funds over a four-year period compliant with the transportation conformity requirements. SCAG's RTP and FTIP identify applicable emission budgets and TCMs in the region. RTP and FTIP conformity analyses have findings that include regional emissions tests, timely implementation of TCM tests, financial constraint tests, a CMP that evaluates SOV capacity increasing projects, and inter-agency consultation and public involvement tests. SCAG's latest air quality modeling assumptions were approved by the EPA and USDOT's conformity determination on August 1, 2017. Requirements met	-	-	-

Certification Review Introduction, Purpose, and Process

Background

Pursuant to 23 United States Code (USC) § 134(k) and 49 USC § 5303(k) the Federal Highway Administration (FHWA) and the Federal Transit Administration (FTA) are required at least every four years to jointly review and evaluate metropolitan transportation planning processes for each urbanized area with a population greater than 200,000, in which these areas are referred to as transportation management areas (TMA). After the review's completion, a joint certification by the FHWA and the FTA is given to the TMA if transportation planning processes are determined to substantially meet federal metropolitan planning requirements. Each review covers actions by all agencies (States, metropolitan planning organizations (MPO), transit operators, local governments, etc.) charged with cooperatively carrying out day-to-day processes. Failure to certify is significant and may result in the withholding of United States Department of Transportation (USDOT) funds. Other reasons the review is conducted are for enhancing planning process quality and for assurance that federally funded projects are being advanced efficiently.

Purpose and Objective

Planning certification reviews serve several purposes: to evaluate the transportation planning process in metropolitan areas; provide recommendations that may help strengthen the transportation planning process; and offer an opportunity to recognize transportation planning process best practices, which is also as important as identifying potential improvements.

During this review the Southern California Association of Governments' (SCAG) transportation planning work products and materials were evaluated including the Regional Transportation Plan (RTP), Federal Transportation Improvement Program (FTIP), Overall Work Program (OWP), Congestion Management Process (CMP), and other relevant documents, whereby all are referred to in the "Results of Certification Review" section of this report.

Specific objectives of the review focused to determine if:

1) Overall planning activities are conducted in accordance with USDOT regulations, policies, and procedures – including provisions of Fixing America's Surface Transportation (FAST) Act, 23 Code of Federal Regulations (CFR), Clean Air Act (CAA), Title VI of Civil Rights Act, etc. as applicable.
2) SCAG's regional transportation planning process is continuing, cooperative, and comprehensive, in which development, implementation, and support of transportation system preservation and improvement results are observed.
3) Regional transportation planning products – including the RTP, FTIP, and OWP – are structured to account for a performance based approach that adequately documents transportation planning activities and other significant regional work tasks.
4) SCAG's RTP is multimodal in perspective and meets the traveling public's and community needs based on current data.

Previous Certification Review

SCAG's last certification review was completed in August 2014, where zero corrective actions, nine recommendations, and a best practice resulted. Recommendations are optional, but USDOT appreciated observing that SCAG's CMP fully evaluates all transportation projects – regardless the amount of funding it cost to build. In addition, SCAG's public outreach practices were identified as a best practice and this area continues to still be worthy as exemplary for others to model after.

Methodology

USDOT conducted SCAG's 2018 certification review with a team from the FHWA California Division and FTA Region 9. FHWA's Headquarters also served to help with the travel demand forecasting area and others as applicable. Prior to the site visit, USDOT prepared a request for information desk audit that asked SCAG to give an electronic response with multiple work products, documents, and processes, i.e. via web-links. SCAG's request for information desk audit responses helped give USDOT a focus for the discussions during the site visit.

The review site visit began on April 3 and concluded April 5, 2018. A full list of the site visit's participants is included in Appendix A. In addition to discussions with SCAG's staff at the site visit, a public listening session was held to give an opportunity for in person comments. Notifications of the public listening session were shared March 19, 2018 on SCAG's website (Appendix D) and disseminated per the agency's public participation plan (PPP) procedures. The public listening session was held at SCAG's office in Los Angeles County and video connections were available at SCAG's satellite offices in Ventura, Orange, San Bernardino, Riverside, and Imperial Counties. There was a total of eight comments received that discussed SCAG's partnering, initiatives, and public outreach. Several project-specific comments were received by the public for various projects in San Bernardino County. The time available for public comment receipt extended beyond 30 days, as written comments were also able to be received through April 27, 2018. Zero written comments, however, were received.

USDOT conducted interviews with SCAG local elected and transit operator officials, and with a Native American Tribal Government official. Appendix B gives a list of the interviewees. Input from the interviews overall was positive in support of transportation planning processes that SCAG performs. In specific, SCAG involves transit operators and local elected officials in their process through the agency's committees and working groups. Once information reaches the Board for determination it has been well vetted through these forums. SCAG consistently engages in other meetings around the region with its stakeholders and the agency's level of knowledge is very good. SCAG's outreach has increased and the MPO's willingness to have one-on-one conversations with its stakeholders on any topic is recognized but an increased focus on smaller cities and Native American Tribal Governments can enhance benefits, e.g. make available a condensed summary of the FTIP process for these stakeholders to comprehend. While the materials SCAG produces are of high-quality, it can continue to refine the information circulated. The installation of video conferencing equipment at SCAG has allowed face-to-face interaction to be easier, which is an enhancement. There is much to be accomplished in SCAG's

region. Interactions with adjacent areas, continuing to move people and give them affordable housing, along with sharing the value of what SCAG does to the public can be increased. Overall, the review team was satisfied with how SCAG has cultivated its valued relationships with the region's governing board, transit operators, and Native American Tribal Governments, gleaned from the interviews.

How to Use this Report

Significant findings, corrective actions, recommendations, and best practices of SCAG's transportation planning processes are summarized in Table 1, which is shown after the Executive Summary section of this report above. To interpret the information this report provides, users are to be aware of the following definitions:

Findings – are statements of fact based on USDOT observations made during the site visit and review of planning documents.

Corrective Actions – are improvements needed to correct statutory or regulatory deficiencies, which if left unaddressed could lead to a "failure to certify" and possible disruption of federal funds to programs and projects.

Recommendations – are other than statutory or regulatory deficiencies, these are actions identified by USDOT that represent strongly endorsed practices.

Best Practices – are those actions or procedures identified by USDOT as outstanding.

Description and Overview of SCAG

SCAG was founded in 1965 and is a Joint Powers Authority under California state law, established as an association of local governments and agencies that voluntarily convene as a forum to address regional issues. Under federal law, SCAG is designated as a MPO and under state law as the multicounty designated Transportation Planning Agency and a Council of Governments (COG).

The SCAG region encompasses six counties (Imperial, Los Angeles, Orange, Riverside, San Bernardino and

Ventura) and 191 cities in an area covering more than 38,000 square miles. The agency's overall responsibilities include:

- Maintaining a continuous, comprehensive, and coordinated (3C) planning process resulting in a RTP and a FTIP
- Developing a Sustainable Communities Strategy (SCS) to address greenhouse gas (GHG) emissions as an element of the RTP
- Developing demographic projections
- Developing integrated land use, housing, employment, transportation programs and strategies for the South Coast Air Quality Management Plan
- Developing and ensuring that the RTP and FTIP conform to the purposes of the State Implementation Plan (SIP) for specific transportation-related criteria pollutants, per the CAA
- Serving as the authorized regional agency for intergovernmental review of proposed programs for federal financial assistance and federal development activities
- Reviewing environmental impact reports (EIR) for projects having regional significance to ensure they are in line with approved regional plans
- Preparing the Regional Housing Needs Assessment (RHNA)

In 1992 SCAG expanded its governing body, the Executive Committee, to a 70-member Regional Council to help accommodate new responsibilities mandated by the federal and state governments, as well as to provide more broad-based representation of Southern California's cities and counties. With its expanded membership structure, SCAG created regional districts to provide for more diverse representation. The districts were formed with the intent to serve equal populations and communities of interest. Currently, the Regional Council consists of 88 members.

In addition to the six counties and 191 cities that make up SCAG's region, there are six County Transportation Commissions that hold the primary responsibility for programming and implementing transportation projects, programs, and services in their respective counties. Additionally, SCAG Bylaws provide for representation of Native American Tribes and Air Districts in the region on the Regional Council and Policy Committees.

Certification Review Results

Federal Regulations

During the desk audit the review team assessed documents, processes, and other relevant information that SCAG gave in the areas chosen for evaluation. At the site visit the review team discussed with SCAG specifics of the MPO's transportation planning elements in accordance with federal statutes and regulations as follows:

Congestion Management Process

Regulatory Basis: 23 USC § 134(k)(3) and 23 CFR § 450.322 set forth requirements for the CMP in TMAs. The CMP is a systematic approach for managing congestion through a process that provides for a safe and effective integrated management and operation of the multimodal transportation system. TMAs designated as non-attainment for ozone must also provide an analysis of the need for additional capacity for a proposed improvement over travel demand reduction, and operational management strategies.

Review Finding:
SCAG's CMP shows development based on the eight-step CMP approach and the process has been fully integrated into the RTP as an appendix and into the FTIP process. SCAG's CMP influences and drives goals and investment strategies where the goals address mobility, land use, and growth while regional investment strategies are focused on operations and maintenance, high occupancy vehicle (HOV) lanes, transportation demand management (TDM) programs, and active transportation. SCAG's CMP network is expansive and includes roadways (freeways, state highways, and arterials), transit and rail, and active transportation (bikeways and walkways) facilities. The CMP discusses causes of congestion, major bottlenecks, non-recurrent congestion issues, and transportation system management (TSM) strategies that include reduction in single occupancy vehicle (SOV) travel.

SCAG's CMP satisfies regulatory requirements.

Other Comments:
The review team appreciated the comprehensiveness of SCAG's CMP. For recommendation, SCAG is encouraged to integrate adequacy of analysis documentation conducted by regional project sponsors. These details have the potential to give SCAG increased insight into how the CMP is functioning regionally and input on process effectiveness overall.

SCAG also is encouraged to integrate performance based planning and programming requirements into its CMP process to characterize existing and anticipated conditions on the regional transportation system; track progress toward meeting regional objectives; identify specific locations with congestion to address; assess congestion mitigation strategies, programs, and projects; and communicate system performance, often via visualization, to decision-makers, the public, and MPO member agencies.

Organizational Structure, Board Membership, and Planning Boundaries

Regulatory Basis: Federal legislation 23 USC § 134(d) requires designation of a MPO for each urbanized area with a population more than 50,000 individuals. When a MPO representing all or part of a TMA is initially designated or re-designated per 23 CFR § 450.310(d), the Board of the MPO shall consist of (a) local elected officials; (b) officials of public agencies that administer or operate major modes of transportation within the metropolitan area, including representation by providers of public transportation; and (c) appropriate State transportation officials. Voting membership of a MPO designated

– or re-designated prior – will remain valid until a new MPO is re-designated. Re-designation is required whenever the existing MPO seeks to substantially change the proportion of voting members representing individual jurisdictions or the State or the decision-making authority or procedures established under the MPO bylaws. The metropolitan planning area (MPA) boundary refers to the geographic area in which the metropolitan transportation planning process must be carried out. 23 USC § 134(e) and 23 CFR § 450.312(a) state the boundaries of a MPA shall be determined by agreement between the MPO and the Governor. At a minimum, the MPA boundaries shall encompass the entire existing urbanized area (as defined by the Bureau of the Census) plus the contiguous area expected to become urbanized within a 20-year forecast period for the RTP.

Review Finding:
SCAG convenes the General Assembly at least once every year to bring together official representatives of the organization. The General Assembly determines all policy matters for SCAG, approves Bylaws, and ratifies the election of Officers. The Regional Council, an 88-member official governing board that meets monthly and is comprised of 69 Districts, conducts the affairs of the SCAG, approves the OWP and other budgets required by funding agencies, and approves the Regional Council Policy Manual and any amendments thereto. The Regional Council also includes one representative from each county Board of Supervisors, one representative of the Southern California Native American Tribal Governments, all members of the Los Angeles City Council and Mayor. Additional Regional Council members are appointed by SCAG's President to make sure that every sub-region has at least one member on the committee. Members of the Regional Council are appointed to one of the policy committees for two-year terms.

The Executive Administration Committee was established by the Regional Council to deal with matters pertaining to human resources, budgets, finance, operations, communications, and other matters. Membership on the Executive Administration Committee includes SCAG's officers, policy committee chairs and vice chairs, and one Tribal Government representative if that person is uncommitted to a committee leadership role. The Executive Administration Committee is responsible for developing policy recommendations to the Regional Council on administration, human resources, budgets, finance, operations, communications, or any other matter that is referred by the Regional Council.

SCAG's three major policy committees are the Community, Economic and Human Development Committee (CEHD), the Energy and Environment Committee (EEC), and the Transportation Committee (TC). Most of the discussion on policy occurs in these committees before reaching the Regional Council for a final determination.

Details of SCAG's MPA are discussed in the description and overview section. SCAG's organizational structure, Board membership, and planning boundaries meet regulatory requirements. Appendix C also provides more detail on SCAG's organizational structure.

Other Comments:
A small portion of the Santa Barbara urbanized area (UZA) extends into Ventura County and includes the community of Mussel Shoals. SCAG is unaware of an existing Memorandum of Agreement (MOA) with the Santa Barbara County Association of Governments (SBCAG) as to the planning responsibilities for this area. The review team encourages SCAG to partner with SBCAG to complete an agreement for an understanding of accountability, since Ventura County is within SCAG's MPA.

Metropolitan Planning Agreements, Contracts, and Consultation Coordination with Federal, State, and Local Agencies

Regulatory Basis: In accordance with 23 USC § 134(d) and 23 CFR § 450.314(a), MPOs are required to establish relationships with State and public transportation agencies under specified agreements between the parties to work cooperatively and carry out a 3C metropolitan planning process. Agreements must identify mutual roles, responsibilities, and procedures governing cooperative efforts, and must identify the designated agency for air quality planning under the CAA to address responsibilities and situations that arise in the metropolitan area.

23 USC § 134(g) & (i)(5)-(6) and 23 CFR § 450.316(b-e) set forth requirements for consultation in developing the RTP and FTIP. Consultation is also addressed specifically about the RTP in 23 CFR § 450.324(f)(10) and 23 CFR § 450.324(h) related to environmental mitigation. In developing the RTP and FTIP the MPO shall, to the extent practicable, develop a documented process that outlines roles, responsibilities, and key decision points for consulting with other governments and agencies that are described below:

- Agencies and officials responsible for other planning activities (State, local, economic development, environmental protection, airport operations, or freight)
- Other providers of transportation services
- Native American Tribal Governments
- Federal Land Management Agencies (FLMA)

Review Finding:
SCAG has an existing series of metropolitan planning agreements with transit operators and county transportation commissions in the region. There are individual agreements with each of the six counties in the region that include transit operations, and another singular agreement with the Southern California Regional Rail Authority/Metrolink. SCAG also has a planning and programming memorandum of understanding (MOU) with the California Department of Transportation (Caltrans) and is in the process of updating all these agreements to incorporate the federal requirements for performance-based planning of the FAST Act. A status of the agreement updates are as follows:

- Imperial County – approved by the Imperial County Transportation Commission (ICTC) on January 24, 2018
- Los Angeles County – reviewed by planning staff and legal counsel at the Los Angeles County Metropolitan Transportation Authority (Metro) and circulated to transit providers with Metro Board approval anticipated in the Spring of 2018
- Orange County – under review at the Orange County Transportation Authority (OCTA)
- Riverside County – approved by the Riverside County Transportation Commission (RCTC) on Jan. 10, 2018 and circulated to transit providers for signature
- San Bernardino County – approved by the San Bernardino County Transportation Authority (SBCTA) on Feb. 7, 2018 and circulated with transit providers for signature
- Ventura County – reviewed by planning staff and legal counsel at the Ventura County Transportation Commission (VCTC) and circulated to transit providers
- Southern California Regional Rail Authority/Metrolink – under review by Metrolink staff

SCAG's region encompasses many acres of federal lands, including the Angeles, Cleveland, Los Padres, and San Bernardino National Forests – in addition to several National Wildlife Refuges and lands administered by the National Park Service and Bureau of Land Management. SCAG recently collaborated with the United States Department of Agriculture's (USDA) Forest Service in support of transportation planning efforts at the newly designated San Gabriel Mountains National Monument, which included hosting a workshop in April 2016 to help form the transportation component of the monument's management plan.

There are 17 Native American Tribal Governments in SCAG's region that include the Fort Yuma Reservation (Quechan Tribal Council), Chemehuevi Reservation, Fort Mojave Indian Tribe, San Manuel Band of Mission Indians, 29 Palms Band of Mission Indians, Agua Caliente Band of Cahuilla Indians, Augustine Band of Mission Indians, Cabazon Band of Mission Indians, Cahuilla Band of Mission Indians, Colorado River Reservation, Morongo Band of Mission Indians, Pechanga Band of Luiseno Indians, Ramona Band of Mission Indians, Santa Rosa Band of Mission Indians, Soboba Band of Luiseno Indians, Torres-Martinez Desert Cahuilla Indians, and the Death Valley Timbi-Sha Shoshone Band. Representatives from several of the Native American Tribal Governments engage in SCAG's policy committees and working groups. SCAG hosted two Native American Tribal Government consultation workshops during the RTP development process in October 2015. Growth forecasts are regularly coordinated with Native American Tribal Government communities and SCAG is developing documentation of consultation procedures with its regional Native American Tribal Governments.

SCAG's metropolitan planning agreements, contracts, and consultation coordination with Federal, State, and local agencies satisfies regulatory requirements, except for the requirement necessitating documentation of roles, responsibilities, and key decision points for consulting with FLMA.

Other Comments:
The review team encourages SCAG to complete its current process of documenting Native American Tribal Governments and FLMA consultation procedures before the next OWP annual meeting.

All working groups that SCAG holds are exemplary as to how the MPO brings together diverse sets of people clustered around the region for collaborated consensus. SCAG's working groups are a success and inspiration, and the review team recognizes them as a best practice.

Regional Transportation Plan (RTP)

Regulatory Basis: 23 USC § 134(c), (h) & (i) and 23 CFR § 450.324 set forth requirements for the development and content of the RTP. Among the requirements are that the RTP address at least a 20-year planning horizon and that it includes both long and short range strategies that lead to the development of an integrated and multi-modal system to facilitate the safe and efficient movement of people and goods in addressing current and future transportation demand. The RTP is required to provide a 3C multimodal transportation planning process and is to consider all applicable issues related to the transportation systems development, land use, employment, economic development, natural environment, and housing and community development. 23 CFR § 450.324(c) requires the MPO to review and update the RTP at least every four years in air quality nonattainment and maintenance areas and at least every five years in attainment areas to reflect current and forecasted transportation, population, land use, employment, congestion, and economic conditions and trends. The RTP must provide a description of the performance measures and performance targets used in assessing the performance of the transportation system and include a system performance report that addresses the progress achieved by the MPO in meeting the performance targets.

Review Finding:
SCAG's 2016 RTP articulates a vision for the region through 2040 of more compact communities that are connected seamlessly by numerous public transit options, including expanded bus and rail service with people living closer to work, school, shopping, and other services. Goods flow freely along roadways, highways, rail lines, by sea, and air into and out of the region fueling economic growth.

SCAG developed an implementation strategy for the 2016 RTP that divides the contents into three components: project specific multi-modal transportation investments, non-project specific multi-modal transportation investments, and enabling strategies. SCAG's RTP includes various project specific multi-modal investments, e.g. the High

Desert Corridor, I-710 South Corridor Improvements, East West Freight Corridor, and Metro Purple Line Extension projects. For high cost projects, the implementation strategy framework recommends monitoring the progress achieved, including:

- Relative implementation progress – moving from planning, to programming phases, and up to final delivery
- Adherence to schedule and budget, and
- Impact on system performance, i.e. did the project deliver the performance anticipated?

Non-project specific multi-modal investment examples in the RTP include preservation, operations, and active transportation. For non-project specific investments, the implementation strategy framework suggests focusing on:

- Levels of expenditures – accomplished by comparing actual expenditures against planned expenditures. This gives a gauge of how close the implementation has proceeded
- Major initiatives – accomplished by identifying specific initiatives relevant to the investment category, i.e. both Los Angeles Metro and OCTA have committed to expanding their bike network and have allocated specific funding in their plans. These types of initiatives are important to identify and report
- Impact on system performance – SCAG is already planning to monitor preservation performance as an example. Other impacts may be summarized from supporting studies, such as bike and pedestrian accidents and reduction in vehicle miles traveled (VMT)

Enabling strategy examples in SCAG's RTP include land use strategies, express lane network, mileage-based user fee, and transportation system management. Here the framework recommends SCAG focus on:

- Supporting initiatives – the RTP includes innovative financing from a variety of sources, including a mileage-based user fee to be implemented by 2025. SCAG plans to monitor supporting initiatives, i.e. the State passed Senate Bill 1077, which established a pilot program to explore a mileage-based user fee
- Relative progress – SCAG has continued to fund several sustainability initiatives around the region and will monitor the effectiveness of these and other elements of the 2016 RTP in addition to the upcoming 2020 RTP, i.e. SCAG plans to gather all available information to analyze whether carpooling has increased and whether VMT per capita has decreased over time
- Impact on system performance – to the extent any of these enabling strategies have been implemented, SCAG will aim to delineate the impacts on system performance. It will be challenging to isolate these impacts, so general performance trends will be reported

Another component of SCAG's RTP implementation strategy expects adherence to the requirements of the FAST Act.

SCAG's RTP also focuses on promoting a state of good repair of Southern California's vast transportation network. SCAG's RTP provides strategies for land use so that housing across the region can be more sufficient to meet the demands of a growing population with shifting priorities and desires. Air quality, natural lands, and recreational areas are improved, preserved, and protected. The RTP promotes expansions of the regional HOV and express lane network, progress on environmental justice (EJ), and improved airport access. All regionally significant projects were identified. The RTP was developed and adopted with involvement from the MPO's Regional Council who set and refined targeted policy options, transportation needs analysis, alternative transportation options, and available financial resources.

SCAG's RTP satisfies regulatory requirements.

Other Comments:
The review team recognizes SCAG's RTP for two best practices, including its Sustainability Planning Grant Program and its 'REVISION' performance monitoring tool.

The Sustainability Planning Grant Program serves as an innovative vehicle for promoting local jurisdictional efforts to test local planning tools. The program provides direct technical assistance to SCAG member jurisdictions to complete planning and policy efforts that enable implementation of the regional sustainability strategies. Grants are available in three categories that support integration of land use and transportation planning, active transportation, and "green" initiatives. Since starting in 2005, 133 projects have been completed through the program, with another 69 projects to be completed by the end of 2016.

Developed in partnership with the University of California Los Angeles (UCLA) Lewis Center for Regional Policy Studies, 'REVISION' is a regional mapping and analysis application that integrates a range of public and private data for sustainable communities planning and trend visualization. Cloud-based, it is usable by anyone with a modern web browser. 'REVISION' is used to support RTP monitoring and visualization of regional and neighborhood data on livability, mobility, accessibility, employment, and other planning metrics and indicators; generate details on demographics, socio-economics, mobility, accessibility, housing affordability, environmental impacts, transit and bicycle networks for areas of about 3000 people; see detailed information for a specific property, including assessor information and crowd-sourced parking information; and see trends in American Community Survey variables over time for areas of about 3000 people (http://revision.lewis.ucla.edu).

Federal Transportation Improvement Program (FTIP)

Regulatory Basis: 23 USC § 134 set forth requirements for the MPO to cooperatively develop a FTIP. Under 23 CFR § 450.326, the FTIP must meet the following requirements:

- Must cover at least a four-year horizon and be updated at least every four years
- Capital and non-capital surface transportation projects, bicycle and pedestrian facilities funded under Title 23 USC or Title 49 USC, except as noted in the regulations, are required to be included in the FTIP
- List project description, cost, funding source, and identification of the agency responsible for carrying out each project
- Projects need to be consistent with the adopted RTP
- Must be fiscally constrained and include a financial plan that demonstrates how the FTIP can be implemented
- The MPO must provide all interested parties with a reasonable opportunity to comment on the proposed FTIP
- The FTIP must include a description of the anticipated effect of the programmed projects toward achieving the performance targets identified in the RTP

Review Finding:
SCAG's 2017 Federal Transportation Improvement Program (FTIP) gives a list of the transportation investment priorities in the region and is developed through a bottom-up process where each county transportation commission proposes projects for inclusion including highway, local arterial, bridge, public transit, rail, bicycle, pedestrian, safety, maintenance, operational, and planning projects. All federally funded transportation projects, as well as all regionally significant transportation projects for which approval from federal funding agencies is required regardless of funding source, are included in the document. The projects in SCAG's FTIP list descriptions, costs, funding sources, and responsible parties. The project information included also is consistent with information given in the RTP. For program delivery with respect to project selection the FTIP follows the same "bottom-up" principle that guides RTP development and the County Transportation Commissions along with local jurisdictions are solely responsible for choosing the projects that are funded. The process begins at the County Transportation Commission's level in which projects are nominated by local jurisdictions and selected by the commissions to develop criteria that determine which projects best enhance the transportation network and addresses the region's goals of improving mobility and promoting sustainability. Ending results are individual County Transportation Improvement Programs, which are the building blocks of SCAG's FTIP.

SCAG produces a biennial FTIP update for the region on an even-year cycle and the MPO's 2017 FTIP includes approximately 2,000 projects that total nearly $28 billion over a six-year period and the document has a financial plan that demonstrates fiscal constraint. SCAG's FTIP allows project sponsors to move forward with state and federal environmental review or project funding allocation/obligation and reflects how the

region intends to implement RTP policies and goals. The document shows a continued emphasis in properly maintaining the region's transportation system and growing commitment to active transportation, which reveals nearly double the active transportation investment amount as compared to the 2015 FTIP. Project implementation will help the region reduce travel time for all automobile trips by 870,000 hours per day, improve air quality by reducing nitrogen oxide emissions 110 tons per day and meet the State of California's greenhouse gas emissions reduction target in 2020. Projects in the FTIP are also foreseen to benefit SCAG's region and the local economy with 82,000 direct jobs created each year over the duration of the document's cycle. The public comment period for the document opened July 7, 2016 for 30-days and closed August 8, 2016, which is a reasonable opportunity given by SCAG to receive input.

SCAG's FTIP satisfies regulatory requirements.

Listing of Obligated Projects

Regulatory Basis: 23 USC § 134(j)(7) and 23 CFR § 450.334 requires that the State, the MPO, and public transportation operators cooperatively develop a listing of projects for which Federal funds under 23 USC or 49 USC of Chapter 53 have been obligated in the previous year. The listing must include all federally funded projects authorized or revised that results in an increase in obligations compared to the preceding program year and, at a minimum, the following for each project:

- The total sum of funds requested in the FTIP
- Federal funding obligated during the preceding year
- Federal funding remaining and available for subsequent years
- A sufficient description to identify the project
- Identification of the agencies responsible for carrying out the project

Review Finding:
SCAG publishes a listing of projects that obligated federal transportation funds in the previous federal fiscal year including investments for highway improvements, transit, rail and bus facilities, HOV lanes, bicycle and pedestrian transportation facilities, signal synchronization, intersection improvements, freeway ramps, etc. SCAG's annual listing of obligated projects includes all federally funded projects authorized or revised to increase obligations in the preceding program year, and includes FHWA funded projects, which includes state and local highway projects; and FTA funded projects, which includes transit projects. Project obligation information given in the report is derived from Caltrans, FHWA, FTA, and SCAG data sources.

The California Transportation Commission (CTC) communicates and collaborates with local agencies, public transportation operators, and the public in the SCAG region to develop local transportation improvement programs. Information is compiled for the

production and publishing of the annual listing of obligated projects in accordance with public participation criteria for the FTIP.

SCAG's listing of obligated projects process satisfies regulatory requirements.

Overall Work Program (OWP)

Regulatory Basis: 23 CFR § 450.308 sets the requirement that planning activities performed under Titles 23 and 49 USC be documented in an Overall Work Program (OWP). The MPO, in cooperation with the State and public transportation operator, shall develop an OWP that includes a discussion of the planning priorities facing the MPA and the work proposed for the next one or two-year period by major activity and task in sufficient detail to indicate the agency that will perform the work, the schedule for completing the work, the resulting products, the proposed funding, and sources of funds.

Review Finding:
SCAG's current OWP describes proposed transportation planning activities for the upcoming fiscal year. The document also serves as a management tool for SCAG's Regional Council, its policy committees, working groups, and staff. It additionally provides local and state agencies with a focal point for improving regional coordination and reducing duplication of work efforts at all levels. SCAG's OWP complies with federal and state requirements, including FAST Act requirements, and it reflects a concentrated focus on the MPO's 2020 RTP development that integrates efforts related to congestion reduction, financial planning, system preservation, and performance measures.

The review team is consistently involved in SCAG's OWP development process and concurs that the MPO's OWP satisfies applicable regulatory requirements.

Self-Certification

Regulatory Basis: Self-Certification is discussed in 23 CFR § 450.336 and required at least once every four years to demonstrate that the metropolitan transportation planning process requirements are being met in accordance with 23 USC § 134 and 49 USC § 5303. Certification by FTA and FHWA for the planning process in TMAs is required at least once every four years.

Review Finding:
Every year, as part of the adoption of its OWP, SCAG produces a metropolitan transportation planning process self-certification. In this document SCAG certifies that its transportation planning process is being carried out in accordance with all applicable requirements, including:

- 23 USC § 134, 49 USC § 5303, and subpart C of 23 CFR § 450

- For nonattainment and maintenance areas, sections 174 and 176(c) and (d) of the CAA and 40 CFR § 93
- Title VI of the Civil Rights Act of 1964
- 49 USC § 5332, prohibiting discrimination on basis of race, color, creed, national origin, sex, or age in employment or business opportunity
- Section 1101(b) of the FAST Act and 49 CFR § 26 regarding the involvement of disadvantaged business enterprises in USDOT funded projects
- 23 CFR § 230, regarding the implementation of an equal employment opportunity program on Federal and Federal-aid highway construction contracts
- Provisions of the Americans with Disabilities Act (ADA) of 1990 and 49 CFR §§ 27, 37, and 38
- The Older Americans Act
- 23 USC § 324 regarding prohibition of discrimination based on gender, and
- Section 504 of the Rehabilitation Act of 1973 (29 USC § 794) and 49 CFR § 27 regarding discrimination against individuals with disabilities

SCAG's self-certification procedures satisfy regulatory requirements.

Other Comments:
To strengthen the connection of self-certification with the OWP, the review team encourages SCAG to make efforts to heighten the awareness of self-certification requirements with the Regional Council and its various committees.

Planning and Environmental Linkages

Regulatory Basis:
The FAST Act builds on the authorities and requirements in the Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users (SAFETEA-LU), Moving Ahead for Progress in the 21st Century Act (MAP-21), and efforts under FHWA's Every Day Counts to accelerate the environmental review process for surface transportation projects by institutionalizing best practices and accelerating complex infrastructure projects without undermining critical environmental laws or opportunities for public engagement. 23 USC § 168, 23 CFR § 450.212, 23 CFR § 450.318, and Appendix A to 23 CFR § Part 450 provides the authority to link transportation planning decisions and National Environmental Policy Act (NEPA) processes.

Review Finding:
SCAG's website shares information, resources, and best practices for the linkage of planning and NEPA in major transportation corridor studies and area plans; however, details appear to have last been updated in 2013. SCAG addresses planning and environmental linkages (PEL) by incorporating problem statements, purpose and need, corridor definitions, descriptions of transportation modes, and alternatives identification into corridor studies that are drafted in the region. SCAG focuses on early

coordination, public involvement, and purpose and need statement guidance, in which each are considered throughout development and implementation of the RTP.

Under California State law, SCAG develops a Programmatic Environmental Impact Report (PEIR) that analyzes and discloses potential RTP environmental impacts. This PEIR serves as a document that can be tiered off for later California Environmental Quality Act (CEQA) review of individual projects included in the FTIP. SCAG has chosen to include a statement of purpose and need to enable proponents of individual projects included in the RTP to use the PEIR in full or in a part to serve as a functional equivalent environmental review for individual projects that may involve a subsequent federal action triggering the procedural provisions of NEPA. SCAG clarified its uncertainty as to the extent that local agencies tier off the PEIR for project level environmental actions, though this is a matter that local agencies have inquired about with the MPO.

SCAG's PEL elements satisfy regulatory requirements.

Other Comments:
For relevance to the FAST Act, the review team recommends SCAG update its website to include updated guidance and resources on linking planning and NEPA, and to reflect refinements to PEL requirements. SCAG is encouraged to review FHWA's Environmental Review Toolkit as a resource for information: https://www.environment.fhwa.dot.gov/env_initiatives/pel.aspx. The Center for Environmental Excellence by the American Association of State Highway and Transportation Officials (AASHTO) is also a good source that contains PEL related information.

SCAG additionally is encouraged to pursue opportunities for FHWA technical assistance (e.g. peer exchange, workshop facilitation, individualized training, etc.) to help its staff and partner agencies enhance PEL implementations. As another resource, a PEL project manager can be contacted to discuss next steps and opportunities: https://www.environment.fhwa.dot.gov/env_initiatives/pel/request_pel_info.aspx.

Regional Models of Cooperation

Regulatory Basis: Regional Models of Cooperation (RMOC) is other than a distinct topic in the planning statue and regulations; however, it is relevant to several aspects of the transportation planning process where coordination and collaboration beyond TMA boundaries are clearly required, as well as in topics where more comprehensive regional cooperation is a best practice. RMOC is likely to be of interest in regions with complex MPO to TMA relationships, such as:

- A TMA is covered by more than one MPO
- A TMA that crosses State boundaries
- An MPO planning area covers all or portions of two or more TMAs

- A public transportation operator provides public transportation service in the planning areas of more than one MPO, or across multiple TMAs
- A TMA is part of a larger air quality nonattainment or maintenance area which may require increased air quality planning and coordination
- A region is part of a megaregion (a network of connected urban areas) with multiple adjacent TMAs

Related regulations applicable include 23 CFR §§ 450.300, 450.310, 450.312, 450.314, 450.318, and 450.322.

Review Finding:
SCAG engages in quarterly meetings with SANDAG, OCTA, and Caltrans, where planning staff meet to discuss projects and other items for coordination, i.e. synchronizing airport, rail, and highway operations between San Diego and Orange Counties. SCAG also coordinates other RMOC activities that are documented in the MPO's OWP. Specifically, SCAG's OWP documents that RMOC encourages cooperation and coordination across MPO boundaries and across State boundaries where appropriate to ensure a regional approach to transportation planning. This is particularly important where more than one MPO or State serves an urbanized area, or adjacent urbanized areas. Cooperation occurs through the metropolitan planning agreements that identify how the planning process and planning products will be coordinated. There are several work elements in SCAG's OWP that address RMOC, which include system planning, transportation finance, environmental planning, air quality conformity, FTIP, geographic information systems (GIS), active transportation planning, regional forecasting and policy analysis, sustainability program, modeling, performance assessment and monitoring, goods movement, collaborative projects, and regional aviation and airport ground access.

SCAG's RMOC practices satisfy regulatory requirements.

Public Involvement, Visualization, Title VI and Nondiscrimination, ADA, EJ, and Limited English Proficiency (LEP)

Regulatory Basis: The MPO is required under 23 CFR § 450.316 to engage in a metropolitan planning process that creates opportunities for public involvement, participation, and consultation. Consultations should include (1) a comparison of the RTP with State conservation plans or maps, if available – or (2) a comparison of the RTP with inventories of natural or historic resources, if available. Use of explicit procedures, strategies, and desired outcomes for employing visualization techniques in the RTP and FTIP are also detailed under the requirements of 23 CFR § 450.316.

Title VI of the Civil Rights Act of 1964 prohibits discrimination based upon race, color, and national origin. Specifically, 42 USC § 2000d states that "no person in the United States shall, on the ground of race, color, or national origin, be excluded from

participation in, be denied the benefits of, or be subjected to discrimination under any program or activity receiving Federal financial assistance". In addition to Title VI, there are other nondiscrimination statutes that afford legal protection. These statutes include the following: Section 162(a) of the Federal-Aid Highway Act of 1973 (23 USC § 324), Age Discrimination Act of 1975, and Section 504 of the Rehabilitation Act of 1973/ADA of 1990. ADA, in part, specifies that programs and activities funded with Federal dollars are prohibited from discrimination based on disability.

The Executive Order (E.O.) #12898 on EJ directs federal agencies to develop strategies to address disproportionately high and adverse human health or environmental effects of their programs on minority and low-income populations. In compliance with this E.O., USDOT issued orders to establish policies and procedures for addressing EJ in minority and low-income populations. The planning regulations of 23 CFR § 450.316(a)(1)(vii), require that the needs of those "traditionally underserved" by existing transportation systems, such as low-income and/or minority households, be sought out and considered.

The E.O. #13166 for LEP requires agencies to ensure that LEP persons can meaningfully access the services provided consistent with and without unduly burdening the fundamental mission of each federal agency.

Other requirements related to this section are included in 23 CFR § 450.322 (f)(7) and (g)(1)(2), and 23 CFR § 450.324 (b).

Review Finding:
SCAG is updating its 2014 PPP. SCAG's PPP guides its public outreach process with the goal of reaching as many people as possible, whether they live, work, or play in the region, are affiliated with a Native American Tribal Government, or with an entity that has an official role in the regional transportation planning process. The PPP explains how SCAG operates, establishes core values for public participation, and sets forth goals and strategies for increasing public information and engagement in the planning process.

As part of SCAG's RTP development a standalone interactive webpage was developed that includes various visuals, e.g. an interactive executive summary, maps, and various info-graphics associated with various subject areas ranging from major highway projects to an overview of the current state of good repair. SCAG also developed breakout pages focused on major topics within the RTP that utilize various visual cues including info-graphics, maps, etc. Detailed specifics are viewable at: http://scagrtpscs.net/pages/default.aspx. Further elements of SCAG's visualization practices include:

- SCAG Data/Map Books (http://scagrtpscs.net/Pages/DataMapBooks.aspx)

- Local Profiles (http://www.scag.ca.gov/DataAndTools/Pages/LocalProfiles.aspx)
- GIS Applications (http://gisdata.scag.ca.gov/Pages/GISApplications.aspx)
- Scenario Planning Model (SPM) (http://sp.scag.ca.gov/Pages/HomePage.aspx)

SCAG gives its Title VI Assurances to USDOT, as part of an annual Certifications and Assurances submission, and to Caltrans for assisting State compliance. SCAG also has a process in place for investigating Title VI complaints. Furthermore, a notice of the MPO's nondiscrimination policy is included in all the agency's contracts and bid advertisements.

For ADA compliance, SCAG includes related information in the RTP. Dedicated resources are applied to maintain and repair thousands of miles of dilapidated sidewalks. SCAG's RTP also promotes active transportation by integrating it with the region's transit system through an increase of access to 224 light rail and bus stations, and via promotion of 16 regional corridors that support biking and walking.

In terms of EJ, SCAG developed a policy to ensure it is as an integral part of the transportation planning process. SCAG's EJ program has two main elements: technical analysis and public outreach. As part of the EJ program, SCAG:

- Gives early and meaningful public access to decision-making processes for all interested parties, including minority and low-income populations;
- Seeks out and considers the input of traditionally underrepresented groups, such as minority and low-income populations, in the regional transportation planning process;
- Takes steps to propose mitigation measures or consider alternative approaches when disproportionately high and adverse impacts on minority or low-income populations are identified; and
- Continues to evaluate and respond to EJ issues that arise during and after implementation of the agency's RTP

SCAG also prepares additional companion documents, or appendices, to help, support, or add to the RTP, e.g. an EJ technical analysis and public outreach methodology are included in the RTP EJ Appendix. SCAG is commended for its comprehensive EJ analysis, robust set of performance indicators used to examine historical trends and existing conditions in comparison RTP baseline scenarios, and its EJ Toolbox that contain strategies for local jurisdictions to improve EJ at the local level.

Over 600 individuals and agencies were invited to SCAG's RTP EJ outreach. Five EJ workshops on the RTP were held to ensure all members of the public had an opportunity to engage in the planning process. Four out of five EJ workshops were held in the evening to accommodate work schedules and two workshops were held outside of SCAG's Los Angeles Office. All workshops held in Los Angeles also had

videoconferencing capabilities at SCAG's Regional Offices in Imperial, Orange, Riverside, San Bernardino, and Ventura.

SCAG conducted eight EJ-related focus groups from July 21 – 23, 2015. Six sessions were conducted at SCAG's Los Angeles Office and two sessions were conducted at SCAG's Riverside County Regional Office. Phone interviews were conducted when focus group participants were unable to participate in-person. Focus group topics included environment, public health, minority and low income, housing, transportation, senior and kid, minority, and low income. More than 75 individual stakeholders were contacted, and 28 stakeholders were engaged in the process. Early and continuous public outreach and input from SCAG's EJ stakeholders help SCAG prioritize and address regional needs.

SCAG developed a language assistance plan for LEP populations. Key elements of SCAG's LEP plan include:

- Translating vital documents into the four largest LEP languages – Spanish, Mandarin Chinese, Korean, and Vietnamese. SCAG determines, on a case-by-case basis, the effectiveness and appropriateness to translate other, non-vital documents
- Identifying LEP individuals who need language assistance by using the United States Census Bureau's "I Speak" language identification list
- Having translators, including bilingual staff members, available for public meetings and workshops as needed
- Instituting formal procedure to document the frequency with which LEP persons meet SCAG staff and the nature of the interaction, as well as documenting the frequency in which translated documents are accessed on the website; and
- Surveying LEP participants at public hearings to assess the effectiveness of the agency's language services and whether alternate services may need to be employed

SCAG's public Involvement, visualization, Title VI and nondiscrimination, ADA, EJ, LEP, and Native American Tribal Governments practices satisfy regulatory requirements.

Other Comments:
As a challenge to further SCAG's public involvement, the MPO is encouraged to increase its transparency and general presence in service as a transportation planning advocate to the public. Example results could include that most of SCAG's residents know how to engage in the planning process that shapes their area, or many residents know other entity facts, i.e. like the organization being the largest MPO in the country.

The review team acknowledges SCAG's robust and comprehensive public outreach effectiveness in engaging stakeholders to include community members from all

backgrounds and areas within the geographically expansive region, as a best practice. Its investment into SCAG-TV, an archive of recorded meetings and public information videos on demand that also provides a live web stream of Regional Council meetings, and its videoconferencing capabilities at its five Regional Offices and sites in the Coachella Valley, City of Palmdale, and South Bay Cities Council of Governments, is commendable.

Travel Demand Forecasting

Regulatory Basis: 23 CFR § 450.324(f)(1) requires that the RTP include the projected transportation demand of persons and goods in the MPA over the period of the transportation plan. Travel demand forecasting models are used in the planning process to identify deficiencies in future year transportation systems and evaluate the impacts of alternative transportation investments. In air quality non-attainment and maintenance areas, they are also used to estimate regional vehicle activity for use in mobile source emission models that support air quality conformity determinations.

Review Finding:
To support the transportation planning process SCAG develops and maintains an activity based model (ABM), trip based model, sub-regional modeling development tool (SMDT), heavy-duty truck (HDT) model, and the air quality emission factors (EMFAC) model. SCAG uses these models to forecast surface transportation system conditions, and to support air quality analyses.

The existing trip based model gives travel forecasting capabilities for the analysis of SCAG's plans and programs. The ABM is the new generation travel demand model that simulates daily activities and travel patterns of all individuals in the region. SCAG uses the enhanced trip based model that has the latest planning assumptions, reasonable input data, and standard validations, which is consistent with the current state of practice in travel demand modeling. The MPO also, however, is committed to finalizing their ABM for future regional planning applications.

The SMDT greatly simplifies the creation of sub-regional models. The SMDT fully automates the development of all aspects of a sub-regional model and is used by the transportation commissions, counties, sub-regions, and cities wishing to create sub-regional models based on SCAG's new regional model. The SMDT promotes model consistency between the region's various model agencies and greatly reduces the cost and effort required to create sub-regional models.

The HDT model was developed by SCAG to evaluate important policy choices and investment decisions. The HDT model is a primary analysis tool to support the goods movement policy decisions made by SCAG and regional stakeholders.

The air quality EMFAC model was developed by the California Air Resources Board (CARB) for calculating emission inventories for vehicles in California. This is the emission

model approved by the Environmental Protection Agency (EPA) for calculating vehicle emissions for transportation conformity purposes in California.

SCAG's Travel Demand Forecasting practices satisfy regulatory requirements.

Other Comments:
As the Transportation Research Board's (TRB) Special Report 288 states, "There is no single approach to travel forecasting or a set of procedures that is 'correct' for all applications or all MPOs"; therefore, the review team encourages SCAG to continue using the latest reasonable assumptions, a realistic model structure, solid data for model development support, and validation with a proper balance between model complexity, data availability, agency resources (funding, computing, and staffing) and analysis needs. SCAG can benefit by coordinating the models and all other data collection activities and by using a suite of tools that satisfy transportation planning and operational essentials.

The review team is satisfied with SCAG's intent to keep both the trip based model and ABM. As such, SCAG is encouraged to simultaneously update its trip based model and ABM for ensured future comparative analysis research compatibility.

The review team was also satisfied with the understanding that SCAG staff demonstrated in terms of the importance of the travel demand model in regional transportation planning. We encourage SCAG to consistently assess how their travel models can help plan for future regional priorities.

Management & Operations (M&O) and Intelligent Transportation Systems (ITS)

Regulatory Basis: 23 CFR § 450.324(f)(5) requires the RTP to include M&O of the transportation network as an integrated, multimodal approach to optimize the performance of the existing transportation infrastructure. Effective M&O strategies include measurable regional operations goals and objectives and specific performance measures to optimize system performance. 23 CFR § 450.324(f)(11)(i) requires that the RTP's financial plan must include system-level estimates of costs and revenue sources that are reasonably expected to be available to adequately operate and maintain Federal-aid highways and public transportation.

Review Finding:
SCAG's RTP discusses transportation network strategies that intends for an integrated and multimodal approach addressed by an array of M&O systems, and the financial plan gives details of reasonably available costs and revenues of system-level estimates to operate. SCAG has a Regional ITS Architecture, viewable at: http://www.scag.ca.gov/programs/Pages/IntelligentTransportation.aspx, that is comprised of several layers/tiers to address multi-county issues including projects, programs, and services that require connectivity across county boundaries or at a multi-county level. Each of the counties in SCAG's region developed a Regional ITS

Architecture to give structure for local deployment of ITS applications. The third layer/tier is at the state level, California's ITS Architecture and System Plan, which addresses services that are interregional or statewide in nature.

SCAG's Regional ITS Architecture was last updated in 2011 to address specific elements such as goods movement, active transportation, positive train control, and express-lanes. SCAG is currently developing an update of the multi-county component of the Regional ITS Architecture to incorporate the numerous new transportation projects and plans over the past decade, and to reflect the latest updates to the National ITS Architecture which now integrates a framework called the Architecture Reference for Cooperative and Intelligent Transportation (ARC-IT) that incorporates the Connected Vehicle Reference Implementation Architecture (CVRIA). SCAG's architecture update is expected to be completed in the summer of 2018. Stakeholder coordination through a project steering committee ensures participation and input by regional ITS stakeholders as well as the FHWA.

SCAG's M&O and ITS area satisfy regulatory requirements.

Other Comments:
The MPO is encouraged to collaborate with the county transportation commissions to develop greater consistency in how managed lanes operate to establish uniform criteria for motorists' understanding and usability of managed lane facilities across county lines. SCAG also has a new role under the FAST Act to "consult" with agencies implementing express-lanes regarding the setting of tolls. The FHWA will collaborate with SCAG to clarify the specific activities required.

The review team recognizes SCAG for its development of a draft plan ("ConOps") for regional managed lanes network implementations as a best practice. This plan evaluates the entire managed lanes network in SCAG's region, primarily HOV lanes, and identifies which HOVs would be best for conversion to high occupancy toll (HOT) lanes. To serve its intended purpose, this plan should be finalized and published as soon as possible.

Pedestrian and Non-Motorized Transportation

Regulatory Basis: 23 USC § 217(g) states that bicyclists and pedestrians shall be given due consideration in the comprehensive transportation plans developed by each MPO under 23 USC § 134. Bicycle transportation facilities and pedestrian walkways shall be considered, where appropriate, in conjunction with all new construction and reconstruction of transportation facilities. 23 CFR § 450.306 sets forth the requirement that the scope of the metropolitan planning process "will increase the safety for motorized and non-motorized users; increase the security of the transportation system for motorized and nonmotorized users; and protect and enhance the environment, promote energy conservation, and improve the quality of life".

Review Finding:
SCAG's RTP discusses active transportation, which refers to human powered transportation and low-speed electronic assist devices. A few examples of active transportation in SCAG's region include bicycle, tricycle, wheelchair, scooter, skates, skateboard, push scooter, trailer, and hand cart.

Walking and bicycling are essential pieces of SCAG's regional transportation system. Nearly everyone is a pedestrian at some point during the day, and bicycling increases the mobility for those with zero access to motor vehicles dramatically. Active transportation is low cost, free of greenhouse gases, and can help reduce roadway congestion along with expanded transit ridership.

Categories of pedestrians can be grouped by trip purpose, as well as ability or willingness to make a trip by foot (or with a travel-assist device). Pedestrians grouped by trip purpose include:

- Commuters, which require quick and direct access to employment or transit
- Utilitarian walkers, which require easy, attractive, and safe access to vital services including medical, grocery, public transit, child care, retail, and other key destinations
- Recreation and fitness pedestrians, which require safe and unobstructed quality infrastructure for unimpeded walking/jogging

Some pedestrians require assist devices or rest stops to complete their journey. Careful attention in design and placement of utility poles, trees, bus stops, and other necessary items, as well as intersection curb cuts, is necessary to allow mobility for these users. Meeting needs of these users through the ADA requirements satisfy the needs of other users as well.

There are two methods of classifying bicyclists. By type of trip being taken (commuter, recreation, or utilitarian), and by comfort level riding on streets (strong/fearless, enthused/confident, interested but concerned, or uninterested).

A commuter is a bicyclist who uses a bicycle to go to/from places of employment, distinct from exercise/recreation or utilitarian. These are typically longer trips and focused on home-to-employment areas in as direct a manner as practical. Some commuter bicyclists ride by necessity. Exercise/recreation bicyclist primary needs are like that of commuter bicyclists, except that their travel routes are less focused on access to business, shopping, and other commercial areas. Exercise may also be a motivation for commute trips for those who bicycle by choice versus necessity. These trips can be longer, with focus on hills, and avoiding stop signs/lights. Alternatively, they can be low-speed cruising along dedicated bikeways or local jurisdiction streets. Utilitarian bicyclist are riders that may also use bicycles for shopping, dining, and

entertainment. These are short trips, often less than two to three miles. Naturally, some trips may involve several purposes and others may fit into more than one category.

SCAG has plans for sidewalks and other pedestrian facilities in the region, and they have several components:

- Curb zone, which is the area immediately next to the roadway, usually about four to six inches wide. The curb zone is placed where pedestrians cross from the sidewalk to the street and it can be a barrier to people with disabilities if installed improperly
- Furniture zone/planter zone, which is the area between the pedestrian walkway and the curb zone. This area is where shade trees, utility poles, traffic meters, bicycle racks, and other necessary obstructions reside. They are often eliminated in newer suburban areas. These areas make it easier for motorists to locate driveways and parking lot entrances, allowing them to be more likely to yield to pedestrians
- Pedestrian zone, which is the area where pedestrians walk. It is supposed to be free of obstructions, but rarely is it specified. There is zero maximum sidewalk width, and the minimum is defined at the local level
- Frontage zone, which is the area that separates store fronts, fences, and walls from a pedestrian zone. In residential areas, the "front yard" serves as the frontage zone between the sidewalk and structure

SCAG's pedestrian and nonmotorized transportation elements satisfy regulatory requirements.

Other Comments:
The review team recognizes SCAG's "Go Human Campaign" (*Go* Human) as a best practice. *Go Human* received FHWA's 2017 Transportation Planning Excellence Award, and is an outreach and advertising campaign to reduce traffic collisions in Southern California. The campaign uses education, advocacy, information sharing, and events that help residents re-envision their streets and communities. The primary goals of *Go Human* are to reduce collisions involving pedestrians and bicyclist while increasing the levels of walking and biking in SCAG's region. By combining the reach of an advertising campaign with the impact of tangible demonstration projects and empowerment toolkit trainings, *Go Human* is raising awareness and empowering champions to promote long-term change. It provides a model for supporting and scaling local activities for regional impact.

Transportation Planning Safety and Security

Regulatory Basis: 23 USC § 134(h)(1)(B) requires MPOs to consider safety as one of ten planning factors. As stated in 23 CFR § 450.306(b)(2), the planning process needs to

consider and implement projects, strategies, and services that will increase the safety of the transportation system for motorized and non-motorized users. In addition, SAFETEA-LU established a core safety program called the Highway Safety Improvement Program (HSIP) (23 § USC 148), which introduced a mandate for states to have Strategic Highway Safety Plans (SHSP). 23 CFR § 450.306(d) requires that the metropolitan transportation planning process should be consistent with the SHSP, and other transit safety and security planning.

23 USC § 134(h)(1)(C) requires MPOs to consider security as one of ten planning factors. As stated in 23 CFR § 450.306(b)(3), the metropolitan planning process is to give consideration of transportation system security. The regulations state that the degree and consideration of security should be based on the scale and complexity of many different local issues. Under 23 CFR § 450.324(h), the RTP should include emergency relief and disaster preparedness plans and strategies and policies that support homeland security, as appropriate.

Review Finding:
In 2015, Caltrans released an update to the SHSP that includes new goals, actions, and challenge areas to further improve transportation-related safety. The SHSP is a comprehensive, data-driven plan that establishes targets and strategies for reducing serious injuries and fatalities on all public roads in California. While California strives toward a long-term goal of zero deaths, the state's short-term goals are to reduce the number and rate of fatalities by three percent per year and to reduce the number and rate of severe injuries by 1.5 percent per year.

SCAG's 2016 RTP prioritizes safety and mobility for regional residents, including drivers and passengers, transit riders, pedestrians, and bicyclists. The RTP incorporates a comprehensive Transportation Safety and Security Appendix that provides details on SCAG challenge areas that are consistent with those included in the 2015 SHSP and what steps should be taken to further reduce transportation-related injuries and fatalities in the SCAG region. SCAG's adopted safety goal is to ensure transportation safety, security, and reliability for all people and goods in the region.

SCAG supports and embraces the efforts of state and local jurisdictions to improve transportation safety, including the City of Los Angeles' "Vision Zero" policy that promotes smart behaviors and roadway design that anticipates mistakes so collisions are survivable with injury-free results. The importance of allowing for a safe and secure transportation system is emphasized by transportation and law enforcement agencies at all levels as well.

Catastrophic events ranging from earthquakes, floods, and fires to hazardous material incidents, dam failures, and acts of terrorism, can occur in SCAG's region at any given time. Adequate preparation is critical as these events are a matter of when they will occur. Good planning helps to minimize impacts and SCAG is committed to working

with local governments to ensure the region is prepared. The 2016 RTP incorporates an action plan and policies detailing eight measures that the agency will undertake in regional transportation security planning. It also recognizes its role as a repository of transportation related data and information that could be brought to bear in planning for and preparing for emergency events, including Geographic Information Systems and transportation modeling data.

SCAG's transportation planning safety and security elements satisfy regulatory requirements.

Other Comments:
SCAG is encouraged to engage in the SHSP process as much as practicable since approximately 40 percent of California's motor vehicle fatalities occur in SCAG's region. SCAG should review the SHSP Implementation Plan and partner with California safety stakeholders in important challenge areas, and participate on the steering committee. The SHSP's homepage is available at: http://www.dot.ca.gov/trafficops/shsp/.

Freight and Goods Movement Planning

Regulatory Basis: MAP-21 established in 23 USC § 167 a policy to improve the condition and performance of the national freight network and to achieve goals related to economic competitiveness and efficiency, congestion, productivity, safety, security, and resilience of freight movement, infrastructure condition, use of advanced technology, performance, innovation, competition, and accountability while reducing environmental impacts. In addition, 23 USC § 134 and 23 CFR § 450.306 specifically identifies the need to address freight movement as part of the metropolitan transportation planning process.

Review Finding:
The goods movement system in the SCAG region relies on a complex infrastructure that supports multiple modes of transportation. This system includes deep-water marine ports, international border crossings, Class I rail lines, interstate highways, state routes and local connector roads, air cargo facilities, intermodal facilities, and distribution and warehousing centers. SCAG supports a world-class, coordinated Southern California goods movement system that accommodates growth in the throughput of freight to the region and nation in ways that support the region's economic vitality, attainment of clean air standards, and community quality of life. SCAG's vision promotes improvement of the goods movement system to:

- Maintain the long-term economic competitiveness of the region
- Promote local and regional job creation and retention
- Increase freight and passenger mobility to reduce congestion
- Improve the safety of goods movement activities
- Mitigate environmental impacts of goods movement operations

In support of this vision, SCAG's 2016 RTP describes a goods movement system with regional initiatives and projects that total about $71 billion through 2040. The plan identifies a comprehensive system of zero- and near zero-emission freight corridors, alleviation of major bottlenecks, a rail corridor improvement package, and an environmental strategy to address emissions through both near-term initiatives and a long-term action plan for technology advancement.

In April 2018 SCAG conducted an industrial warehousing study where stakeholders were interviewed to:

- Shed light on the distribution center characteristics and operating strategies that beneficial cargo owners (BCO) employ, specifically in Southern California
- Describe how their Third-Party Logistics (3PL) warehouse operators partner together
- Confirm accuracy on conclusions drawn from the historical and emerging supply chain trends
- Give guidance on baseline values for SCAG's regional warehousing supply/demand forecasting model parameters

The full report of this study is viewable at: http://www.freightworks.org/DocumentLibrary/Industrial%20Warehousing%20Report%20-%20Revised%202018.pdf.

SCAG's RTP also recognizes the role of the region in serving as the largest international trade gateway in the United States with trade moving through the San Pedro Bay Ports, and an international land border crossings in Imperial County. It presents key findings relative to patterns and the efficiency of goods that move across the international border, including projected cross-border goods movement volumes in future years that suggest roadway congestion levels will increase; transportation infrastructure in the greater Los Angeles area and distribution facilities in the Inland Empire that continue to be critical in supporting Tijuana manufacturing growth activities; the magnitude of near-shoring trend and associated impacts on overall cross-border activities yet to be determined; delays associated with land ports of entry, especially for northbound finished goods, that continue to be major concerns for companies on both sides of the border; and research & development, value engineering in certain manufacturing sectors like medical devices, and components providing additional opportunities for growth. SCAG has also sponsored several planning efforts to gather and synthesize information on goods movement across the United States-Mexico border to assist with the assessment of infrastructure needs, including a 2012 Goods Movement Border Crossing Study and Analysis.

SCAG's freight and goods movement area satisfies regulatory requirements.

Other Comments:
SCAG is encouraged to better promote freight and goods movement activities occurring in Southern California's region through increasing the availability of freight and goods movement information available on the agency's website, e.g. make available a link that discusses the Global Freight Council.

Performance-Based Management, Planning, and Programming

Regulatory Basis: The metropolitan transportation planning process is to use a performance-based approach for decision-making and identify goals in the following areas:

- Safety
- Infrastructure condition
- Congestion reduction
- System reliability
- Freight movement and economic vitality
- Environmental sustainability
- Reduced project delivery delays

The metropolitan planning process also is to establish performance targets that track progress towards attainment of critical outcomes for the MPO region. MPOs may evaluate scenarios using locally developed measures, and the RTP is to contain a description of the performance measures and performance targets used. The MPO RTP is to contain a system performance report and the FTIP is to include a description of its anticipated effects on achieving the performance targets established in the RTP. MPOs additionally may voluntarily elect to develop multiple scenarios for consideration in part with the RTP development and consider multiple investment scenarios.

Further, in terms of Federal requirements, performance based planning and programming became a requirement for States, MPOs, transit agencies, and their planning partners as both MAP-21 and the FAST Act placed a strong emphasis on performance based decision-making in the statewide and metropolitan transportation planning processes. 23 USC § 134(h)(2)(A) states that the metropolitan transportation planning process shall provide for the establishment and use of a performance-based approach to transportation decision making to support the national goals described in Section 150(b) of this title and in Section 5301(c) of 49 USC. 23 CFR § 450.306(a) requires MPOs, in cooperation with the State and public transportation operators, to develop RTPs and FTIPs through a performance driven outcome-based approach to planning for metropolitan areas of the State and address the performance measures or standards established under 23 CFR part 490 (where applicable), 49 USC § 5326(c), and 49 USC § 5329(d) to track progress toward attainment of critical outcomes for the region of the metropolitan planning organization. These National Performance

Management Measures apply to Safety Performance (PM1), Pavement and Bridge Condition (PM2), System Performance/Freight/Congestion Mitigation and Air Quality Improvement (CMAQ) (PM3), Transit Asset Management, and Transportation Asset Management Plan (TAMP).

Review Finding:
SCAG has used performance measurements to support RTP development since 1998. Investments identified in SCAG's RTP, when fully implemented, are expected to achieve several performance outcomes that reflect air quality, economic activity and job creation, sustainability, and EJ benefits. SCAG indicated a commitment to build on successes through refining and enhancing performance measures to meet regional priorities. Primary performance goals of SCAG's RTP are focused on outcomes that strengthen the land-use/transportation connection and the region's physical health. The set of performance measures that are being used to evaluate SCAG's RTP are viewable at:
http://scagrtpscs.net/Documents/2016/final/f2016RTPSCS_PerformanceMeasures.pdf.

SCAG's RTP affirms two general types of performance measures as appropriate for monitoring progress to achieve regional goals. The first type of measure relies on readily available data that can be forecast into the future, and can therefore be used for evaluating RTP alternatives. The second type of measure is more valuable for on-going system monitoring. This type of measure typically is unable to be readily forecast, but allows the region to monitor whether goals are being met over time. This grouping also evaluates other measures for future integration into SCAG's performance monitoring efforts as reliable data becomes available. SCAG's RTP discusses additional regionally important measures, e.g. infrastructure investment measures, which include the percentage of total funding to be invested in transit and active transportation. SCAG's RTP performance measures and outcomes discusses reference to three scenarios:

- Base Year, which represents existing conditions as of 2012 – the region's transportation system, land use patterns, and socio-economic characteristics (e.g. households and employment), as it was in 2012. The year 2012 was selected as the Base Year for analysis because it was the year of SCAG's previously adopted RTP
- Baseline, which assumes a continuation of development trends over recent decades. This scenario represents a future in 2040 in which only the following have been implemented: projects currently under construction or undergoing right of way acquisition; those programs and projects programmed and committed in the 2015 FTIP; and projects that have already received environmental clearance
- Plan represents future conditions in 2040, in which investments and strategies detailed in the RTP are fully realized

The performance of SCAG's RTP intends to give beneficial results in a wide variety of measurable categories, all of which contribute meaningfully toward achieving the region's goals and offering an enhanced overall quality of life in Southern California.

In terms of meeting new Federal performance based planning and programming requirements, the Review team commends SCAG, Caltrans, and public transportation providers for their strong cooperation and collaboration. The following provides an overview of recent efforts to cooperatively develop and share information relating to transportation performance data, the selection of performance targets, the reporting of performance targets, the reporting of performance to be used in tracking progress toward attainment of critical outcomes for the SCAG region, and the collection of data for State asset management plans for the National Highway System (NHS):

- **November 28, 2016 (PM1)** – MPO participation in FHWA workshop and prerequisite webinar to discuss performance-based safety target setting, methodologies for target setting and target setting coordination
- **December 12, 2016 (PM1)** – MPO participation in all day workshop in Sacramento, California presented by FHWA, and the Caltrans Office of Traffic Safety, to educate and engage stakeholders in discussions regarding establishing California's statewide safety performance targets
- **December 15, 2016 (TAMP)** – MPO participation in CTC sponsored workshop in Sacramento, California that focused on the goals and objectives for the TAMP
- **January 1, 2017 (Transit Asset Management)** – Initial Transit Asset Management Targets established
- **February 8, 2017 (PM1)** – MPO participation in workshop held in Fontana, California to demonstrate how to access and analyze safety data for setting safety performance targets
- **April 19, 2017 (TAMP)** – MPO participation in workshop held in Los Angeles, California that focused on TAMP risk management
- **June 14, 2017 (TAMP)** – MPO participation in a half-day workshop, in Oakland, CA that focused on the TAMP's financial plan and investment strategies
- **July 1, 2017 (PM1)** – set statewide PM1 targets for three of the five targets (number of fatalities, number of serious injuries and rate of fatalities) with the National Highway Traffic Safety Administration (NHTSA)
- **August 31, 2017 (PM2/3)** – MPO participation in a joint conference/webinar in Sacramento, California that included an interactive strategic session focused on pavement and bridge target setting
- **August 31, 2017 (PM 1)** – Caltrans set calendar year 2018 statewide PM1 targets with the FHWA in the HSIP
- **September 21, 2017 (TAMP)** – MPO participation in half-day workshop in Sacramento, California that focused on the TAMP and ten-year long-term pavement and bridge targets

- **December 18, 2017 (PM3)** – MPO participation in a target setting workshop in Los Angeles, California
- **January 2018 (PM2/TAMP)** – approval of state's ten-year long range pavement and bridge targets and the draft California TAMP at the January 2018 CTC meeting
- **January 1, 2018 (Transit Asset Management)** – Transit Asset Management targets reported in the National Transit Database (NTD)
- **February 27, 2018 (PM1)** – MPO documented with Caltrans that they agree to plan and program projects so that they contribute toward the accomplishment of Caltrans' PM1 target for that performance measure
- **March 13, 2018 (PM1/3)** – MPO participation in statewide PM1 safety target setting workshop
- **May 20, 2018 (PM2/3)** – Caltrans set two-year and four-year PM2/3 targets. Caltrans and SCAG must agree to a single unified PM3 CMAQ traffic congestion and on-road mobile source emissions targets. MPO has up to 180 days to set their targets from this date
- **May 23, 2018 (PM1)** – Metropolitan Planning Agreement with Caltrans executed on this date further outlining the roles and responsibilities for the State and MPO to meet performance-based planning and programming requirements. Performance measure targets must be included in the RTP and FTIP thereafter. Since SCAG's 2016 RTP was adopted before this date, SCAG does not have to include any of the performance measures until their next scheduled update; however, FTIP amendments and the new Federal Statewide Transportation Improvement Program (FSTIP) cycle will need to include performance measure information for PM1

SCAG's Board adopted transportation safety performance measures in 2018 that supported Caltrans' adopted statewide targets. These measures include number of fatalities; rate of fatalities (per 100 million VMT); number of serious injuries; rate of serious injuries (per 100 million VMT); and number of non-motorized fatalities and non-motorized severe injuries. SCAG's next FTIP update/amendment for approval will integrate discussion of safety performance targets.

SCAG's performance-based management, planning, and programming implementations satisfy regulatory requirements.

Other Comments:

SCAG is recommended to integrate Federal performance based planning and programming requirements as one of its highest priorities. By the next RTP and FTIP update cycle, the MPO is encouraged to reflect an evolving and complete integration of Federal requirements into development of the RTP and FTIP, in terms of helping to inform investment priorities and decision making processes.

SCAG is encouraged to continue its coordination with Caltrans on performance targets as this would help the State realize achievement of their safety targets. Information on calendar year 2018 statewide safety performance targets can be viewed at: http://www.dot.ca.gov/trafficops/shsp/docs/Safety-Performance-Management-Targets-for-2018.docx.

The review team recommends that SCAG develop freight-related performance measures for its MPA and link integrated discussions into the MPOs OWP, FTIP, and RTP.

Financial Planning/Fiscal Constraint

Regulatory Basis: 23 CFR § 450.324(f)(11) and 23 CFR § 450.326(j) and (k) outline financial planning requirements to support RTP and FTIP implementation as follows:

- Revenue estimates shall be cooperatively developed by the State, MPO, and public transportation operator(s), and include all public and private sources reasonably expected to support the plan's implementation
- For nonattainment and maintenance areas, recommendations for additional financing strategies shall also be included in the RTP. Nonattainment and maintenance area projects included in the first two years of the FTIP shall have funds available or committed; eligible transportation control measure (TCM) projects shall have priority
- System level cost estimates shall be identified for system M&Os, incorporate inflation rates reflecting year of expenditure (YOE), and demonstrate consistency with existing and proposed revenue sources that have all forecasted M&O and project costs. For outer years (beyond ten years), cost ranges or bands are acceptable
- The financial plan may include additional projects if additional resources outside of the financial plan are identified
- The FTIP shall be fiscally constrained by year, and be updated to maintain consistency

Review Finding:

SCAG's RTP identifies how much funding the MPO reasonably expects will be available to support the region's surface transportation investments. The financially constrained portion of the RTP includes both a "traditional" core revenue forecast comprised of existing local, state, and federal sources, and more innovative but reasonably available sources of revenue to implement a program of infrastructure improvements to keep freight and people moving. The financial plan further documents progress made since past RTPs and describes steps to be taken for obtaining needed revenues to implement the region's transportation vision.

The financial plan highlights the importance of finding new and innovative ways to pay for transportation, including an ever-expanding backlog of projects to preserve the existing transportation system. The SCAG region relies heavily on local sources of tax revenue, where seven sales tax measures generate 71 percent of core revenues for transportation improvements.

SCAG is exploring how it can transition from the current system based on fuel taxes to a more direct system based on user fees. Recent action by the state Legislature to launch California's Road Charge Pilot Program is a critical step in this effort. Numerous policy and technical studies have been conducted and more work is planned to examine and demonstrate the viability of user fee systems, including toll networks. SCAG's region has successfully implemented toll systems in the past, with the Transportation Corridor Agencies' (TCA) network of privately financed toll roads, the State Route (SR)-91 Express Lanes in Orange County, and more recently with the express lanes along Interstate 10 and Interstate 110 in Los Angeles County. The SCAG region has secured the necessary resources to support transportation investments detailed in past RTPs, and the existing financial plan will continue to meet necessary milestones to implement the RTP.

The region's revenue forecast timeframe for the RTP is 2015 through 2040 and the financial plan accounts for inflation and reports statistics in nominal YOE dollars. The underlying data are based on financial planning documents developed by the local county transportation commissions and transit operators. The revenue model also uses information from Caltrans and the California Transportation Commission. Regional forecasts incorporate county forecasts where available and fill data using a common framework. This ensures consistency between SCAG's forecast and the planning documents of the county transportation commissions. When there are gaps in the financial projections in the outer years between the county forecasts and SCAG's RTP time horizon, growth assumptions are extrapolated from historical trends based on published data.

SCAG's process for developing the revenue forecast is to:

- Incorporate financial planning documents developed by local county transportation commissions and transit operators in the region, where available
- Ensure consistency with both local and state planning documents
- Utilize published data sources to evaluate historical trends, and
- Conduct sensitivity testing of assumptions to augment local forecasts, as needed

The RTP financial plan includes two types of revenue forecasts (both are included in the financially constrained plan):

- Core revenues, which are existing transportation funding sources projected to 2040. This revenue forecast other than includes future increases in state or

federal gas excise tax rates (other than the adjustments reflecting the state gasoline sales tax swap) or adoptions of regional gasoline taxes, mileage-based user fees, and new tax measures. These revenues provide a benchmark from which additional funding can be identified.

- Reasonably available revenues, which include new sources of transportation funding likely to materialize within the RTP timeframe. These sources include adjustments to existing state and federal gas tax rates, value capture strategies, potential national freight program funds, tolls for specific facilities, and private equity participation.

Transportation expenditures in the SCAG region are summarized into three main categories:

- Capital costs for transit, state highways, and regionally significant arterials (local streets and roads)
- Operating and maintenance costs for transit, state highways, and regionally significant arterials (local streets, and roads)
- Debt service payments (for current and anticipated bond issuances)

SCAG's financial planning/fiscal constraint practices satisfy regulatory requirements.

Financial Controls, Procurement, Consultant Selection, and Audits

Regulatory Basis: 2 CFR § 200, which became effective in December 2014, covers uniform administrative requirements for grants and cooperative agreements to state and local governments while 23 CFR § 172 gives specifics on conditions to administer engineering and design related service contracts and methods of procurement, with procedures focused on competitive negotiation, small purchases, noncompetitive negotiation, and approvals. FHWA's Auditing Transportation Programs Internal Controls Guidance Appendix C gives a checklist of how to control the environment and activity, also of how to appropriately assess risks in facilitation of consultant selection and procurement procedures.

Review Finding:

SCAG is aware of, and implements, Uniform Administrative Requirements. The MPO conducts a single audit annually for protocol evaluation, and SCAG's financial system has budgeting and accounting components. Internal controls are documented in SCAG's Procurement Policy and Procedures Manual.

For procurement SCAG allows contenders to submit bids for federal funding awards. There is a structured system in place for advertising request for proposals (RFP) and the decision-making process is kept confidential, with post-award feedback given to unselected bidders. SCAG's Procurement Policy & Procedures Manual describes general guidelines that govern conduct of the agency's procurement activities. The manual

details a discussion on approval authority, roles and responsibilities, agreement types, methods, other informal/formal solicitation process requirements, overall administration, and other requirements. This manual was last updated in 2016 and SCAG shared that it will be updated again following completion of an audit being conducted by Caltrans.

SCAG's financial control, procurement, consultant selection, and audit areas were found in general conformance to satisfy requirements.

Land Use, Livability, and Environmental Mitigation

Regulatory Basis: 23 USC § 134(g)(3) encourages MPOs to consult with officials responsible for other types of planning activities that are affected by transportation in the area (including State and local planned growth, economic development, environmental protection, airport operations, and freight movements) or to coordinate its planning process, to the maximum extent practicable, with such planning activities. 23 USC § 134(h)(1)(E) and 23 CFR § 450.306(b)(5) set forth requirements for the RTP to protect and enhance the environment, promote energy conservation, improve the quality of life, and promote consistency between transportation improvements and State and local planned growth and economic development patterns. The transportation planning process must be coordinated with "planned growth" and similar activities, including agencies with certain responsibilities for land and other resource management activities.

23 USC § 134(i)(2)(D) and 23 CFR § 450.324(f)(10) require environmental mitigation to have connection with the RTP. The RTP is required to include a discussion on types of potential environmental mitigation activities for transportation improvements and potential areas to carry out these activities, including activities that may have the greatest potential to restore and maintain environmental functions affected by the plan. 23 USC § 168 and Appendix A to 23 CFR Part 450 provide for linking the transportation planning and the NEPA processes. A PEL study can incorporate the initial phases of NEPA through the consideration of natural, physical, and social effects, coordination with environmental resource agencies, and public involvement. This will allow the PEL study analysis to be referenced in the subsequent NEPA document once the project is initiated, saving time and money with project implementation.

Review Finding:

Land use and livability strategies are discussed in SCAG's RTP, which are built on a foundation of contributions from communities, cities, counties and other local agencies across the Southern California region. Land use patterns are based on local general plans as well as input from local governments. In the plan, SCAG details its commitment to preserving the growth forecasts provided by local jurisdictions at the jurisdictional level. SCAG has developed an overall land use pattern that respects local control and incorporates best practices for achieving state-mandated reductions in greenhouse gas

emissions through decreases in per capita VMT regionally. Foundational policies that have guided SCAG's land use and livability developments are to:

- Identify regional strategic areas for infill and investment
- Structure the RTP on a three-tiered system of centers development
- Develop "Complete Communities"
- Develop nodes on a corridor
- Plan for additional housing and jobs near transit
- Plan for changing demand in types of housing
- Continue protection of stable, existing single-family areas
- Ensure adequate access to open space and preservation of habitat
- Incorporate local input and feedback on future growth

There are several local and habitat conservation plans, and state/federal park designated areas, that give protection for a significant amount of SCAG's regional natural and farm lands. Many of these protected lands, however, are in remote/desert areas far away from incorporated locations. As such, a substantial amount of land on the urban and suburban fringe is vulnerable to development. Protected areas tend to be distributed unevenly across habitat types, leaving some largely unprotected. Many high-biodiversity habitats that play a key role in SCAG's ecosystem are adjacent to urban and suburban communities, and are unprotected. Local agencies in SCAG's region address these calls for conservation through forming Regional Conservation Plans (RCP), which recognize that important habitats at times other than line up with jurisdictional borders. SCAG's RTP gives reference to three adopted major conservation plans made up of multiple jurisdictions within SCAG's boundaries. Coachella Valley and Western Riverside are Multiple Species Habitat Plans (MSHCPs), which allow the county, its cities and special districts to more effectively make local land use decisions regarding development while adhering to state and federal endangered species acts regulations and environmental mandates. Under an MSHCP, wildlife agencies grant authorization for public and private development that is potentially detrimental to individual species, in return for assembling and managing a coordinated Conservation Area. Like the MSHCP, Natural Communities Conservation Plan/Habitat Conservation Plans (NCCP/HCP) acquire and manage large conservation areas that can be made up of several distinct jurisdictions. An NCCP/HCP takes a broad-based ecosystem approach, focusing on the long-term protection of wildlife and plant species while also allowing for development.

SCAG additionally accounts for land use and sustainability actions via "Toolbox Tuesday" events, green region indicators, and in receipt of sustainability planning grants. Overall, the land use, livability, and environmental mitigation practices performed by SCAG satisfy regulatory requirements.

Air Quality Conformity

Regulatory Basis: For the EPA to classify an MPO as an air quality nonattainment or maintenance areas many special requirements apply to the metropolitan planning process. Section 176(c)(1) of the Clean Air Act Amendments of 1990 (CAAA) states: "No MPO designated under section 134 of Title 23 USC shall give approval to any project, program, or plan that fails conformance to an implementation plan approved or promulgated under section 110". The Intermodal Surface Transportation Efficiency Act of 1991 (ISTEA) includes provisions in response to CAAA mandates.

The air quality provisions of the CAA (42 USC § 7401) and the MPO provisions of Titles 23 and 49 require a planning process that integrates air quality and metropolitan transportation planning, such that transportation investments support clean air goals. Under 23 CFR § 450.324(m), a conformity determination must be made on any updated or amended transportation plan in accordance with the CAA and the EPA transportation conformity regulations of 40 CFR Part 93. A conformity determination must also be made on any updated or amended FTIP, per 23 CFR § 450.326(a). There are to be agreements/coordination:

- Between the MPO and the designated air quality planning agency (as applicable)
- Amongst the MPO, State Department of Transportation, and State and local air quality agencies if the entire area is outside the MPA
- Among the State and the MPO if more than one MPO covers the non-attainment/maintenance area

The RTP process must demonstrate:

- A coordinated development with the SIP development process, including TCM development
- Projects that significantly increase SOV capacity coming from the CMP
- Identified and included a design concept along with a scope of existing and future facilities
- MPO and USDOT conformity determinations processed on any new or revised RTP
- Acceptable transportation and emission modeling

The RTP content needs to address existing and future transportation facilities included in the design concept and scope, and the FTIP process must involve:

- MPO and USDOT conformity determinations processed on any new or amended FTIP
- An opportunity for at least one formal public meeting
- Identification of projects designated as TCMs in the SIP
- A new conformity determination processed, if amended by adding or deleting projects that affect transportation related emissions

The FTIP needs to address:

- Existing and future transportation facilities included in the design concept and scope
- An inclusion of all regionally significant transportation projects proposed, regardless of funding
- Identified TCM projects and described their progress
- Lists all projects found to conform in the previous FTIP that are now part of the base case for conformity

USDOT reviews the MPO's transportation planning process to ensure conformity.

Review Finding:
SCAG hosts the Transportation Conformity Working Group (TCWG). The TCWG is a monthly forum that convenes for supporting interagency coordination to maintain transportation conformity and help improve air quality in SCAG's region. The group facilitates an inclusive transportation/air quality planning process to fulfill the interagency consultation requirements of the Federal Transportation Conformity Rule. The group helps resolve regional issues pertaining to transportation conformity and coordinates with and supports the Statewide Transportation Conformity Working Group. Membership of SCAG's TCWG includes the EPA, FHWA, FTA, Caltrans, Air Resource Board (ARB), Air Quality Management Districts (AQMD), SCAG, County Transportation Commissions, and other stakeholders.

SCAG's RTP has a 20-year minimum period consistent with the agency's FTIP that allocates funds over a four year period compliant with the transportation conformity requirements. SCAG's RTP and FTIP are subject to four criteria pollutants for air quality in the region:

- Carbon monoxide (CO), which is a product of automobile exhaust. CO reduces the flow of oxygen in the bloodstream and is particularly dangerous to persons with heart disease
- Nitrogen dioxide (NO2), which is created under the high pressure and temperature conditions in internal combustion engines. It impacts the respiratory system and degrades visibility due to its brownish color
- Ozone (O3), which is formed by the reaction between reactive organic gases (ROG) and nitrogen oxides (NOX) in the presence of sunlight. O3 negatively impacts the respiratory system
- Particulate matter 10 and 2.5 (PM10 and PM2.5), which are extremely small particles and liquid droplets associated with dust, soot, and combustion products. PM10 and PM2.5 pollution has been linked to significant health

problems, including aggravated asthma, increases in adverse respiratory problems, chronic bronchitis, decreased lung function, and premature death

SCAG's RTP and FTIP identify the applicable emission budgets and TCMs in the region. The RTP and FTIP's conformity analyses have findings that include regional emissions tests, timely implementation of TCM tests, financial constraint tests, a CMP that evaluates SOV capacity increasing projects, and inter-agency consultation and public involvement tests. SCAG's latest air quality modeling assumptions were most recently accepted and approved by the EPA and USDOT's RTP Amendment #2/FTIP Amendment #7 conformity determination on August 1, 2017. Full details of SCAG's RTP and FTIP air quality conformity are viewable at: http://scagrtpscs.net/Documents/2016/final/f2016RTPSCS_TransportationConformityAnalysis.pdf and http://ftip.scag.ca.gov/Pages/2017/adopted.aspx, respectively.

SCAG's air quality conformity processes satisfy regulatory requirements.

Conclusion

The outcome of this review is a determination whereby the FHWA and the FTA jointly certify that SCAG's planning process meets the requirements of 23 CFR § 450, and all other applicable legislation. SCAG is recognized for six best practices.

We appreciate and thank SCAG's staff for its tremendous assistance and cooperation in making the certification review informative, productive, and a positive exchange of open discussions between the Federal review team, SCAG staff, State, local elected, transit operator, and Native American Tribal Government officials.

Appendix A
Certification Review Site Visit Participants

Michael Morris	Federal Highway Administration, California Division
Adam Stephenson	Federal Transit Administration, Los Angeles Metro
Monica Gourdine	Federal Highway Administration, California Division
Tashia Clemons	Federal Highway Administration, California Division
Kenneth Born	Federal Highway Administration, California Division
Ray Tellis	Federal Transit Administration, Los Angeles Metro
Stacy Alameida	Federal Transit Administration, Los Angeles Metro
Candice Hughes	Federal Transit Administration, Los Angeles Metro
Scott Carson	Federal Highway Administration, California Division
Will McClure	Federal Highway Administration, California Division
Sarah Sun	Federal Highway Administration, Headquarters
Jesse Glazer	Federal Highway Administration, California Division
Ken Kochevar	Federal Highway Administration, California Division
Rebecca Sanchez	California Department of Transportation, District 7
Alison Nealon	California Department of Transportation, Headquarters
Hasan Ikhrata	Southern California Association of Governments
Darin Chidsey	Southern California Association of Governments
Debbie Dillon	Southern California Association of Governments
Basil Panas	Southern California Association of Governments
Joann Africa	Southern California Association of Governments
Kome Ajise	Southern California Association of Governments
Art Yoon	Southern California Association of Governments
Naresh Amatya	Southern California Association of Governments
Frank Wen	Southern California Association of Governments
Annie Nam	Southern California Association of Governments
Philip Law	Southern California Association of Governments
Pablo Gutierrez	Southern California Association of Governments
Leyton Morgan	Southern California Association of Governments
Kimberly Clark	Southern California Association of Governments
Julie Loats	Southern California Association of Governments
Margaret de Larios	Southern California Association of Governments
Daniel Tran	Southern California Association of Governments
John Asuncion	Southern California Association of Governments
Hsi-Hwa Hu	Southern California Association of Governments
Mana Sangkapichai	Southern California Association of Governments
Sarah Jepson	Southern California Association of Governments
Alan Thompson	Southern California Association of Governments
Ping Chang	Southern California Association of Governments
Roland Ok	Southern California Association of Governments
Justine Block	Southern California Association of Governments

Erika Bustamante	Southern California Association of Governments
Rongsheng Luo	Southern California Association of Governments
Jason Greenspan	Southern California Association of Governments
Marco Anderson	Southern California Association of Governments
Grieg Asher	Southern California Association of Governments

Appendix B
Interviewed Local Elected, Transit Operator, and Native American Tribal Government Officials

Local Elected Officials

Honorable Cheryl Viegas-Walker, Past President of SCAG, City of El Centro, Imperial County

Honorable Margaret Finlay, Current President of SCAG, City of Duarte, Los Angeles County

Honorable Michele Martinez, Past President of SCAG, City of Santa Ana, Orange County

Transit Operator Officials

Kurt Brotke, Strategic Planning Director, Orange County Transportation Authority (OCTA)

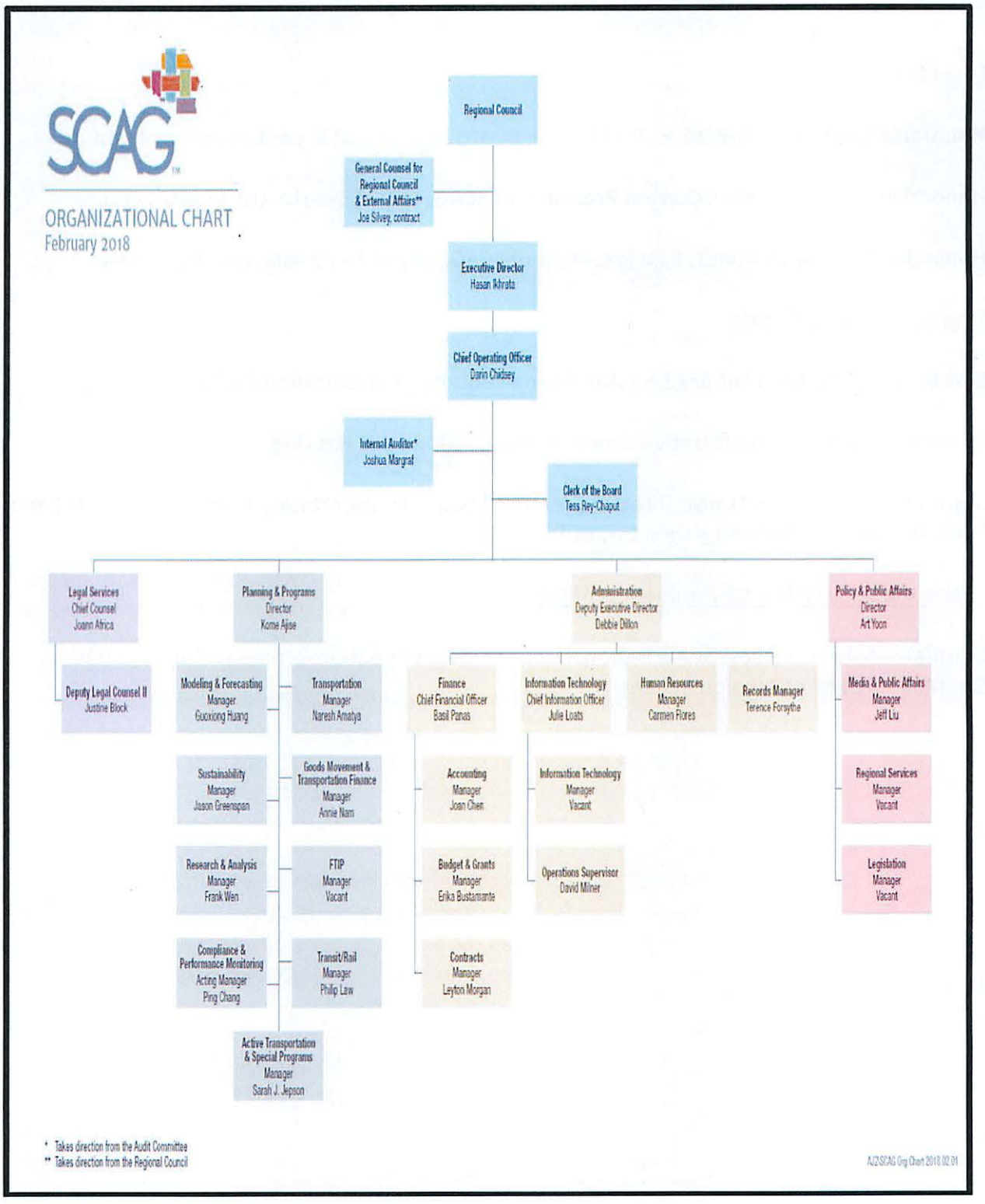
Dana Pynn, Transit Administrative Officer, Gardena Municipal Bus Line

Martin Erickson, Public Transit Director, Ventura County Transportation Commission (VCTC) and Peter DeHaan, Programming Director, VCTC

Native American Tribal Governments Official

Honorable Sabrina Le Roy, SCAG Regional Council Indian Tribal Governments Representative, San Manuel Band of Mission Indians

Appendix C
SCAG Organizational Structure



Appendix D
Public Meeting Notice

A copy of USDOT's public listening session is viewable below:

SCAG

Notice of Public Listening Session for the Southern California Association of Governments Federal Certification Review

A public listening session is scheduled for Tuesday, April 3, 2018 to receive input on how to improve the transportation planning process within Southern California.

The Federal Highway Administration (FHWA) and the Federal Transit Administration (FTA) will conduct the 2018 certification review and evaluation of the Southern California Association of Governments' (SCAG) regional transportation planning process as carried out by SCAG and its partners. The FHWA and the FTA jointly conduct this process every four years and invites the public to comment on SCAG's transportation planning process at the following public listening session:

April 3, 2018
5:30 p.m. to 7:30 p.m.
Southern California Association of Governments
900 Wilshire Blvd., Ste. 1700
Los Angeles, CA 90017

People may also participate in the public listening session via videoconference from SCAG's regional offices, including:

- SCAG Imperial County Office: 1405 North Imperial Avenue, Suite 1, El Centro, CA 92243
- SCAG Orange County Office: 600 South Main Street, Suite 906, Orange, CA 92868
- SCAG Riverside County Office: 3403 10th Street, Suite 805, Riverside, CA 92501
- SCAG San Bernardino Office: 1170 West 3rd Street, Suite 140, San Bernardino, CA 92410
- SCAG Ventura County Office: 950 County Square Drive, Suite 101, Ventura, CA 93003

Register Online

Oral and written comments may be presented at the meeting. Written comments will be accepted by email and can be sent to cert.review@dot.gov, or by regular mail to.

Mr. Michael Morris
FHWA Cal-South Office
888 S. Figueroa, Suite 440
Los Angeles, CA 90017

OR

Mr. Adam Stephenson
FTA Region IX LA Metro
888 S. Figueroa, Suite 440
Los Angeles, CA 90017

Written public comments will be accepted through Friday, April 27, 2018. For additional information about the SCAG federal certification process, or the April 3, 2018 public listening session, dial (213) 894-4014.

SCAG

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Appendix E
Certification Review Concurrence and Closure

From: Naresh Amatya
To: Morris, Michael (FHWA); Kome Ajise; Joann Africa; Art Yoon
Cc: Clemons, Tashia (FHWA); Born, Kenneth (FHWA); Tellis, Ray (FTA); Stephenson, Adam (FTA)
Subject: RE: 2018 SCAG Certification Corrective action
Date: Wednesday, August 8, 2018 1:14:50 PM
Attachments: image005.png
image006.png
image007.png
image008.png

Hi Michael,

Thank you so much for your prompt response. We really value and appreciate our mutual working relationship and the trust you have placed on us to carry out the federal mandates through our planning process.

Please accept this email as our concurrence for the finalization of the 2018 SCAG certification report.

Thank you.

Naresh Amatya, P.E.
Manager of Transportation Planning
Tel: (213) 236-1885 |
amatya@scag.ca.gov

SOUTHERN CALIFORNIA ASSOCIATION OF GOVERNMENTS
900 Wilshire Boulevard, 17th Floor, Los Angeles, CA 90017

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From: Morris, Michael (FHWA) [mailto:Michael.Morris@dot.gov]
Sent: Wednesday, August 8, 2018 12:31 PM
To: Kome Ajise <ajise@scag.ca.gov>; Joann Africa <africa@scag.ca.gov>; Art Yoon <ArtYoon@scag.ca.gov>; Naresh Amatya <AMATYA@scag.ca.gov>
Cc: Clemons, Tashia (FHWA) <tashia.clemons@dot.gov>; Born, Kenneth (FHWA) <kenneth.born@dot.gov>; Tellis, Ray <ray.tellis@dot.gov>; Stephenson, Adam (FTA) <adam.stephenson@dot.gov>
Subject: RE: 2018 SCAG Certification Corrective action

Hi All,

We appreciate the clarity received on our call today that SCAG is in process of documenting Native American Tribal Government consultation procedures and this also will include the documentation of FLMA consultations, to be completed by end of this calendar year.