

**Southern California
Association of Governments
2009 Federal Certification Review**

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Pursuant to 23 U.S.C. 134(i)(5) and 49 U.S.C. 1607, the Federal Highway Administration (FHWA) and the Federal Transit Administration (FTA) must jointly certify the metropolitan planning process in Transportation Management Areas (TMA) at least every four years. The FHWA and the FTA will be conducting a federal certification review of the Southern California Association of Governments (SCAG) transportation planning process in December 2009.

April 2006 Federal Certification Review

In April 2006, FHWA and FTA conducted a federal certification review of SCAG's transportation planning process. The report prepared by FHWA and FTA included two Corrective Actions and several Recommendations. SCAG's initial response to those Corrective Actions and Recommendations is attached. In addition, below is an update to SCAG's response to the two Corrective Actions.

Corrective Action 1. *To comply with metropolitan planning and programming requirements outlined in 23CFR, Part 450.310(b), SCAG shall enter into agreements with the region's publicly owned transit operators that document the collaborative planning and programming processes currently existing in the region or take other action as detailed in the regulations under 23CFR, Part 450.314 (c) sufficient to address this requirement. This corrective action must be resolved within one year from the issuance of this certification review report.*

Current Status of Corrective Action 1: SCAG successfully entered into Memoranda of Understanding (Agreements) with the transit operators in the SCAG region. The Agreements were entered into with each of the required transit operators in order to address Corrective Action 1 identified in the April 2006 Certification Review Report prepared by FHWA and FTA. These Agreements document compliance with the metropolitan planning and programming requirements set forth under 23 CFR 450.314(a), formerly 23 CFR 450.310(b). The Agreements describe roles and responsibilities of SCAG, the County Transportation Commissions, and the respective transit operators in carrying out the metropolitan planning and programming processes, specifically including provisions for the cooperative development of the Regional Transportation Plan, the Regional Transportation Improvement Program, and input into the development of the Overall Work Program.

SCAG has copies available of all the respective agreements on file and each of the signatory parties has retained an original copy. Copies of the agreements between SCAG and transit operators are attached in the Appendix under Exhibit 3, along with a list of the transit operators covered by the Agreements.

Corrective Action 2. *FHWA and FTA are issuing a corrective action requiring SCAG to reflect the cost of individual projects in all future RTPs. SCAG did not reflect the individual cost of all projects included in 2004 RTP. SCAG only included project costs for new projects being added to the 2004 RTP. “Baseline” projects that were carried over from the 2002 RTP did not reflect project costs. Each project included in the financially constrained RTP should include all the costs (environment, design, construction, right of way, etc.) to build the project. Project costs are needed to determine that the RTP is financially constrained and in the development of NEPA documents in order to determine that the project as described in the NEPA document is correctly reflected the RTP. This corrective action must be resolved in SCAG’s next RTP.*

Current Status of Corrective Action 2:

In response to the federal agencies' corrective action #2 pertaining to itemization of individual project cost information, SCAG submitted an addendum to the 2004 Regional Transportation Plan following the notice of the corrective action. Additionally, the 2008 RTP delineated all project cost information for both baseline and new projects pursuant to corrective action #2 as well. The project cost information is in the Project List in the supplemental report section of the 2008 RTP. A copy of a portion of the Project List is attached in the Appendix as Exhibit 6 as a sample to document individual project costs.

2009-2010 Federal Certification Review

In anticipation of the 2009-2010 FHWA and FTA certification review of SCAG, the federal agencies prepared desk audit questions on the subject areas to be covered in the review, which are listed below and are followed by the questions and responses for each subject area. The Appendix includes copies of the documentation requested by the federal agencies.

- ORGANIZATIONAL STRUCTURE AND BOARD MEMBERSHIP
- AGREEMENTS AND CONTRACTS
- OVERALL WORK PROGRAM
- REGIONAL TRANSPORTATION PLAN
- FINANCIAL PLANNING / FISCAL CONSTRAINT
- AIR QUALITY
- TRANSPORTATION IMPROVEMENT PROGRAM – TIP DEVELOPMENT AND TIP AMENDMENTS
- PROGRAM DELIVERY / PROJECT MONITORING
- PUBLIC PARTICIPATION PLAN
- TITLE VI, ADA, and ENVIRONMENTAL JUSTICE
- CONGESTION MANAGEMENT PROCESS
- INTELLIGENT TRANSPORTATION SYSTEMS (ITS)
- TRAVEL DEMAND MODELING
- TRANSPORTATION SAFETY PLANNING

TMA Certification Questions & SCAG **Responses**

ORGANIZATIONAL STRUCTURE AND BOARD MEMBERSHIP

Please describe SCAG's organizational structure. (Provide a copy of SCAG's current organizational charts.)

Please discuss the purpose, function, and membership of all committees (technical, policy, ad-hoc, standing, etc.).

Please discuss the make up of SCAG's Board. Please address the following questions in the discussion:

- Are all transit operators represented on the Board? Which are? How was it decided which operators would be represented on the Board?
- Are any Indian tribal representatives included on the policy board?
- Do all Board members have voting privileges?
- What is the voting structure of the MPO?

SCAG Response:

Please describe SCAG's organizational structure.

The Southern California Association of Governments (SCAG) is the largest Metropolitan Planning Organization (MPO) in the nation, representing 189 cities and the six (6) counties of Imperial, Los Angeles, Orange, Riverside, San Bernardino and Ventura (collectively referred to herein as "the SCAG region").

The affairs of the organization and its day-to-day operations are headed by SCAG's Executive Director. Since January 2008, Hasan Ikhata has served as SCAG's Executive Director. Mr. Ikhata is assisted by an executive management team comprising the following positions: Chief Counsel; Chief Financial Officer; Director of Administrative Services and Human Resources; Director of Government, Regional & Public Affairs; Director of Legislation; Director of Planning Methods, Assessment & Compliance; Deputy Director of Planning Methods, Assessment & Compliance; Director of Regional & Comprehensive Planning; and Deputy Director of Regional & Comprehensive Planning. The staff also includes managers for the various divisions in certain departments. In total, SCAG has approximately 108 permanent employees. Copies of SCAG's current Organizational Charts dated September 9, 2009 are attached in the Appendix as Exhibit 1.

In addition to staff, the organization is guided by the policy decisions of its various boards. Representatives from SCAG's member jurisdictions comprise SCAG's General Assembly, which meets on an annual basis. The main governing body of SCAG is its 83-member board known as the Regional Council. The composition of the Regional Council is described below. The Regional Council has four Officers (President, First Vice President, Second Vice President and Immediate Past President), who are elected annually. The Regional Council is assisted by the Executive/Administration Committee and three main Policy Committees as well as a number of subcommittees and task forces which are described in more detail in subsequent responses. A copy of SCAG's current Bylaws is attached in the Appendix as Exhibit 2.

Please discuss the purpose, function and membership of all committees (technical, policy, ad-hoc, standing, etc.).

General Assembly – Comprising the official representatives from each jurisdiction that is a member of SCAG, the General Assembly meets once a year to approve SCAG's General Fund Budget and annual dues assessment, and to consider proposed amendments to the SCAG Bylaws as well as resolutions initiated by member agencies or the Regional Council.

Regional Council – The Regional Council serves as the main governing board for SCAG. This 83-member board is responsible for approving the Agency's major plans, including the Regional Transportation Plan (RTP), and making policy decisions related to such plans. SCAG's Bylaws provide for membership on the Regional Council as follows: representatives from each of the six counties in the SCAG region, with Los Angeles County having two representatives; representatives of the 67 Regional Council Districts, which comprises the 189 cities in the SCAG region; the Mayor of Los Angeles as the City-At-Large representative; representatives from the five County Transportation Commissions in the SCAG region (Los Angeles County Metropolitan Transportation Authority, Orange County Transportation Authority, San Bernardino Associated Governments, Riverside County Transportation Commission; and Ventura County Transportation Commission); a representative from the Imperial Valley Association of Governments; a representative from the Tribal Government Regional Planning Board; and one representative representing the five Air Districts in the SCAG region. All members on the Regional Council must be elected officials, and serve two-year terms. Prior to the General Assembly, the Regional Council elects its Officers for the year. Regular meetings of the Regional Council take place monthly on the first Thursday of the month, except for the month of August. It should also be noted that the recently enacted SB 607 (Ducheny) has created the Imperial County Transportation Commission which shall serve as the successor agency to the Imperial Valley Association of Governments effective January 1, 2010. It is anticipated that the SCAG Bylaws will be amended next year to reflect representation from the Imperial County Transportation Commission on the Regional Council.

The Executive/Administration Committee – Membership of the Executive/Administration Committee (EAC) is comprised of the SCAG Officers, the Policy Committee Chairs and Vice Chairs, three members of the Regional Council appointed by the SCAG President, one ex-officio member representing the private sector appointed by the SCAG President and one Tribal Government representative. The EAC is a standing committee who makes policy recommendations to the Regional Council on matters pertaining to administration, human resources, budgets, finance, operations and communications. The EAC is also responsible for annual performance evaluation of the Executive Director. Regular meetings of the EAC take place monthly on the first Thursday of the month, except for the month of August.

SCAG has three major standing or permanent policy committees, as described below. The SCAG President appoints Regional Council members to one of the policy committees for two-year terms. Unlike the Regional Council, membership on the policy committees may include non-elected officials. Two additional Tribal Government representatives may serve on each of the policy committees.

Transportation Committee – The Transportation Committee (TC) studies problems, programs and other matters pertaining to mobility, transportation control measures and communications, and makes recommendations to the Regional Council. Major programs under the purview of the Transportation Committee are the RTP, Regional Transportation Improvement Program (RTIP), Aviation, Highway, Goods Movement, Transportation Finance and Transportation Conformity. Regular meetings of the TC occur monthly on the first Thursday of the month, except for the month of August.

Community, Economic and Human Development Committee – The role of the Community Economic and Human Development (CEHD) Committee is to study problems, programs and other matters pertaining to community, economic and human development and growth. This committee reviews projects, plans and programs of regional significance for consistency and conformity with applicable regional plans. The CEHD oversees the Growth Visioning and Growth Forecasting processes as well as the Regional Housing Needs Assessment (RHNA), the Intergovernmental Review effort and the monitoring and analysis of the regional economy. Regular meetings of the CEHD Committee occur monthly on the first Thursday of the month, except for the month of August.

Energy and Environment Committee – The Energy and Environment Committee (EEC) considers environmental and energy issues including air and water quality, solid and hazardous waste, habitat preservation, environmental justice and environmental impact analysis. The EEC is charged with reviewing the Program Environmental Impact Report (PEIR) for the RTP, and any related addendums to this PEIR for the RTP. Regular meetings of the EEC Committee occur monthly on the first Thursday of the month, except for the month of August.

In addition to the three policy committees, the Regional Council has established a number of standing subcommittees and task forces including the following noted below to provide more focused attention to specific policy or planning issues. It should also be noted that recently, the Regional Council has directed that some of the subcommittees and task forces be merged with their reporting committees in an effort to streamline the work of the Agency.

- Audit Subcommittee – This is a subcommittee of the Regional Council which provides guidance regarding internal and external audit issues and implementing Best Practices.
- Aviation Task Force – This task force comprised of elected officials and aviation professionals provides SCAG with technical and professional expertise on regional aviation issues. This task force reports to the Transportation Committee.
- Benchmarks Task Force – Elected officials and issue-expert representatives provide guidance on the development of performance indicators and benchmarks for the Regional Comprehensive Plan (RCP) and State of the Region Report. This task force reports to the CEHD Committee.
- Bylaws and Resolutions Committee – This is a committee of the Regional Council who reviews proposed amendments to SCAG Bylaws as well as proposed resolutions submitted by the Regional Council or member jurisdictions.
- Compass Partnership – The objective of the Compass Partnership is to serve as an extension of SCAG’s Compass Blueprint program in local communities by mobilizing private and non-profit interests to stimulate implementation of the 2% Compass strategy as well as monitoring and consensus building activities. This group reports to the CEHD Committee.
- Contracts/Audit/Personnel (CAP) Subcommittee – The objective of the CAP Subcommittee is to assist the Executive/Administration Committee and Regional Council in fulfilling policy guidance and oversight responsibilities for SCAG’s financial management, internal and external reporting, contracting process, and human resources programs administration. This group reports to the EAC.
- District Evaluations Subcommittee – This subcommittee evaluates the composition of the Regional Council Districts every five years in accordance with SCAG Bylaws. This group reports to the Executive/Administration Committee.
- Goods Movement Task Force – This task force reports to TC and provides policy guidance in developing a more efficient goods movement system including improvements to the ports, trucking and rail systems, intermodal terminal access and freight logistics.

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- Modeling Task Force- This task force serves as a technical and advisory forum to discuss regional modeling practices. The Modeling Task Force promotes quality modeling practices within the region by providing guidance to SCAG's Regional Modeling Program; coordinating the region's various modeling programs; and providing a forum to share model related information.
 - Data/GIS Task Force – This task force is comprised of representatives from cities, subregions, public agencies and one elected official. The Data/GIS Task Force provides SCAG with technical and professional expertise on data acquisition, management and sharing. Members of this task force are also encouraged to present demonstration of activities within their organization including implementation of Enterprise GIS, large data collection efforts, web based data/information dissemination and other related Data/GIS activities.
 - Integrated Policy Task Force – This task force is comprised of 40 Regional Council Members, including two ex-officio members, and has an objective of seeking to bridge the gaps between land use, transportation and natural resources planning. This task force reports to EEC.
 - Investment Subcommittee – A subcommittee of EAC, this committee provides standards and guidelines for the prudent investment of funds by SCAG in conducting its investment and cash management responsibilities.
 - Legislative/Communications and Membership Committee –This committee provides policy direction to legislative, communications and membership strategies, issues and materials. This committee reports to the Regional Council.
 - Plans and Programs Technical Advisory Committee (P&P TAC) – Comprised of staff from transportation planning or related agencies, this peer group ensures the technical integrity of the 2012 Regional Transportation Plan, including its assumptions, methodologies, and data used in developing the growth forecast, other underlying planning assumptions and proposed strategies, including those associated with the requirements of new state integrated planning law, SB 375. This committee also reviews and provides technical input to the performance analysis of Plan alternative strategies that meet federal and state requirements. Given that it serves as a peer group to SCAG staff, the P&P TAC does not report to any particular committee or board.

Please discuss the make up of SCAG's Board. Are all transit operators represented on the Board? Which are? How was it decided which operators would be represented on the Board?

As previously noted, SCAG is governed by an 83-member board known as the Regional Council. The Regional Council has four Officers (President, First Vice President, Second Vice President and Immediate Past President). The Regional Council is comprised of elected officials from 67 Districts, which consist of one or more cities in the SCAG

region of approximately equal population levels that have a geographic community of interest. Some member cities are assigned more than one district given their population size (Los Angeles has 15 District representatives, comprised of 15 City Council Districts and Long Beach has two District representatives.) Regional Council District members are elected by a quorum of at least two-thirds of the SCAG city members in each district. Please see above response for more information about the composition of SCAG's Regional Council.

SCAG's Bylaws provide for membership on the Regional Council for representatives from the five County Transportation Commissions (CTCs), two of which are also transit operators, Los Angeles County Metropolitan Transportation Authority (Metro) and Orange County Transportation Authority (OCTA). (However, Metro is currently not a member of SCAG and thus does not hold a seat on the Regional Council at this time.) Additionally, many of SCAG's member cities represented on the Regional Council also provide transit services, including the cities of Los Angeles, Torrance, Santa Monica, Riverside, and Simi Valley. Since the 1990s, SCAG has expanded the composition of the Regional Council from a 20-member board to its current 83-member board, with the understanding that the representatives from the County Transportation Commissions, IVAG, and cities that operate transit services would help to ensure that the Regional Council considers transit matters in its policy decision-making. The Commissions were added to the Transportation Policy Committee composition pursuant to 1993 amendments.

Are any Indian tribal representatives included on the policy Board?

Yes. The SCAG Bylaws provides that one representative from the Tribal Government Regional Planning Board, who shall be a locally elected Tribal Council member from a federally recognized Tribal Government within the SCAG region, serve on the Regional Council. In addition, there may be up to two additional representatives from the Tribal Government Regional Planning Board on each of the Policy Committees.

Do all Board members have voting privileges? What is the voting structure of the MPO?

Yes, all members on the Regional Council have the right to vote. There are no ex-officio (non-voting) members on the Regional Council. Each member of the Regional Council has one vote, and the affirmative votes of a majority of the Regional Council members present at the meeting constitute approval of the matter at hand.

AGREEMENTS AND CONTRACTS

Please discuss how SCAG, the State, and transit operators cooperatively develop the OWP, RTP, and TIP as required in 23 CFR 450.308(c) and 450.314 (a).

Please provide a copy of the latest agreements between SCAG and all other government agencies, including, but not limited to, those described in 23 CFR Section 450.310.

- Are there any problems with the contents of the agreements that would require updating?
- To what extent do existing agreements conform to regulatory requirements and how accurately do they represent the planning process as actually practiced?
- Please provide any agreements (and work products) pertaining to goods movement efforts including, but not limited to, SCAG's efforts with SANDAG and statewide.

SCAG Response:

Please discuss how SCAG, the state, and transit operators cooperatively develop the OWP, RTP, and TIP as required in 23 CFR 450.208© and 450.314 (a).

SCAG maintains cooperative memorandums of understanding with the State DOT and the transit operators separately to ensure that we are working cooperatively with these agencies and our planning processes are coordinated and collaborative. Organizationally, the decision flows within SCAG from appropriate task forces/committees to policy committees to Regional Council. Both state and the transit operators are represented directly at the task force level and indirectly at the policy committee and Regional Council levels. Preparation of these documents is vetted through SCAG's committee structure, which offers ample opportunities for these agencies to participate in the development. Furthermore, pursuant to SCAG's Public Participation Plan, the OWP, RTP, and TIP must be subjected to a rigorous public outreach and review process, which includes formal public hearings. Appropriate draft documents are mailed out to all stakeholders, including these agencies, with adequate lead time to comment during the public review and comment period. Input we receive through this process is considered and addressed in finalizing these documents.

Regarding outreach to the Transit Operators in SCAG's OWP development, SCAG's Public Participation Plan provides the following: "Mail letters to over 300 City Planners, Planning Directors and other Planning representatives within the SCAG region, including subregional coordinators, CTCs and transit operators, and encourage their feedback on the draft OWP. Notify them of the availability of the draft document on SCAG's website."

Please provide a copy of the latest agreements between SCAG and all other government agencies, including but not limited to those described in 23 CFR 450.301. Are there any problems with the contents of the agreements which would require updating? To what extent do existing agreements conform to the regulatory requirements and how accurately do they represent the planning process as actually practiced? Please provide any agreements (or work products) pertaining to goods movement efforts including, but not limited to, SCAG’s efforts with SANDAG and statewide.

Copies of the latest agreements between SCAG and other government agencies are attached in the Appendix as Exhibit 3. 23 CFR 450.310 provides that in order to carry out the metropolitan transportation planning process, a metropolitan planning organization (MPO) shall be designated for each urbanized area with a population of more than 50,000 individuals. MPO designation may be achieved by way of an agreement between the respective State Governor and the units of general purpose local government that together represent at least 75 percent of the affected population, or in accordance with the procedures established by applicable State or local law. In the case of SCAG, MPO designation is established by State law. Specifically, California Government Code §65080.5, subdivision c, provides that that the “multicounty designated transportation planning agency” shall prepare the regional transportation plan and the regional transportation improvement program in consultation with the county transportation commissions. SCAG is defined as the “multicounty designated transportation planning agency” under California Public Utilities Code §130004. Moreover, the “Memorandum of Understanding on Comprehensive Federal Transportation Planning between SCAG and the State of California through the Department of Transportation” dated June 22, 2005 (included as part of Exhibit 3), outlines SCAG’s MPO designation for the counties of Los Angeles, Imperial, Orange, Riverside, San Bernardino and Ventura.

Based upon its review, SCAG staff finds that the contents of the existing agreements are sufficient but may require an update to reflect that SCAG develops the RTP every four years now (instead of every three years) in accordance with the provisions in SAFETEA-LU. In addition, SCAG staff finds that the existing agreements conform to the regulatory requirements and to a large extent, accurately reflect the planning process as actually practiced. For example, the planning and coordination process described in the above-referenced Memorandum of Understanding is consistent with SCAG’s actual planning practices

Finally, copies of agreements pertaining to SCAG’s goods movement program are attached in the Appendix in Exhibit 4.

OVERALL WORK PROGRAM

Please discuss, in detail, how SCAG develops its annual OWP. Please address the following questions as part of the discussion:

- Who determines responsibilities for the program?
- How are OWP activities developed, selected, prioritized?
- 23 CFR Section 450.308(c) states that transit operators shall be a participant in the development of the OWP. How is transit involved in the makeup of the OWP?
- What safety data collection and analysis tasks are included in the OWP?
- How do the activities in the OWP relate to the goals and priorities identified in the SCAG RTP?
- How does the OWP provide for the development of performance measures that relate to the SCAG RTP goals and objectives?

SCAG Response:

Who determines responsibilities for the program?

How are the OWP activities developed, selected, prioritized?

23 CFR Section 450.308(c) states that transit operators shall be a participant in the development of the OWP. How is transit involved in the makeup of the OWP?

Development of SCAG's Overall Work Program (OWP) begins with the creation of an OWP Development Schedule and its subsequent approval by the Regional Council. The adopted schedule meets the Caltrans guidelines and deadlines for development of the OWP. This schedule allows sufficient time for review and approval before the start of the fiscal year in July. All projects are developed with a start date of July 1 or later.

To address the key issues facing the region and ensure that planning efforts are focused in the areas identified by the U.S. Department of Transportation, SCAG's Executive/Administration Committee confirmed the following strategic goals for SCAG's current FY 09/10 OWP, from which each work element is developed:

- Improve mobility and reliability of the goods movement system
- Reduce and mitigate congestion, integrating transportation/land use strategies
- Determine optimal strategies to finance the construction and maintenance of the system in year-of-expenditure dollars
- Expand security in transportation planning projects
- Achieve air quality compliance
- Enhance supportive information services and technical capabilities
- Monitor performance and effectiveness in achieving objectives.

All projects are developed to include a detailed project description and any previous accomplishments. A project scope is detailed and includes the timeline for completing each step and all products. Each step identifies the work to be performed by staff or a consultant.

Financial information is also detailed for each work element. This includes a fund source budget detailing the sources of funding and a funds application breaking out how the funds will be utilized. Budget detail by fund source is identified for each project as well. Reference tables of Program Revenues and Program Expenditures that are listed by work element are also included in the document.

SCAG's management reviews all project proposals and prioritizes them to ensure all core MPO activities are covered and are in compliance with Federal and State laws. All other proposals that are not core activities are reviewed and prioritized according to the priorities established by the Regional Council. Each project is developed with a schedule and products that address one or more of the USDOT Planning Emphasis Areas.

During the OWP development process, all CTCs, Air Quality Districts, and Caltrans districts 7, 8, 11 & 12 are requested to submit their planning programs for inclusion in the final document. The interests of transit operators are considered in the OWP process as part of the submissions from the CTCs. SCAG also reviews the Caltrans grant award lists to ensure any projects awarded locally are included in the OWP.

In the first week in March, the Draft OWP is presented to SCAG's Regional Council for review and approval to release the document for a 30-day public comment period. At the same time, SCAG submits the Draft OWP to Caltrans Districts 7, 8, 11 & 12, Caltrans Headquarters, FTA and FHWA for their review and comment. The Draft OWP is placed on SCAG's website with an announcement of the public comment period.

In April, SCAG receives and responds to all comments. At that time, the draft OWP is finalized and includes changes based on comments received. The final document is approved by the Regional Council in May and distributed to Caltrans and FHWA for approval.

The OWP is developed based on the actual funds available for the coming year. The majority of the funds in the OWP are federal funds currently allocated by SAFETEA-LU. The other funds included in the OWP are from other special State and Federal grants that have been awarded, State Transportation Development Act (TDA) funds, and local funds. SCAG utilizes SAP as its accounting software, but is currently in the process of installing a new Financial Management Information System (FMIS) that uses the Microsoft base software and is more user-friendly. The FMIS, which is scheduled for implementation by July 1, 2010, is designed to monitor and track all agency finances.

What safety data collection and analysis tasks are included in the OWP?

WBS 10-010.190 -- Data Monitoring Analysis to Enhance Transportation Safety Security (around transit stations).

The planning project's goal is to assemble knowledge on rail transit station safety and security. Data and tools will be provided, including a station assessment web-based survey, online GIS that can guide information collection and analysis to mitigate the risks of crime and larger scale incidents within Southern California. Through this initiative transit and security experts will better understand the inextricable link between (a) transit stations and their surrounding communities (b) methods for mitigating conventional crime and larger-scale terrorist acts, and (c) transit planning and emergency preparedness.

WBS 10-010.169 (task 4) -- Update the regional non-motorized safety data, including the California Strategic Highway Safety Plan Implementation Program.

As part of this WBS, SCAG participates in the California Strategic Highway Safety Plan Challenge Area Teams, collecting accident data for all modes and helping to develop relevant action steps that can be incorporated into project submissions from subregions into the FTIP. Geodata that is being compiled by the University of California Institute of Traffic Studies for the SHSP may provide the ability to map accident clusters, benefiting SCAG's overall safety program. A unique aspect of this geodata is that it may help visualize the locations where children were killed or injured near education facilities, a significant benefit to the Safe Routes to School programs in Southern California.

How do the activities in the OWP relate to the goals and priorities identified in the SCAG?

2008 RTP identifies seven broad goals related to mobility, accessibility, safety, reliability, sustainability, productivity, environment, air quality, security and land use compatibility that mirror the eight federal planning factors. The plan further identifies policies and performance objectives that help us ensure we achieve those goals. SCAG's work activities identified through the OWP are designed to make sure that the RTP is being implemented, monitored and adjusted to keep it relevant and current. For example, one of the major activities identified in the current OWP is to conduct a comprehensive regional goods movement study that will allow us to develop a regional goods movement strategy that is implementable, achieves regional consensus and meets our goods movement goals as well as emission reduction goals. All of the work activities associated with System Planning, Corridor Planning, Modeling, Performance Assessment and Monitoring, Goods Movement Planning, Transit Planning, Airport Ground Access work and High Speed Rail coordination work are directly related to implementing the goals and priorities identified in the SCAG RTP.

How does the OWP provide for the development of performance measures that relate to the SCAG RTP goals and objectives?

SCAG RTP is a performance based RTP and performance measures play a critical role in arriving at the most effective and efficient set of transportation investments in the region. Performance measures quantify the outcomes that are important to individuals, businesses and the region. They quantify regional goals and provide a way to evaluate progress over time. There were ten performance measures employed in the 2008 RTP. These measures directly relate to the broad goals and polices of the RTP. Key performance measures used in the 2008 RTP are Mobility, Accessibility, Reliability, Productivity, Safety, Sustainability, Preservation, Cost-Effectiveness, Environment and Environmental Justice. In order to make sure the performance measures are appropriate, relevant, and current, it is important to ensure that they are reviewed and updated periodically and at the same time the most current data is utilized. So, in our current OWP there are a number of work elements that are directly related to updating the performance measures as well as appropriate new data collection under System Planning as well as Modeling.

REGIONAL TRANSPORTATION PLAN

Please discuss the process SCAG followed in the development of the 2008 Regional Transportation Plan (RTP). Please provide a copy of SCAG's RTP development procedures. As part of the discussion, address the following questions:

- How was the RTP developed?
- How is land use addressed in the RTP?
- What type of relationship does SCAG have with the land use authorities for the planning area it covers?
- How is goods movement addressed in the RTP?
- What is the State's (Caltrans) involvement in the RTP development?
- How does the 2008 RTP assess the capital investment and other measures necessary to preserve the existing transportation system, as well as operations, maintenance, modernization, and rehabilitation of existing and future transportation facilities?
- Please describe the process for incorporating the programs and/or projects from the list below into the SCAG RTP:
 - Pedestrian walkways and bicycle transportation facilities
 - Strategic Highway Safety Plan
 - Transit safety and security processes
 - Congestion Management Process

SCAG Response:

How was the RTP developed?

The development of the 2008 RTP was based on an on-going collaborative and bottom-up process involving numerous parties, including the county transportation commissions, subregional councils of governments, transit operators, Caltrans, air quality districts, and other transportation stakeholders. At the technical level, these stakeholders provided input to SCAG staff as part of the Plans & Programs Technical Advisory Committee (P&P TAC).

Each of the six counties in the SCAG region has a transportation commission or authority, with the exception of Imperial County, where the Imperial Valley Association of Governments (IVAG) serves as the countywide transportation agency. These agencies are charged with implementing countywide transportation planning activities, allocating locally generated transportation revenues and, in some cases, operating transit services.

Additionally, there are 14 subregions within the SCAG region. These subregional organizations are generally groups of neighboring cities and communities (sometimes an entire county) that work together to identify, prioritize and seek transportation funding for needed investments in their respective areas.

The SCAG region also includes all or part of thirteen air quality non-attainment or maintenance areas in five air basins. Federal law requires that transportation and air quality planning are coordinated in these non-attainment and maintenance areas.

The SCAG region further includes all of Caltrans Districts 7, 8 and 12, and the Imperial County portion of District 11. Caltrans is a standing member of the P&P TAC, which is charged with ensuring the technical integrity of the 2008 RTP. Through Caltrans staff participation on the P&P TAC, Caltrans has an integral role every step of the way in the development of the RTP. Caltrans staff works directly with SCAG staff on the clarification of project scope, cost, and schedule on a regular basis. Caltrans input is also obtained through its direct work with the county transportation commissions in developing countywide transportation strategies, which are provided to SCAG as part of the RTP development process. Caltrans is also included on SCAG's Transportation Committee as a non-elected voting member.

Technical Approach

The first step in the technical approach to the 2008 RTP update, which was initiated over three years prior to the adoption of the RTP, was the review and update of the basic assumptions in the existing RTP, including the goals and objectives. It was important to validate the basic planning assumptions and to ensure that the goals and objectives still spoke to the region's needs, challenges, and aspirations.

The second step was to ensure that all the data, including growth forecast, revenue forecast, cost information, project scope changes, etc., were updated. It was critical to involve key project sponsors, such as the CTCs, local jurisdictions, Caltrans, and transit operators during this step.

The third step in the RTP development process involved taking the updated data and reassessing system deficiencies, bottlenecks, and chokepoints in the system to identify system improvement needs.

The fourth step targeted improvements and strategies, including growth strategies, in developing alternative scenarios to be considered and tested against performance standards for potential inclusion in the updated Plan. Evaluation of the alternatives was based on a set of performance measures established through a consensus process. Additionally, fiscal reasonableness, transportation conformity and programmatic environmental impacts of the alternatives were also assessed. The best-performing alternative was forwarded as the preferred alternative recommendation to SCAG's policy board.

A Draft RTP that documented the preferred alternative as the Plan was then released for public review and comments for a minimum of 45 days. Finally, all comments received and appropriate staff responses were documented prior to finalizing the Plan. The Draft Plan was adjusted as needed to address the comments and issues raised during this period before recommending its final adoption as the new RTP for the region.

Public Participation

A key component of the RTP development process was seeking public participation. Public input helped SCAG prioritize and address transportation needs in the region. SCAG sought participation and comment on the RTP from an array of stakeholders:

- Citizens
- Public transit users
- Pedestrians
- Users of bicycle transportation facilities
- Transportation agency employees
- Freight shippers
- Providers of freight transportation services
- Private providers of transportation
- Representatives of the disabled
- Nonprofit organizations
- Ethnic and minority groups
- Older and retired persons
- Special-interest nonprofit agencies
- Environmental groups
- Educational institutions
- Women's organizations
- Private sector

The RTP was developed in consultation with all interested parties, and SCAG ensured that they had a reasonable opportunity to comment on the contents of the RTP.

To ensure compliance with federal and state requirements, SCAG implemented a public involvement process to provide complete information, timely public notice and full public access to key decisions, and to support early and continuing public involvement in developing its regional plans. Since its inception, SCAG has engaged in a public involvement process in developing its regional transportation plans and programs. As a result of changes in SAFETEA-LU in 2005, SCAG has broadened its participation activities to engage a more extensive group of stakeholders in its planning and programming processes, as reflected in SCAG's Public Participation Plan adopted by the Regional Council in March 2007 and subsequently amended in October 2007. SCAG consulted with a range of interested parties as required by SAFETEA-LU in developing the public participation strategies, procedures and techniques noted herein. SCAG solicited comments and feedback from a diverse number of stakeholders through mailings, email correspondences, workshops, presentations, meetings, telephone communications and website postings.

By using the feedback and comments received on SCAG's Public Participation Plan, SCAG implemented the following techniques and strategies for RTP outreach:

- Development of an Integrated Inter-Departmental Outreach Team that encourages innovative outreach efforts and was comprised of staff from various divisions, including Communications, Member Relations, and Transportation Planning
- Development of presentation materials for the public in a variety of formats to reach broader audiences: translated materials into languages other than English; developed interactive PowerPoint presentations, fact sheets, surveys, brochures, and maps
- Enhancement of website capabilities that allowed SCAG to post all RTP-related information on its website to ensure that it was accessible and transparent to the public. The website is compliant with the 1990 Americans with Disabilities Act.
- Coordination of outreach efforts with other stakeholder organizations to maximize outreach opportunities
- Development of an outreach schedule that notified all individuals and groups of activities where SCAG would be presenting the RTP and encouraged attendance
- Supported multiple committees and task forces involving our partners, stakeholders, and interested groups that developed the key components of the Plan
- Held multiple public workshops before the release of the RTP to allow direct participation by interested parties
- Reached out to traditionally underrepresented and/or underserved audiences
- Considered comments received in the deliberations regarding proposed plans and programs
- Evaluation of public participation activities to continually improve the outreach process

RTP outreach consisted of three phases: Pre-Draft (February 2007 to November 2007), Post-Draft (December 2007 to February/March 2008), and Post-RTP adoption (March/April 2008 to July 2008). SCAG developed an RTP hotline and email address exclusively for RTP inquiries at 213-236-1960 and RTPinfo@scag.ca.gov .

In addition to these targeted outreach efforts, all regular and special meetings of the RTP task forces, the Transportation and Communications Committee (TCC) and the SCAG RC were publicly noticed and opportunities for public comment were provided. There were seven RTP task forces and key transportation subcommittees: Goods Movement, Transportation Finance, High-Speed Regional Transport, Aviation, Plans & Programs Technical Advisory Committee (P&P TAC), Regional Transit Technical Advisory Committee, and the Compass Blueprint Partnership. Also, federally required interagency consultation was done through the monthly meetings of the Transportation Conformity Working Group (TCWG). Specific public comments on the RTP were recorded and considered by SCAG in the development of the 2008 RTP.

**How is land use addressed in the RTP?
What type of relationship does SCAG have with the land use authorities for planning area it covers?**

Land Use

Integrated Growth Forecast

In February 2005, SCAG initiated the 2008 RTP Growth Forecast Update Process, now known as the 2008 “Integrated Growth Forecasting” process. The resulting Baseline Growth Forecast established the projected population, employment, households and housing units for use in the 2008 RTP.

The Baseline Growth Forecast sets the stage for a future regional growth scenario, as it ties housing to transportation planning, considering both needs simultaneously in communities throughout the region. This approach ensures that the resulting assumptions are consistent with planned transportation infrastructure. Based on a combination of recent and past trends, reasonable key technical assumptions, and existing and new local policy options, the Baseline Growth Forecast provides the basis for developing the land use assumptions at the regional and small-area levels which build the 2008 RTP Plan Alternative. A detailed description of the growth forecast methodology is available in the 2008 RTP Growth Forecast Report.

Advisory Land Use Policies and Strategies

The 2008 RTP Plan Alternative incorporates the Baseline Growth Forecast and the approved transportation network. However, in the rapidly growing SCAG Region, these trends could be tempered, and in some cases bolstered, by policies and strategies designed to improve future travel patterns and vehicle emissions. In response, SCAG adopted a set of advisory land use policies and strategies for future regional planning efforts and for localities to consider as they accommodate future growth. These policies and strategies were founded upon the principles developed through the regional growth visioning efforts begun in 2001.

- Identify regional strategic areas for infill and investment
- Structure the plan 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 a changing demand in types of housing
- Continue to protect stable existing single-family areas
- Ensure adequate access to open space and preservation of habitat
- Incorporate local input and feedback on future growth

These policies have evolved since 2001, when SCAG initiated one of the first large-scale regional growth visioning efforts in the nation. Through its Compass Blueprint Growth Vision, SCAG sought to integrate land use and transportation through a consensus-built regional plan. Compass Blueprint was developed with the goal of accommodating the six million additional residents expected by 2030, while improving mobility for all residents, fostering livability in all communities, enabling prosperity for all people, and promoting sustainability for future generations. The 2004 Growth Vision Alternative was approved and adopted by the Regional Council as the Preferred Growth Alternative for the 2004 Regional Transportation Plan. The Compass Blueprint principles that were established provide the foundation for the advisory land use policies and strategies adopted in the 2008 Regional Transportation Plan.

These advisory policies and strategies encourage changes to the urban form that improve accessibility to transit and create more compact development, which yields a number of transportation benefits to the region, including reductions in travel time, vehicle miles traveled, vehicle hours traveled, and vehicle hours of delay, as well as increased transit use and mode share. All of these effects lead to tangible air quality improvements.

SCAG's Compass Blueprint Program has become a model for turning regional vision into local reality. Since 2004, SCAG has used innovative planning tools, creative strategies and dynamic partnerships to expand its Suite of Services and Demonstration Project consulting services that are available to all local governments in the region, free of charge.

As a voluntary program, SCAG provides these cutting-edge tools, analyses and comprehensive planning services to cities that seek additional technical expertise or strategic planning in order to implement a plan, ordinance or program consistent with the Compass Blueprint Principles.

Popular tools in the Compass Blueprint Suite of Services include photo-morph and 3D video "fly-through" visualizations, a sophisticated "Tipping Point" return-on-investment tool that simulates a developer's pro forma for potential projects and the "Envision" GIS based land use scenario-building tool. Building upon the Suite of Services, Compass Blueprint Demonstration Projects combine public participation, design and financial analysis to produce local plans that respond to community interests and are market feasible, i.e., plans that will be adopted and realized because of their benefits to all stakeholders. Demonstration Projects range from parcel-specific zoning analyses to county-wide plans around transit stations, and include an array of services including tipping point and business functionality analyses, design charrettes and community workshops, housing prototypes and conceptual land use plans, parking studies, and transit-oriented development strategies.

With an ever-growing portfolio of completed, documented Demonstration Projects, an expanding Suite of Services, and significant improvements to existing tools, implementation efforts have seen sustained improvement since the Growth Vision was adopted. SCAG recently launched "Toolbox Tuesdays," a series of training seminars for

local planning staff through which they can learn the skills and software capabilities necessary to build their own in-house capacities for using the Compass Blueprint-developed tools. This transferability is a cornerstone of the implementation strategy. Demonstration Projects are scoped to be just that -- examples for others to emulate. The Compass Blueprint website and annual Awards Program event are other important vehicles for sharing lessons learned. Services have been sought through the Compass Blueprint program for over 50 sites in jurisdictions all over the region.

SCAG directly interacts with the land use authorities in the region primarily through the following avenues:

- **Growth Forecast:** In order to develop the baseline growth forecast, SCAG met with city staff from across the region to discuss city-specific long-range growth forecasts and assumptions contained within.
- **Compass Demonstration Projects:** As described in the above section, SCAG interacts closely with several cities through the Compass Demonstration Projects, supporting them and often working hand in hand as they implement plans, ordinances, or programs consistent with the Compass Blueprint Principles.
- **Regional Housing Needs Assessment (RHNA):** Through the RHNA, SCAG forecasts the need for housing within each jurisdiction (city and unincorporated county) during specified planning periods. Senate Bill 375 identifies a direct linkage between the land use and growth assumptions in the RTP (via the Sustainable Communities Strategy) and the RHNA.

How is goods movement addressed in the RTP?

Goods movement has critical and far-reaching impacts on our region's transportation system, economy, and public health. The goods movement sector of transportation is growing at a tremendous pace and will continue to do so over the time frame of the RTP. The San Pedro Bay Ports (Port of Los Angeles and the Port of Long Beach) forecast that by 2030 container volume could triple. Cross-border trade activity also contributes to the region's international trade growth, with the growth in the manufacturing industry in Mexico resulting in increasing truck trips through Calexico East in Imperial County by 77 percent between 1994 and 2005. Also, the Port of Hueneme plays an important role in facilitating the movement of goods. Approximately \$7 billion in cargo traverses through the Port annually, and trade-related activity generated by the Port contributes significantly to the local economy.

To continue to provide this critical service, a combination of federal, state, local and private investment is needed. Working with the Ports and county transportation commissions, all of whom were members of the Plans & Programs TAC, various goods movement investments were committed in the 2008 RTP. Specifically, the RTP calls for approximately \$13 billion in freight rail investments, nearly \$18 billion in a freight High-Speed Regional Transport (HSRT) system, and over \$5 billion in highway investments to enable the region to handle the dramatic growth in goods movement. Rail investments consist of additional mainline capacity, grade separations, and locomotive engine

upgrades. About half of the rail-related investments are for highway-rail grade separations, which reduce traffic congestion, improve safety, and reduce pollution. Highway investments include the first phase of a dedicated, toll clean technology truck lane system and truck climbing lanes. Additionally, the proposed alternative technology system for freight includes a shared guideway with passenger vehicles. Service would be operating between passenger intervals, effectively utilizing the available capacity of the system.

An essential element of improving the region's goods movement system is reducing its current and long-term impacts on public health and the environment. Accordingly, the 2008 RTP includes investments that integrate air quality mitigation into the goods movement system improvements. Substantial air quality benefits can be realized by accelerating fleet modernization with cleaner technologies.

Further, the Plan maximizes the utilization of the scarce land area near the ports, includes the development of inland port capacity, and has dedicated ground access systems that enable the region to protect communities and meet demand. Specific elements of this Plan are described in the following sections.

Port Access Improvements

Port access improvements include short-term initiatives to improve access to Terminal Island and to remove bottlenecks to truck movements. They include the replacement of the Gerald Desmond Bridge, SR-47 Truck Expressway/Heim Bridge replacement, I-110/SR-47 Connectors Improvement Program, and the SR-47/Navy Way Interchange. These projects are programmed over the short term in the 2006 RTIP.

To provide for the landside port access improvements in Imperial County, the 2006 RTIP includes the Brawley Bypass project, which is a four-lane expressway connecting SR-78 and SR-111. The completion of the project will provide continuity between the California/Baja California border to Riverside County, ensuring smooth and reliable movement of goods through the border.

Dedicated Lanes for Clean Technology Trucks

Over the past several RTP updates, the region has been exploring dedicated truck-lane facilities and continues to refine the concept of such user-supported corridors to improve the flow of goods. More recent effort has focused on adding dedicated truck lanes for clean technology vehicles along truck-intensive corridors in Southern California. Operationally, such a corridor would be aligned to connect freight-intensive locations such as the Ports, warehousing/distribution center locations, and manufacturing locations. These dedicated facilities would have fewer entrance/egress locations than typical urban interstates to smooth the flow of goods.

This proposal has the potential to relieve many of the negative truck impacts in Southern California such as recurrent delay, pavement deterioration, safety, emissions, and design

deficiencies. Dedicated truck lanes would also increase reliability in the freeway system. Despite these benefits, substantial financial constraints as well as environmental impact considerations could hinder project implementation. Recognizing these challenges, the 2008 RTP funds the I-710 segment as the first phase of a comprehensive system that addresses truck-related issues in the region. This segment includes roughly 78 lane-miles (two lanes in each direction) of dedicated lanes for clean technology trucks along alignments extending from Ocean Blvd. in Long Beach to the intermodal railroad yards in Vernon/ Commerce. This represents an investment of over \$5 billion.

The region's longer-term strategic vision would include an east-west corridor and the I-15 freeway, serving strategic distribution centers in Barstow. Major corridor studies have already been completed for I-710, SR-60, and I-15. An EIR/EIS and preliminary engineering are currently underway for I-710. The technical analysis for the 2008 RTP assumes the implementation of dedicated lanes accommodating clean technology vehicles along the I-710 corridor until a preferred alternative is identified by the EIR/EIS.

Regional Freight Rail Investment and Emission Reduction Package

Recent projections included in SCAG's Inland Empire Railroad Main Line Study suggest that the number of freight trains on most BNSF and UP lines will more than double between 2000 and 2025 in response to a tripling of container volumes at the San Pedro Bay Ports. Passenger train volumes are expected to experience similar volume growth.

The UP and BNSF mainlines east of downtown Los Angeles will reach capacity before the end of the decade and will need to be triple-tracked or even quadruple-tracked in some segments. Investments in the 2008 RTP include \$3.2 billion for mainline rail capacity improvements, \$6.0 billion to build an estimated 131 highway-rail grade separations east of downtown Los Angeles, and a total of \$3.8 billion for accelerating upgrades to cleaner diesel locomotive engines—namely, Tier 4 engines.

In March of 2007, the US Environmental Protection Agency (EPA) proposed new standards to reduce emissions from diesel locomotives: Tier 3 and Tier 4 exhaust emission standards for newly built engines with high-efficiency catalytic after-treatment technology. Tier 3 engines will be available in 2009 and the associated estimated reduction in emissions is less than 50 percent of current conditions. The reduction in emissions from Tier 4 engines is estimated at 90 percent of current conditions. The 2008 RTP assumes nearly \$2 billion in federal EPA funding to accelerate the deployment of Tier 4 engines in the region.

Most of the BNSF system south and west of Colton Crossing will need additional track by 2025, and several of these segments will require additional track as soon as 2010. By 2025 this line will require grade-separated crossings at junctions where the two railroads have lines crossing. North of Colton Crossing over the Cajon Pass to Barstow substantial additional mainline capacity will be needed by 2010 as well as new connections to the system. In the UP system, most of the Yuma line will require double-tracking by 2025

and the San Gabriel line may require double-tracking over major segments during the same time frame. Also by 2025, UP will require several grade-separated junctions.

Stakeholder agencies throughout the region have identified priority grade separations that were analyzed in the Inland Empire Railroad Main Line Study and it was determined that without additional grade separations, motor vehicle delay at grade crossings will more than triple between 2000 and 2025. Analysis of vehicle delay from high-priority grade separations shows that these could reduce growth in vehicle hours of daily delay (VHDD), cutting delay in half by 2025. This will reduce motor vehicle idling delay and associated idling emissions, and by increasing train speeds, will reduce train emissions through more efficient operations.

Alternative Technology-Based Goods Movement/Logistics

The region is also exploring new alternative technology-based systems that can provide greater throughput and reliability with near zero emissions (the emissions would be only those associated with electricity generation). A recent analysis carried out by the IBI Group considered the application of an HSRT system for the movement of containers (logistics and systems technology) to and from the San Pedro Bay Ports. This container movement system would provide a high-capacity, fast, and efficient method of moving containerized cargo from the Ports to an inland port facility in San Bernardino. The system capitalizes on the inherent savings of multiple uses on a single infrastructure by operating on shared alignments with the HSRT passenger system. The technology permits operation of HSRT freight vehicles on a shared guide way with passenger vehicles even during peak hour service. Freight vehicle trips can be interspersed with passenger trips while still meeting required passenger vehicle headways. Additionally, full utilization of the freight line can be achieved during the passenger system's off-peak hours. The deployment of the HSRT system would create value in associated components which could in turn contribute to the HSRT's total financial performance.

The connection for the HSRT system would begin at the Ports and join up with the IOS at a point just east of LAUPT. This alignment runs north-south and is assumed to follow a route parallel to the I-710/Alameda Corridor. After connecting to the IOS and other segments, the freight-only service would be interspersed with passenger service. Current estimates indicate that the HSRT container movement system is capable of moving over 9.2 million Twenty-foot Equivalent Units (TEUs) annually. The total freight component is estimated to cost nearly \$18 billion in nominal dollars.

Critical to the implementation of an alternative technology system, such as this HSRT system, the location of inland port facilities and associated costs need to be further evaluated. The development of inland ports served by the system would reduce truck VMT, lower emissions, and encourage efficient patterns of industrial development and land use.

What is State's (Caltrans) involvement in the RTP development?

Caltrans is involved in the development of the RTP every step of the way. First, Caltrans is well represented in key task forces that guide the development of RTP, such as the Plans and Programs Technical Advisory Committee (P&P TAC) and the Transportation Conformity Working Group (TCWG). Furthermore, Caltrans also has a seat on our key policy committee, the Transportation Committee (TC), as a non-voting ex-officio member. Caltrans also has a special role in overseeing the development, implementation and monitoring of SCAG's Overall Work Program (OWP). This role uniquely positions Caltrans in influencing SCAG's work activities, including those that are directly related to the development of the RTP. Caltrans also provides direct input on Highway Improvements and preservation needs for consideration in the RTP and comments extensively on the Draft RTP during the review period.

How does 2008 RTP assess the capital investment and other measures necessary to preserve the existing transportation system, as well as operations, maintenance, modernization, and rehabilitation of existing and future transportation facilities?

Over the decades, the region has invested hundreds of billions of dollars in our multimodal transportation system. The system is now aging and requires immediate attention. Preserving our assets is a critical priority of the RTP.

In a sense, the region must make up for past funding shortfalls. As discussed in Chapter II of the RTP, roadway expenditures have not kept up with demand over the last three decades. As a result, we have not properly funded roadway preservation needs. The recent passage of the Infrastructure Bond injected much needed funding to highway preservation. However, SCAG estimates that an additional \$30 billion is required to bring the system into a comprehensive state of adequate repair.

SCAG also estimates that an additional \$10 billion is required for arterials and transit preservation needs. The subsequent shortfall for highway, arterial, and transit preservation needs totals \$40 billion. Deferring maintenance only increases this shortfall over time.

Recognizing that every dollar expended today to address this shortfall would save much more in the future, the region committed \$8 billion of new funding to preservation in the 2008 RTP, thereby addressing at least 20 percent of preservation needs. As more funding becomes available, additional commitments will be made. These additional investments will ensure that over the next thirty years, our infrastructure will be in a better condition than it is today. This also means that user costs (e.g., vehicle maintenance costs) will decline compared to today.

SCAG will continue to work with its stakeholders, particularly county transportation commissions and Caltrans, to prioritize funding for preservation and maintenance.

Please describe the process for incorporating the programs and/or projects from the list below into SCAG RTP?

- **Pedestrian walkways and bicycle transportation facilities**
- **Strategic Highway Safety Plan**
- **Transit Safety and Security processes**
- **Congestion Management Process**

Non-Motorized Transportation

Bicycle transportation infrastructure has an important role in regional mobility and air quality improvements. Every automobile driver that switches to an alternative transportation choice (walking, bicycling, using transit) reduces air pollution, congestion, and the need for increasing roadway capacity, and, in the case of walking and bicycling, improves public health.

Bicyclist and pedestrian improvements are included in the RTP implicitly as part of many street maintenance and construction projects. The RTP investments and supporting policies summarized below all aim to maximize the benefits of these efficient modes of transportation.

1. Decrease bicyclist and pedestrian fatalities and injuries in the state to 25% below 2000 levels.
2. Increase accommodation and planning for bicyclists and pedestrians: The needs of non-motorized travel (including pedestrian, bicyclists and persons with disabilities) need to be fully considered for all transportation planning projects.
3. Increase bicycle and pedestrian use in the SCAG Region as an alternative to utilitarian vehicle trips: Create and maintain an atmosphere conducive to non-motorized transportation, including well-maintained bicycle and pedestrian facilities, easy access to transit facilities, and increasing safety and security. While pedestrian sidewalks are fairly well established in most areas, it is estimated that there are only 3,218 miles of dedicated bicycle facilities in the region, with an additional 3,170 miles planned.
4. Increase non-motorized transportation data: To make non-motorized modes an integral part of the region's intermodal transportation planning process and system, reliable data for planning are needed. Non-motorized transportation data needs include, but are not limited to, comprehensive user statistics; user demographics; bicycle travel patterns/corridors; accident mapping; bikeway system characteristics; and sub regional improvement projects and funding needs.
5. Bicyclists and pedestrians should always be included in general plan updates. SCAG also encourages the development of local Non-Motorized Plans. Also, Non-Motorized Plans that have been created or updated within the previous five years are eligible for bicycle transportation account (BTA) funds. SCAG can assist in the development of these plans through the Compass Blueprint Program.
6. Develop a Regional Non-Motorized Plan: SCAG will work with all counties and their cities to coordinate and integrate all Non-Motorized Plans from counties and

jurisdictions in the SCAG Region in a collaborative process, including interested stakeholders.

The RTP allocates over \$1.8 billion for non-motorized transportation.

Strategic Highway Safety Plan

The safety of the region's multimodal system is a critical priority for SCAG and Caltrans. The 2008 RTP continues the commitment to improve safety for the region. In 2007, the region fully funded highway collision reduction and emergency response needs, estimated at \$317 million and \$110 million, respectively. This was the only category that was fully funded. Activities within this category include the construction of median barriers and response to landslides.

Through 2035, the RTP forecasts expenditures of \$10 billion for safety-related projects and services. This is in addition to safety standards considered as part of every project design. The scope of this RTP goes beyond specific funding for safety preparedness or emergency response. It emphasizes the collaboration among SCAG, Caltrans, and their stakeholders to examine safety on a system basis so the region can use all the tools available to decrease traffic injuries and fatalities. The result of this collaboration, the California Strategic Highway Safety Plan, has been incorporated into the 2008 RTP. The SHSP identifies 16 challenge areas to reduce accidents, fatalities, and injuries, and SCAG has identified and proposed an appropriate regional response to each area.

Transit Safety and Security

In the 2008 RTP, SCAG identifies its potential role and responsibility in regards to the relationship between transportation and emergency preparedness. SCAG is committed to work with transportation operators to plan and coordinate transportation projects, as appropriate, with the Department of Homeland Security grant projects, to enhance the regional transit security strategy (RTSS).

In addition, SCAG is also committed to promoting various transit safety policies, such as the following:

- Transit operators should incorporate ITS technologies as part of their security and emergency preparedness and share that information with other operators.
- Aside from deploying ITS technologies for advanced customer information, transit agencies should work intensely with ethnic, local and disenfranchised communities through public information/outreach sessions ensuring public participation is utilized to its fullest. In case of evacuation, these transit-dependent persons may need additional assistance to evacuate to safety.

Congestion Management Process

To meet the federal Congestion Management Process requirements, SCAG and the county Congestion Management Agencies (CMAs) have come together to develop a Congestion Management Process for the region. Under California law, the Congestion Management Plans (CMPs) are prepared and maintained by the respective CMAs:

- The Los Angeles County Metropolitan Transportation Authority (LACMTA)
- The Orange County Transportation Authority (OCTA)
- The Riverside County Transportation Commission (RCTC)
- The San Bernardino Associated Governments (SANBAG)
- The Ventura County Transportation Commission (VCTC)

With the exception of small portions of Riverside and San Bernardino counties, all counties within the TMA are designated as ozone non-attainment areas. In addition, the entire South Coast Air Basin (SCAB) is designated as a carbon monoxide non-attainment area. SCAB covers the urbanized portions of Los Angeles, Orange, Riverside, and San Bernardino counties.

Federal funds may not be programmed in the carbon monoxide and ozone non-attainment areas of the Transportation Management Areas (TMAs) for any project that will result in a significant increase in single occupant vehicle (SOV) capacity unless that project is addressed through a CMS. In the SCAG region, the federally approved and conforming RTP functions as the associated Congestion Management System (CMS).

The CMPs interlink with the Air Quality Management Plan (AQMP) in several areas, but most significantly through the Transportation Control Measures (TCMs). Most TCM projects identified in the RTIP are designed to help relieve congestion at the local level. Thus, implementation of the AQMP helps local governments tackle congestion, which, in turn, reduces emissions from idling vehicles or the number of vehicles traveling on congested roadways, and also helps maintain the level of service standards. At the same time, the CMP process provides local governments a mechanism to contribute to the regional effort toward attaining the National Ambient Air Quality Standard.

Congestion Management Program

Each of the SCAG region's five CMAs develops a CMP for its respective county. The degree of urbanization varies from one county to another so the magnitude of congestion will also vary. The CMPs' efforts have been brought together on a region-wide basis and integrated into the SCAG regional planning process.

SCAG's Regional Council and the Regional Transportation Agencies Coalition ensure consistency between the county CMPs and SCAG's RTP and RTIP, through project implementation.

In 1995, SCAG and CMAs developed the following criteria to ensure consistency and compatibility between the regional transportation planning process and the county congestion management process:

- CMP consistency with the current RTP
- Interregional (inter-county) coordination between the CMPs goals and objectives
- Consistency between county-wide model / database and SCAG's model/database
- All regionally significant CMP projects are to be modeled and incorporated into SCAG's Regional Transportation Modeling System (network)

The sum of these criteria is that each county CMP will be responsive to the goals and objectives of SCAG's RTP. Compliance with the above criteria is essential, particularly for those CMP projects to be programmed into the SCAG RTIP.

All county CMPs share the same goal of reducing congestion and applying congestion relief strategies. However, there are different priorities in the selection of related strategies based on the needs of each county. Therefore, each county CMP differs in form and local procedure. By State statute, all CMPs perform the same functions outlined below and are consistent with the federal CMS requirements.

- Highway Performance - each CMA monitors the performance of an identified highway system. This allows each county to track how their systems, and their individual components, are performing in comparison to established standards, and how performance changes take place over time.
- Multi-Modal Performance - in addition to highway performance, each CMP contains an element to evaluate the performance of other transportation modes including transit.
- Transportation Demand Management (TDM) - each CMP contains a TDM component geared at reducing travel demand and promoting alternative transportation methods.
- Land Use Programs and Analysis - each CMP incorporates a program to analyze the impacts of local land use decisions on the regional transportation system.
- Capital Improvement Program (CIP) - using data and performance measures developed through the activities identified above, each CMP develops a CIP. This becomes the first step in developing the County TIP. Under State law, projects funded through the Regional Transportation Improvement Program (RTIP) must first be contained in the CMP.
- Deficiency Plan – despite the above stated efforts, when unacceptable levels of congestion occur, the respective CMP contains a set of “deficiency plan” provisions to address the problems. Deficiency plans may be developed for specific problem areas or on a county-wide-system basis. Projects implemented through the deficiency plan must, by statute, include both mobility and air quality benefits. In many cases, the deficiency plan captures the benefits of the transportation projects beyond the SCAG RTIP such as non-federally funded / non-regionally significant projects.

Information on the CMP activities, and resulting data, is updated on a biennial basis by each CMA and supplied to SCAG and the respective air quality management district.

A copy of the section from SCAG's 2008 RTP on the development of the RTP is attached in the Appendix as Exhibit 5.

A sample of the 2008 RTP Project List to document individual project cost information is attached in the Appendix as Exhibit 6.

FINANCIAL PLANNING/FISCAL CONSTRAINT

Please discuss the process used by SCAG to develop financial plans for the RTP and TIP. As part of the discussion, please address the following questions:

- What sources (the State, transit operator, etc.) does SCAG use to gather information for developing revenue estimates?
- If new revenue sources are required to demonstrate financial constraint of the RTP and the TIP, what strategies have been identified to ensure the availability of the new funds?
- Is the TIP financially constrained by year?
- Funding for projects included in the first two years of the TIP shall be committed or reasonably be expected to be available. How does SCAG assure itself that these funds are available or committed?
- How are contingency amounts incorporated into the estimate? Are contingency amounts based on total estimated costs, identified project risks, or some other variables?
- How does the financial plan illustrate adequate non-Federal revenue to cover AC projects?

SCAG Response:

What sources (the State, transit operator, etc.) does SCAG use to gather information for developing revenue estimates?

Development of the 2008 SCAG RTP Financial Plan entailed a multi-year collaborative effort involving SCAG staff and stakeholder agencies including the County Transportation Commissions staff. The financial plan includes a regional revenue model, expenditure forecast, along with documentation of the financial strategies, assumptions, and methodologies used for forecasting revenues and expenditures. This effort involved incorporating financial planning documents developed by local County Transportation Commissions and transit operators in the region where available and utilizing published data sources to evaluate historical trends and augment local forecasts as needed. Specific sources of published historical data include some of the following:

State Board of Equalization (BOE) Annual Report: State Sales and Use Tax Collections and Number of Permits, 1960-61 to 2004-05
BOE Annual Report: State Sales and Use Tax Statistics by County, 1997-98 to 2004-05
BOE Annual Report: Revenues Distributed to Counties from County Transportation Tax (i.e., TDA Funding)
BOE Annual Report: Revenues Distributed to Special Districts from Transactions and Use Tax
BOE Annual Report: Total Gas Tax Apportionments to Counties and Constituent Cities
Caltrans Motor Vehicle Stock, Travel and Fuel Forecast
California Transportation Commission -Adopted 2006 STIP
2004 SHOPP Program

2006 SHOPP Program
2008 SHOPP Program
California State Controller: Transit Operator and Non-Transit Claimants Annual Report
California State Controller: Transportation Planning Agency Annual Report
Federal Transit Administration, FY2007-FY2008 Apportionments and Allocations and Program Information
Foothill/Eastern Transportation Corridor Agency, Financial Statements, June 30, 2006
San Joaquin Hills Transportation Corridor Agency, Financial Statements, June 30, 2006
LeCG, Economic Benefits of Toll Roads Operated by the Transportation Corridor Agencies Executive Summary
2005 Transportation Corridor Agency Annual Report
Office of Management and Budget, Budget of the United States Government, Fiscal Year 2008 Budget (FY08) – Gross Domestic Product and Deflators used in the historic tables
California Department of Finance, California County Population Estimates and Components of Change by Year – July 1, 2000-2006, December 2006

For project cost evaluation, SCAG staff solicits detailed project cost estimates from project sponsors including the local County Transportation Commissions. A standardized project list template, developed by SCAG, was utilized for this effort and included fields to detail a project's scope, cost, benefits, priority (anticipated implementation timeframe), and funding picture, on an individual project level. Project list submissions were compiled into a comprehensive RTP project list and fully evaluated as follows:

1) Consideration of funding availability and source/type of funding; 2) level of regional support as may be applicable; 3) reasonableness of cost estimate using system level cost assumption ranges; and 4) adequate incorporation of cost escalation for estimates developed prior to 2007. Various factors were taken into account in evaluating projects, such as the variance in detail and level of accuracy of cost estimates depending on the level of planning/detailed engineering work as appropriate and availability of any additional information. Where public cost information was not available or not provided by implementing agencies, capital, operations and maintenance, as well as any associated revenue dollars were estimated for projects given descriptions as to location, extent of construction or service, and any other relevant information.

If new revenue sources are required to demonstrate financial constraint of the RTP and TIP, what strategies have been identified to ensure the availability of new funds?

Strategies identified to date in ensuring the availability of new revenue sources for the 2008 RTP are delineated in the table on the following pages:

**New Revenue Sources and Innovative Financing Strategies
(In nominal dollars, billions)**

Revenue Source	Description	Amount	Actions to Ensure Availability	Responsible Party
Value Capture Strategies	Various techniques assumed: formation of special districts, including Benefit Assessment Districts, Mello-Roos Community Facility Districts, as well as tax increment financing and joint development to provide gap financing for specific transit investments (Gold Line extension, Purple Line extension, and the HSRT system). SCAG also assumes one-time proceeds from the sale of Caltrans-owned property within the SR-710 tunnel vicinity.	\$3.7	Pursue necessary approvals for special districts by 2012 (Benefit Assessment Districts require majority approval by property owners; Mello-Roos tax requires two-thirds approval); work with private entities for joint development opportunities; also, work with Caltrans to utilize proceeds from real estate sales to partially fill funding gap for the SR-710 tunnel; pursue legislation to enable sales and to establish escrow account for the proceeds	MPO, transit operators, local jurisdictions, property owners along project corridors, developers, Caltrans
Local Option Sales Tax Extension	Half-cent sales tax measure extension for Imperial County—existing Measure D expires in 2010	\$0.8	Local sales tax measure was placed on November 2008 ballot and 40 year extension was voter approved.	Imperial County
Highway Tolls (includes toll revenue bond proceeds)	Toll revenues generated from the SR-710 tunnel, I-710 dedicated truck lanes, High Desert Corridor, and CETAP Corridor	\$22.0	Region was granted authority under AB 1467 (2006) to impose tolls and work with private entities for the financing of goods movement related facilities including the I-710 dedicated truck lanes; additional state legislative approval needed for the SR-710 tunnel	MPO, local county transportation commissions (LACMTA, SANBAG, RCTC), State Legislature
State and Federal Gas Excise Tax Adjustment to Maintain Historical Purchasing	Estimate equivalent to additional ten cent per gallon gasoline tax imposed by the state and federal government starting in 2012—extrapolation of historical trend	\$17.0	Congressional and state legislative approval	MPO, State Legislature, Congress

Revenue Source	Description	Amount	Actions to Ensure Availability	Responsible Party
Power				
Container Fees (includes container fee bond proceeds)	Charge imposed on containerized cargo moving through the Ports of LA/LB (includes railroad user-fees for rail capacity improvement program); fees are directly linked to specific goods movement projects	\$41.5	Negotiated by ports, shipping community, regional stakeholders or state legislative approval (upon passage of SB 974 or other legislative effort)	Ports, shippers, goods movement stakeholders (MPO, railroads, local county transportation commissions), State Legislature
Private Equity Participation	Public Private Partnership arrangement whereby a private entity designs, finances, builds, operates, and maintains a facility under a lease arrangement for a fixed period of time	\$4.4	Region was granted authority under AB 1467 (2006) to work with private entities for the financing of freight-related projects; additional state legislative approval needed for the SR-710 tunnel	MPO, local county transportation commissions, private consortium, State Legislature
Private Activity Bonds (PAB)	Interest savings from the issuance of tax-exempt private activity bonds	\$0.4 (included in container fees)	Work with railroads and other regional stakeholders to receive federal PAB allocation	MPO, freight railroads, local county transportation commissions, US DOT
U.S. Environmental Protection Agency (EPA) funding for clean freight rail technology	EPA subsidies to help mitigate locomotive emissions per the 2007 State Implementation Plan (SIP)	\$1.9	Work with railroads, AQMD, ARB and US EPA for federal clean technology funding allocation	MPO, freight railroads, AQMD, ARB, US EPA
Interest Earnings	Interest earnings from toll bond proceeds (High Desert Corridor, CETAP, SR-710 tunnel, and I-710 truck lanes)	\$0.4	See Highway Tolls	See Highway Tolls
Riverside County Measure A (Bond Anticipation Notes)	Short-term debt to help fund the CETAP Corridor in anticipation of the sale of Measure A revenue bonds	\$1.5	Issuance of debt subject to RCTC Board policy	RCTC
Transportation	The TIFIA loan program	\$0.9	Work with US DOT and	MPO, RCTC,

Revenue Source	Description	Amount	Actions to Ensure Availability	Responsible Party
Infrastructure Finance and Innovation Act (TIFIA) Loan	provides credit assistance for transportation investments of national/regional significance; TIFIA loan assumed for the CETAP Corridor		RCTC to evaluate applicability of the TIFIA loan program for the CETAP Corridor; further feasibility work necessary to assess traffic and revenue potential on CETAP Corridor	US DOT TIFIA Office
HSRT Passenger System (Private Contribution & User Fee)	User fee-supported initiative for HSRT system. Assumes private-sector development: design, finance, build, operate and maintain. See HSRT Report for further details	\$26.2	For the IOS: form JPA, finalize development of a comprehensive business plan; work with private entity to ensure commitment	MPO, private consortium, local/regional stakeholders

Is the TIP financially constrained by year?

Yes, the TIP is financially constrained by year. In accordance with federal requirements, the SCAG region’s TIP identifies funds in the first two years that are fully committed for the projects programmed. For the years thereafter, funds are identified as reasonably available and are projected/ extrapolated based on published data, input from County Transportation Commissions and other jurisdictions, as well as state and federal documentation on funding availability/ apportionment and allocations as appropriate.

Funding for projects included in the first two years of the TIP shall be committed or reasonably be expected to be available. How does SCAG assure itself that these funds are available or committed?

As indicated in the response to the previous question, SCAG staff works in coordination with appropriate local and state project sponsors to ensure funding commitment for projects programmed in the first two years. As may be needed, documentation of resource commitment including funding agency board reports, financial statements, and related letters of financial support are requested from project sponsors to ensure adequate commitment levels as appropriate.

How are contingency amounts incorporated into the estimate? Are contingency amounts based on total estimated costs, identified project risks, or some other variables?

Contingency amounts are incorporated into the financial plan based on evaluation of cost estimates and in consultation with the County Transportation Commissions/ project sponsors. Specifically, contingency amounts, as may be applicable, are provided by the

County Transportation Commissions, and these estimates are augmented where necessary based on further evaluation of cost estimates using such variables as historical expenditure by project type.

How does the financial plan illustrate adequate non-federal revenue to cover AC projects?

Any non-federal resources for financial planning purposes are identified in consultation with the County Transportation Commissions. As indicated in response to the question pertaining to overall revenue forecasting process, numerous documentation including historical publications are referenced for assessing availability of resources over the near-term and for forecasting revenues over the long-term.

AIR QUALITY

How does SCAG's OWP incorporate all of the metropolitan transportation-related air-quality-planning activities addressing air-quality goals, including those not funded by FHWA/FTA?

SIP

- How does SCAG coordinate the development of the RTP and TIP with SIP development and the development of TCMs?
- How do the RTP, TIP and SIP reflect this coordination?
- How is SCAG involved in establishing air quality budgets in cooperation with the State, regional, and local air quality agencies?
- How does SCAG ensure priority programming and expeditious implementation of TCMs from the SIP?
- Does the TIP describe progress in implementing required TCMs?

CMAQ

- What is SCAG's process for the prioritization and selection of CMAQ program funded projects?
- How are public, local transit operators and air quality agencies involved in the prioritization and selection of CMAQ program funded projects?

SCAG Response:

How does SCAG's OWP incorporate all of the metropolitan transportation-related air-quality-planning activities addressing air-quality goals, including those not funded by FHWA/FTA?

SCAG's metropolitan transportation related air-quality planning activities are grouped under the air quality and conformity program in the OWP:

- RTP Conformity
- RTIP Conformity
- Transportation Control Measure (TCM) Timely Implementation and Substitutions
- Project-level Conformity
- Interagency Consultation via the Transportation Conformity Working Group (TCWG)
- Air Quality Management Plans(AQMPs)/SIPs
- RTIP Guidelines for TCMs and transportation conformity
- Average Vehicle Occupancy Reports
- CMAQ Reports
- Participation in technical and policy committees/working groups related to air quality

How does SCAG coordinate the development of the RTP and TIP with SIP development and the development of TCMs?

The RTP, RTIP, and SIP development are all integrated. Socioeconomic forecasting and transportation activity data (through modeling) are incorporated into local AQMPs and SIPs. In turn, consistency of the RTP and TIP with the applicable SIP is ensured through the conformity process and interagency consultation. TCM determination procedure is codified in the 1994 SIP, and TCM projects are implemented through the TIP via criteria in the TIP Guidelines.

How do the RTP, TIP and SIP reflect this coordination?

The RTP and TIP conformity analysis includes regional emission analyses (emission budgets from SIPs), timely implementation of TCMs (determined by SIPs), interagency consultation, and public involvement. The same socioeconomic projections, regional transportation demand models, and emission model are used for each.

How is SCAG involved in establishing air quality budgets in cooperation with the State, regional, and local air quality agencies?

SCAG provides socioeconomic data and projections and transportation activity data and projections to air districts and the Air Resources Board. Subsequently, three agency meetings are held with local air districts, ARB, and SCAG to review data and determine how to apportion necessary emission reductions among sectors, including transportation. The emission budgets and related information are presented by SCAG to the Transportation Conformity Working Group. Additionally, SCAG participates in all AQMP/SIP working groups.

How does SCAG ensure priority programming and expeditious implementation of TCMs from the SIP?

Every two years during the process for developing a new TIP, the adequacy of funding for TCM projects is checked to ensure priority funding for TCM. As part of this process, SCAG reviews all TCM projects for timely implementation. If any TCM is not meeting the criteria, SCAG works with the responsible agency to overcome implementation obstacles or initiates TCM substitution procedures. SCAG also conducts on-going review of TCM projects during all TIP/RTP amendments. Additionally, timely implementation reports are regularly discussed at the TCWG.

Does the TIP describe progress in implementing required TCMs?

Yes. During the development of the TIP and its associated TCM timely implementation report, data is developed to describe progress in implementing each TCM project and is a prominent section of the TIP document.

What is SCAG's process for the prioritization and selection of CMAQ program funded projects?

SCAG has a current set of principles to guide the development of programming priority for Surface Transportation Program (STP) and Congestion Mitigation and Air Quality (CMAQ) funds. The principles were reviewed through the AB 1246 process and adopted by SCAG's Regional Council. They are used in the development of each county's STP and CMAQ programs.

1. Programming of STP and CMAQ funds are the primary responsibility of the respective County Transportation Commission or IVAG, consistent with Federal and State law, the RTP, and in conformance with applicable SIPs.
2. Implementation of Transportation Control Measures (TCMs) in the applicable SIPs is a high priority for allocation of STP and CMAQ funds. Cities and counties are eligible to utilize the STP and CMAQ funds for transportation demand management / transportation control measures and are so advised by the appropriate County Transportation Commission or IVAG.
3. County Transportation Commissions are responsible for documenting timely implementation of the TCMs for which they are project sponsors, and SCAG reviews all TCMs for timely implementation.
4. A local Surface Transportation Program shall be developed and administered within each county consistent with state implementing legislation. Local STP projects will be prioritized in each county by the County Transportation Commissions and IVAG consistent with SAFETEA-LU, which requires multimodal flexibility.

All Local STP programming decisions must be based on a discretionary process; formula apportionments are not acceptable. (Note: According to 23 CFR 450.324 (j), "Procedures or agreements that distribute sub-allocated Surface Transportation Program funds or funds under 49 U.S.C. 5307 to individual jurisdictions or modes within the metropolitan planning area by pre-determined percentages or formulas are inconsistent with the legislative provisions that require MPOs, in cooperation with the State and transit operators, to develop a prioritized and financially constrained TIP and shall not be used unless they can be clearly shown to be based on considerations required to be addressed as part of the metropolitan transportation planning process." Project selection, therefore,

must be by the use of objective criteria other than population alone, i.e., there must be some correlation between selection and measurable need).

County TIPs are submitted to SCAG and are incorporated into SCAG's Federal TIP. The Federal TIP is adopted by SCAG's Regional Council following the appropriate interagency consultation, public review and comments period, and following its presentation to, review and comments by the Regional Transportation Agencies' Coalition (RTAC). SCAG's adoption includes the associated conformity findings. If SCAG is unable to resolve identified conflicts, SCAG will adopt the components of the program which are possible to adopt and refer back to the respective county for reconciliation of those projects which present conformity conflicts. In the event the respective County Transportation Commission or IVAG is unable to reconcile the conflict in a timely manner, recommendations will be made by the Regional Transportation Agencies Coalition (RTAC).

How are public, local transit operators and air quality agencies involved in the prioritization and selection of CMAQ program funded projects?

Under state law, the County Transportation Commissions (CTCs) are responsible for project programming in the SCAG region. Each of the CTCs has a public process regarding selection and prioritization of projects, including the CMAQ program funded projects. SCAG and CTC also have a public process for developing the FTIP (see answer to the previous question).

Local transit operators are represented by the CTCs and the CTCs have a defined process for soliciting, selecting and prioritizing projects including the CMAQ program funded projects.

SCAG provides the CTCs with a list of TCM projects that must be given funding priority. The CTCs and air quality agencies are all represented in the Transportation Conformity Working Group where the TCM projects and the timely implementation of these projects are reviewed.

TRANSPORTATION IMPROVEMENT PROGRAM

TIP DEVELOPMENT

Please discuss the development of SCAG's 2008 TIP.

In the discussion, please address the following questions and provide copies of SCAG's TIP development procedures:

- How are STP projects selected for the TIP?
- How are CMAQ-funded projects selected for the TIP?
- How does SCAG assure that the TIP includes regionally significant projects whether or not they are federal projects?
- Did SCAG experience any significant delays in the planned implementation of major projects from the previous TIP?
- Are "lump sum" TIP projects grouped by function, geographic area, and work type using classifications under 23 CFR 771.117?
- How is public involvement incorporated in the TIP development process, and how has this involvement affected the content of the TIP?
- What opportunities are provided for participation by traffic, ridesharing, parking, transportation safety and enforcement agencies, commuter rail operators, airport and port authorities, appropriate private transportation providers, and city officials?

TIP AMENDMENTS

Please discuss SCAG's TIP amendment process. (Please provide a copy of SCAG's approved TIP amendment procedures.) In the discussion, please address the following questions:

- How does SCAG develop and monitor "lump sum" categories of projects? How are projects selected from the listing to proceed to construction or other phase of work?
- During the 2006 certification review, it was suggested SCAG review its current TIP amendment process and identify ways to reduce the number of TIP amendments. Please discuss the progress made in this area.

SCAG Response:

Please discuss the development of SCAG's 2008 TIP.

SCAG develops Federal Transportation Improvement Guidelines at the beginning of each FTIP cycle. These FTIP Guidelines are approved by the SCAG Regional Council.

The FTIP Guidelines contains the FTIP Adoption and Quarterly Amendment schedules, as well as policy and programming information for use by the County Transportation

Commissions and the Imperial Valley Association of Governments in the development of their respective programs. The Transportation Improvement Program questions contained within this certification are largely covered in the FTIP Guidelines. A copy of the approved 2011 FTIP Guidelines is included.

**How are STP projects selected for the TIP? And
How are CMAQ-funded projects selected for the TIP?**

SCAG has a current set of principles to guide the development of programming priority for Surface Transportation Program (STP) and Congestion Mitigation and Air Quality (CMAQ) funds. The principles were reviewed through the AB 1246 process and adopted by SCAG's Regional Council. They should be used in the development of each county's STP and CMAQ programs.

Programming of STP and CMAQ funds is the primary responsibility of the respective County Transportation Commission or IVAG, consistent with federal and state law, the RTP, and in conformance with applicable SIPs.

Implementation of Transportation Control Measures (TCMs) in the applicable SIPs is a high priority for allocation of STP and CMAQ funds.

Cities and Counties are eligible to utilize the STP and CMAQ funds for transportation demand management / transportation control measures and are so advised by the appropriate County Transportation Commission or IVAG.

County Transportation Commissions are responsible for documenting timely implementation of the TCMs for which they are project sponsors, and SCAG verifies the timely implementation of TCMs.

A local Surface Transportation Program shall be developed and administered within each County consistent with state implementing legislation. Local STP projects are prioritized in each county by the County Transportation Commissions and IVAG consistent with SAFETEA-LU which requires multimodal flexibility.

All local STP programming decisions must be based on a discretionary process; formula apportionments are not acceptable. (Note: According to 23 CFR 450.324 (j), "Procedures or agreements that distribute suballocated Surface Transportation Program funds or funds under 49 U.S.C. 5307 to individual jurisdictions or modes within the metropolitan planning area by pre-determined percentages or formulas are inconsistent with the legislative provisions that require MPOs, in cooperation with the State and transit operators, to develop a prioritized and financially constrained TIP and shall not be used unless they can be clearly shown to be based on considerations required to be addressed as part of the metropolitan transportation planning process." Project selection, therefore, must be by the use of objective criteria other than population alone, i.e., there must be some correlation between selection and measurable need).

County TIPs are submitted to SCAG and are incorporated into SCAG's Federal TIP. The Federal TIP is adopted by SCAG's Regional Council following the appropriate interagency consultation, public review and comments period, and following its presentation to, review and comments by the Regional Transportation Agencies' Coalition (RTAC). SCAG's adoption includes the associated conformity findings. If SCAG is unable to resolve identified conflicts, SCAG will adopt the components of the program which are possible to adopt and refer back to the respective county for reconciliation of those projects which present conformity conflicts. In the event the respective County Transportation Commission or IVAG is unable to reconcile the conflict in a timely manner, recommendations will be made by the Regional Transportation Agencies Coalition.

How does SCAG assure that the TIP includes regionally significant projects whether or not they are federal projects?

SCAG updates the FTIP Guidelines at the beginning of each FTIP update cycle. The "Transportation Conformity & Modeling Section" of the guidelines contains the definition and programming requirements for the County Transportation Commissions and the Imperial Valley Association of Governments. SCAG requires that the CTCs/IVAG identify and program regionally significant projects in the FTIP. The following is from the 2011 FTIP Guidelines, pages 43-49

Regionally Significant Projects

EPA conformity regulations require that the impacts of "Regionally Significant" projects be considered in the regional emissions analyses for regional transportation plans and TIPs regardless of funding sources (e.g. even 100% locally funded projects). EPA's use of the term "Regionally Significant" is intended to limit emissions analyses to those projects that would have significant impacts on regional travel, emissions and air quality. EPA defines the terms as follows:

"Regionally Significant means a transportation project (other than an exempt project) that is on a facility which serves regional transportation needs (such as access to and from the area outside the region, major activity centers in the region, major planned developments such as new retail malls, sports complexes, etc., or transportation terminals as well as most terminals themselves) and would normally be included in the modeling of a metropolitan area's transportation network, including at a minimum all principal arterial highways and all fixed guideway transit facilities that offer an alternative to regional highway travel."

For the purpose of regional transportation modeling and regional emissions analysis in the SCAG region, any transportation facility project meeting one of the following criteria is considered regionally significant:

Freeways

State Highways

Principle Arterial (Eight-lane divided roadway)

Major Arterial (county defined)

Routes that provide access to major activity centers such as amusement parks, regional shopping centers, military bases, airports and ports

Goods Movement Routes including both truck routes and rail lines (including rural agricultural routes that provide goods to the regions)

Intermodal transfer facilities such as transit centers, rail stations, airports, and ports

Fixed transit routes such as light and heavy rail, commuter rail, and express bus routes

Each county is required to identify regionally significant projects by entering the appropriate *program code* for each project in the SCAG database. The codes are listed based on the program code type (i.e. the first two characters). For example, capacity enhancing improvements are coded as “CA,” while Non-Capacity Improvements are coded “NC.” To better identify projects of Regional Significance and Goods Movement projects, please utilize the Regionally Significant (“X”), Non-Regionally Significant (“N”), and Goods Movement (“Y”) program codes (see “References” section of the FTIP Guidelines). A regionally significant, capacity enhancing grade crossing project should be coded as “CAX61.” If the grade separation project will improve access to and from a port, the project should be coded as “CAY61” to identify it as a goods movement project.

The program codes also assist SCAG staff in identifying projects that require modeling. Modeled projects will be pulled from the SCAG TIP database based on the regionally significant program codes. It is imperative that the Program Code field is accurate to ensure that projects are modeled. Specific project information is required for modeling purposes. Counties should enter this project information into the TIP database as part of the project description and/or comment section.

In addition to the modeling information, counties should identify other projects not covered in the project list. Examples of other regionally significant projects are goods movement routes, intermodal transfer facilities, and major fixed transit routes.

SCAG also models the type of projects listed below to provide accurate VMT estimates utilized in the regional emissions analysis. This information is to be submitted to the SCAG modeling section with the same deadline as the submittals for the FTIP cycle.

Major Arterial (Six-lane divided roadway)

Bus Routes (Express and local)

SCAG’s Modeling Task Force and Transportation Conformity Working Group function as the responsible forums for interagency consultation to discuss which minor arterials and other projects, in addition to EPA’s definition of regionally significant projects, shall be modeled. The specific project modeling criteria is located on pages 44 to 48 of the 2011 FTIP Guidelines.

Did SCAG experience any significant delays in the planned implementation of major projects from the previous TIP?

Project implementation is a long and complex process. Delays may occur for a wide array of reasons. For example, project delays may occur due to a delay in right-of-way acquisition; delays in the environmental document approval process; delays in project obligation; the FTIP amendment approval process; and reduced funding due to the economic downturn. These examples provide the major reasons impacting project implementation and these delays trigger FTIP Amendments to keep them moving forward. The County Transportation Commissions closely monitor their projects to expedite their implementation as expeditiously as possible through all of these delays.

Are “lump sum” TIP projects grouped by function, geographic area, and work type using classifications under 23 CFR 771.117?

SCAG’s FTIP contains Grouped Projects consistent with §93.126, 127 and 128 of the Transportation Conformity Regulations. The projects are for the most part listed by geographic area and classification. The State administered programs such as the Highway Safety Improvement Program (HSIP), and Safe Route to School (SR2S) programs are listed as region wide projects by classification. SCAG is currently actively participating in the California Federal Programming Group (CFPG) Grouped Projects Taskforce. The task force is developing a statewide Grouped Project template which will include a listing of projects that may be grouped. The task force is also developing the process for additions to the listing once approved by the federal agencies. The taskforce is expected to conclude by the end of the 2009 calendar year. Upon approval by the federal agencies the Grouped Project procedures will be implemented via the 2011 FTIP.

How is public involvement incorporated in the TIP development process, and how has this involvement affected the content of the TIP?

The TIP development is a tiered process in the SCAG region. Unlike other MPO’s in the nation, California state law created County Transportation Commissions in the SCAG region (as set forth in the Public Utilities Code Section 130000 et-seq. otherwise know as AB 1246). As such the County Transportation Commissions have responsibility to develop the short range TIP for their county.

Therefore, the public has the opportunity to comment on the TIP development through the County Transportation Commission processes via their respective committees and board adoption processes. This allows the public to provide comments to the County Transportation Commissions prior to board adoption of the County TIPs and the various Call for Projects.

The public also has the opportunity to comment through SCAG’s FTIP adoption process. SCAG’s Public Participation Plan outlines the public involvement process for FTIP updates and amendments. When SCAG is updating the FTIP, public notices are placed in newspapers throughout the region in English, Spanish and Chinese, as well as being made available in public libraries throughout the region. Three public hearings are held and a 30-day public review period is made available. The comments received during the FTIP public review period are usually project specific in nature.

What opportunities are provided for participation by traffic, ridesharing, parking, transportation safety and enforcement agencies, commuter rail operators, airport and port authorities, appropriate private transportation providers, and city officials?

Broadly, there are opportunities for participation by all of these agencies at three levels. First, in the process of developing the Regional Transportation Plan, which provides the broader framework for TIP development, all of these entities have opportunities to participate in one or more advisory groups that guide the technical and policy agenda for the plan update. Some of the advisory groups are Plans and Programs Technical Advisory Committee, Transit Technical Advisory Committee, Aviation Technical Advisory Committee, and Regional Goods Movement Steering Committee. Second, all of these entities have opportunities to work directly with their County Transportation Commissions (CTC) and IVAG, which are responsible for programming for their individual counties. Each of the CTCs and IVAG has their own stakeholder involvement processes to engage their stakeholders in shaping their respective county programs. Last, but not least, the FTIP update as well as amendments must go through a rigorous public review process pursuant to SCAG’s Public Participation Plan, which provides opportunities for all stakeholders as well as public at large to shape the TIP. FTIP public notices are noticed in newspapers throughout the region as well as being made available in public libraries throughout the region. Three public hearings are held and a 30-day public review period made available. The comments received during the FTIP public review period are usually project specific in nature. The comments received and issues raised through this public review process are appropriately addressed and responded to prior to finalizing the FTIP. Additionally, SCAG also prepares and updates the FTIP Guidelines, which set the ground rules for preparing the FTIP. The Guidelines also go through a rigorous public review process, thus, affording the stakeholders additional opportunities to influence the FTIP indirectly.

TIP AMENDMENTS

Please discuss SCAG’s TIP amendment process. (Please provide a copy of SCAG’s approved TIP amendment procedures.) In the discussion, please address the following questions: How does SCAG develop and monitor “lump sum” categories of projects? How are projects selected from the listing to proceed to construction or other phase of work? During the 2006 certification review, it was suggested SCAG review its current TIP amendment process and identify ways to reduce the number of TIP amendments. Please discuss the progress made in this area.

A copy of the FTIP Guidelines is included in the transmittal packet, and they contain the policy and programming procedures for FTIP updates and Amendments. The FTIP Guidelines include the Amendment Schedule, Administrative Modifications Criteria, and policy and procedures for Amendments and Administrative Modifications.

Amendments and Administrative Modifications in the SCAG Region are developed in close coordination, and collaboration with the County Transportation Commissions and IVAG. The process is a tiered process in that the County Transportation Commissions and IVAG develop their county Amendment and Administrative Modifications and transmit them to SCAG for consideration and action. These agencies are required to provide SCAG with the following information for all Amendment and Administrative Modifications:

Cover Letter

Narrative which describes all the project changes being requested

Project Listing

Financial Plan demonstrating financial constraint

Back-up documentation detailing project information and/or funding

The excerpt from the FTIP Guidelines on the schedule and basic amendment requirements is as follows, from page 16 of the 2011 FTIP Guidelines:

FTIP Amendment Schedule

FY 2011 Federal Transportation Improvement Program

Amendment #10-01	
September 27, 2010	County Submittal to SCAG
October 25, 2010	Public Review and Web Posting
November 23, 2010	SCAG submits amendment #09-01 to Funding Agencies

Amendment #10-02	
January 10, 2011	County Submittal to SCAG

February 25, 2011	Public Review and Web Posting
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March 28, 2011	SCAG submits amendment #09-02 to Funding Agencies
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Amendment #10-03	
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April 29, 2011	County Submittal to SCAG
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June 10, 2011	Public Review and Web Posting
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July 12, 2011	SCAG submits amendment #09-03 to Funding Agencies
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Amendment #10-04	
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September 16, 2011	County Submittal to SCAG
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October 28 , 2011	Public Review and Web Posting
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November 28, 2011	SCAG submits amendment #09-04 to Funding Agencies
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The following is from pages 19-22 of the 2011 FTIP Guidelines

PROCEDURES FOR FEDERAL STATEWIDE TRANSPORTATION PROGRAM (FSTIP) AMENDMENTS AND ADMINISTRATIVE MODIFICATIONS

The following procedures are applicable for processing modifications to the Federal Statewide Transportation Improvement Program (FSTIP). In accordance with the provisions of 23 CFR 450, Federal Transportation Improvement Programs (TIPs) developed by Metropolitan Planning Organizations MPOs are incorporated into the FSTIP and, as such, these procedures are also applicable to FTIPs.

In accordance with 23 CFR 450.216(c), projects in the recognized four-year period of the FSTIP may be delivered in any of the FSTIP program years subject to the project selection requirements of 23 CFR 450.222. Such modifications do not require approval, provided expedited project selection procedures have been adopted in accordance with 23 CFR 450.332 and the required interagency consultation or coordination is accomplished and documented. These changes should be accounted for through subsequent amendments or modifications to the FSTIP/FTIP's. Changes to illustrative projects or others that have been included for informational purposes only do not require administrative modifications or amendments.

1. DEFINITIONS:

Administrative modifications are minor changes to the FSTIP/FTIP that do not require a conformity determination, a demonstration of fiscal constraint or a public review and comment period. Administrative modifications can be processed in accordance with these procedures provided that they:

Revise a project description without changing the project scope of conflicting with the environmental document;

Revise the funding amount listed for projects or project phases. Additional funding is limited to the lesser of 25 % of the total project cost or \$5 million, and programming capacity has to be available in the FSTIP/FTIP prior to programming the modification, and documented in the support materials;

Cost decreases have no cap, however, the request to reduce the cost must originate from the project sponsor and include an explanation for the decrease;

Change sources of funds;

Change a project lead agency;

Program federal funds for Advance Construction conversion;

Change program year of funds with the 4-year FTIP/FSTIP, provided Expedited Project Selection Procedures are in place;

Split or combine individually listed projects, provided cost, schedule and scope remain unchanged;

Change required information for grouped or project listings; or,

Add or delete projects from grouped or project listings provided the funding amounts stay within the funding change guidelines above.

Administrative modifications are allowed for the re-programming of projects for which CMAQ funds were transferred to FTA in the prior FTIP and the FTA had not approved the grant yet. The project can be programmed in the current FTIP via administrative modification as long as there is no change in the original scope or cost, and the project needs to be programmed with “FTA 5307 (CMAQ Transfer Funds)” in the FTIP.

Administrative modifications may be used for programming FTA projects from the previous FTIP. The project can be programmed into the current FTIP via administrative modification as long as there is no change in the original scope or cost. Prior year funding must be differentiated from the current year funding by including narrative in the project description

(or in “CTIPS MPO Comments” section) stated the year, amount and nature of the prior year funds.

Make minor changes to the FTA funded grouped project listings. Minor changes to the fuel type of transit vehicles, MPO needs to take the change through its interagency consultation procedures to confirm that the change in scope is minor.

Amendments are all other modifications to the FSTIP/FTIP that are not Administrative Modifications.

PROCEDURES:

Administrative Modifications - Each MPO-approved administrative modification will be forwarded to Caltrans Division of Transportation Programming for approval on behalf of the Governor. If the MPO Board has delegated approval of administrative modifications to the MPO Executive Director, the MPO will need to provide copies of the delegation to Caltrans, FHWA, and FTA.

The MPO will provide copies of administrative modifications submitted to Caltrans for approval to FHWA and/or FTA for informational purposes. In addition the MPO will demonstrate in a subsequent amendment that the net financial change from each administrative modification has been accounted for. Once approved by Caltrans, on behalf of the Governor, the administrative modification will be incorporated into the FSTIP and no Federal action will be required. Caltrans will notify the MPO, FHWA and FTA of the approved administrative modification

Amendments - Amendments to the FSTIP must be developed in accordance with the provisions of 23 CFR 450.326 and/or 23 CFR 450.216, and approved by the FHWA and/or FTA in accordance with 23 CFR 450.218, 23 CFR 450.328 and the July 15 2004 MOU between FHWA-CA and FTA Region 9. Each MPO-approved amendment will be forwarded to Caltrans Division of Transportation Programming for approval on behalf of the Governor. To expedite processing, the MPO will also forward a copy of the submitted amendment to FHWA and FTA at the same time the amendment is sent to Caltrans. Once approved by Caltrans on behalf of the Governor, Caltrans will forward the amendment to FHWA and/or FTA, the amendment will be incorporated into the FSTIP. The FHWA and/or FTA approval letter will be addressed to Caltrans, with copies sent to the MPO.

DISPUTE RESOLUTION:

If a question arises on the interpretation of what constitutes an administrative modification or amendment, Caltrans, the MPO, FHWA and FTA will consult with each other to resolve the question. If after consultation, the parties disagree regarding what constitutes an administrative modification or amendment, the final decision rests with the FTA for transit projects and FHWA for highway projects.

SCAG STAFF REVIEW OF FTIP AMENDMENTS AND ADMINISTRATIVE MODIFICATIONS

Outlined below is a summary of the process used by SCAG to analyze FTIP amendments and administrative modifications:

Quick review of amendment submittals to insure that all components were transmitted by the county transportation commissions and IVAG;
Confirm that the County Financial Plan bottom line is in balance;
County amendment comparison reports are prepared;
FTIP staff starts amendment analysis;
Staff analyzes each field that changed in the proposed amendment;
Staff analyzes the changes to determine what impacts the changes may have on the:
Regional Emissions Analysis,
Timely Implementation of Transportation Control Measures, and
Conformity Determination;
Clear reason for cost increases over 25%;
Back-up documentation is provided for changes in funding;
Analyze new projects for a clear project scope and determine if project is:
Exempt from a the regional emissions analysis; or,
Project is consistent with the existing conformity determination;
Eligible for proposed funding;
Analyze proposed deleted projects to ensure that there is no impact to:
Regional Emissions Analysis,
Timely Implementation of Transportation Control Measures, and
Conformity Determination;
For changes or the addition of new projects determine that the proposed state (STIP, SHOPP, HBP) and/or federal funds are approved by the respective agency;
Analysis of County Financial Plan Summary;
Ensure that the county's narrative is consistent with the proposed changes in the TIP database;
FTIP staff coordinates with conformity staff for any Projects relying on the existing conformity determination; and
FTIP staff coordinates with conformity staff for TCM approval

Products Posted on the SCAG web site (<http://www.scag.ca.gov/rtip/>) for public review of formal amendments include:

County amendment comparison reports.
Conformity determination.
Conformity determination project listing.
SCAG Regional Financial Summary.
Public Notice for 15 day public review.

After approval by SCAG, amendments are forwarded to Caltrans for review and approval. After Caltrans approval, amendments are forwarded to FHWA and FTA for review and approval.

Note: Administrative modifications do not require formal posting.

The following is from page 28 and 29 of the 2011 FTIP Guidelines:

Public Participation Requirements

SAFETEA-LU has provided two definitions of amendments. The following is a summary of the different types of amendments identified by SCAG and FHWA for the FTIP and the public participation requirements for each amendment type.

Category 1. Administrative Modification

An administrative modification as defined under SAFETEA-LU, includes minor changes to project cost, schedule, scope, or funding sources. Please see the Procedures for Federal Statewide Transportation Program (FSTIP) Modifications for a complete definition of administrative modifications.

Category 2. Formal Amendment – Changes that do not impact the existing conformity determination.

The category of formal amendments may include project cost changes that are greater than 25 percent of the total project cost or \$5 million, whichever is higher. This amendment may also include adding or deleting projects that are exempt from regional emission analyses.

Category 3. Formal Amendment – Relying on the existing Conformity Determination. This amendment may include adding a project or a project phase to the program. This amendment category consists of projects that are modeled and are included in the regional emissions analysis.

Category 4. Formal Amendment – New Conformity Determination.

This amendment may include adding or deleting projects that are not currently included in the regional emissions analysis nor part of the existing conformity determination. This amendment may involve adding or deleting projects that must be modeled for their air quality impacts: significantly changing the design concept, scope; or schedule of an existing project.

SCAG in consultation, coordination and collaboration with its stakeholders, partners, and interested parties has agreed that the above amendments will be circulated as prescribed in the following table:

Public Hearing - Public Review & Comment Period Requirement

Amendment Category	Public Hearing Requirement	Public Review Period # of Days
Category 1. Administrative Modification	n/a	n/a
Category 2. Formal - Changes that do not impact the existing conformity determination	No	15
Category 3. Formal - Relying on existing conformity determination	No	15
Category 4. Formal – Requires a new conformity determination	Yes	30

FTIP Administrative Modifications and Amendments

SCAG will continue to process amendments that do not jeopardize the region’s conformity on a quarterly basis. The amendment schedule is found on page 18 of the 2011 FTIP Guidelines and will be adjusted during the FTIP development cycle as needed. To ensure a fiscally constrained program, financial plans are required for all FTIP amendments and administrative modifications. A financial plan is found on page 76 of the 2011 FTIP Guidelines.

Components for 2011 FTIP Administrative Modifications and Amendments must include the following:

- Narrative
- Completed Financial Plan
- Grouped Project Listings (only if a grouped project listing is being amended)
- Documentation for additions or changes to funding sources

For the narrative portion of the portion, a brief explanation must be given for each project. Examples of changes that need explanations are listed below:

- Fund source change -- Why did it change? CTC approval?
- Schedule advance – Were additional funds obtained? If so, how?
- Schedule delay – Was there a delay in getting approvals, materials, and/or other funding sources
- Cost Increase – Why did the project cost increase? Is the project still fully funded?
- Cost Decrease – Why did the project cost decrease? Is the project still fully funded?

The SCAG Regional Council approves with each update of the FTIP Guidelines the delegation of authority to the SCAG Executive Director the authority to approve Amendments and Administrative Modifications that meet the following criteria:

The following is from page 12 of the 2011 FTIP Guidelines

Amendment plus Administrative Modification Approval Procedures – SCAG Executive Director Authority

The Regional Council hereby grants authority to SCAG’s Executive Director to approve Federal Transportation Improvement Program (FTIP) amendments and associated conformity determination and to transmit to the state and federal agencies amendments to the most currently approved FTIP. These amendments must meet the following criteria:

- Changes that do not affect the regional emissions analysis.
- Changes that do not affect the timely implementation of the Transportation Control Measures.
- Changes that do not adversely impact financial constraint.
- Changes consistent with the adopted Regional Transportation Plan.

Amendments triggered by an RTP amendment must be approved by the Regional Council.

How does SCAG develop and monitor “lump sum” categories of projects?

The County Transportation Commissions and IVAG develop the Grouped Project listings within their jurisdictions through their FTIP adoption process or through the Amendment and Administrative Modification process. The agencies submit their projects via electronic listings through an FTIP update cycle or through the Amendment process for programming. These agencies monitor their projects as frequently as weekly for project obligation. Through the FTIP update cycle and/or the Amendment process the project sponsors identify which projects have been completed and provide the County Transportation Commissions/IVAG with this information. In turn the FTIP project is updated to reflect the updated program.

How are projects selected from the listing to proceed to construction or other phase of work?

The projects are approved by the County Transportation Commissions and IVAG through their processes. Projects included in the Group Project List are programmed in the year expected to be obligated. The projects are financially constrained and may proceed toward implementation as soon as they are ready to be obligated.

During the 2006 certification review, it was suggested SCAG review its current TIP amendment process and identify ways to reduce the number of TIP amendments. Please discuss the progress made in this area.

SCAG's FTIP Guidelines contain a schedule identifying a quarterly amendment schedule. While the agency works to curtail the number of amendments, the goal of the agency is to prevent the lapsing and loss of any funds to the region and to move projects toward implementation. It is difficult to curtail the number of amendment primarily due to the size and diversity of the SCAG region. During the current 2008 FTIP cycle, SCAG has approved a large number of Amendments. The reason for these amendments is due primarily to the 2009 American Reinvestment and Recovery Act of 2009, and the economic down-turn. Amendments are needed in order to keep projects on schedule and moving toward implementation. When the 2008 FTIP Cycle is compared with the 2006 FTIP cycle SCAG approved 13 Amendments during the entire life of the document, compared with the 2008 FTIP, in which thus far SCAG has approved 14 Amendments, and the 2008 cycle has not yet concluded. SCAG continues to work to reduce the number of amendments within the region, but circumstances beyond its control often prevent adherence to a quarterly schedule, such as has occurred with the 2008 FTIP cycle.

A copy of SCAG's TIP Development and Amendment Procedures: Guidelines for the 2011 Federal Transportation Improvement Program (CD) is attached in the Appendix as Exhibit 7.

PROGRAM DELIVERY / PROJECT MONITORING

Please discuss SCAG's project monitoring system and the overall program delivery of the previous TIP. Please address the following questions in the discussion:

- How does SCAG monitor the TIP to assure timely completion of projects?
- Are project status reports produced? If so, how often? Are such reports provided to project sponsors, FHWA, FTA, Caltrans?
- What are the primary causes of project delivery delays?
- How has SCAG addressed these delays?
- How can FHWA, FTA, and Caltrans assist SCAG (and local agencies) in addressing project delays?

SCAG Response:

How does SCAG monitor the TIP to assure timely completion of projects?

SCAG monitors the timely completion of projects through the "Project Status" field in the FTIP database that requires the County Transportation Commissions and the Imperial Valley Association of Governments (CTCs/IVAG) to update every project in an FTIP Amendment, FTIP Administrative modification, or FTIP Update. Additionally, SCAG staff discusses project status with the various CTCs/IVAG to ensure the timely completion of projects. SCAG also works with the CTCs/IVAG in monitoring projects that have possible lapsing funds and to ensure that these funds have been obligated. This is done through FTIP meetings with all of the CTCs/IVAG and regular consultations with each of the CTCs/IVAG.

Are project status reports produced? If so, how often? Are such reports provided to project sponsors, FHWA, FTA, Caltrans?

SCAG works in conjunction with the CTCs/IVAG to produce project status reports through the SCAG TIP database. In every FTIP update, amendment, or administrative modification, SCAG requires to the CTC's/IVAG to provide an update to the project status for every project as applicable. These results are analyzed by SCAG and are used to monitor the progress of projects that are active in the FTIP. In the SCAG TIP Database, there is a drop down menu to select the status of current projects. These selections are designed for highway and transit projects. Project status reports are not included in the public project listing reports. However, they are currently produced as part of project listing reports for FTIP Amendments, FTIP Administrative Modifications, and FTIP Updates which SCAG staff uses to analyze project changes. These reports are available upon request.

What are the primary causes of project delivery delays? How has SCAG addressed these delays? How can FHWA, FTA, and Caltrans assist SCAG (and local agencies) in addressing project delays?

SCAC surveyed the CTCs to find out the primary causes of project delivery delays in the SCAG region. As expected, there are numerous primary causes of project delivery delays throughout the SCAG region. Each of these issues is discussed below along with possible solutions to address these project delays:

1. Approval process of E-76 forms - Concurrent review of E-76 forms prior to federal approval of an FTIP Amendment or FTIP Administrative Modification occurred previously. However, some of the Caltrans districts are not applying this concurrent review process of FTIP Amendments and E-76 forms. As a result, the process to review E-76 forms only begins after the FTIP Amendment has been approved. This obviously results in project delivery delays. To address these concerns, SCAG requests concurrent review of FTIP Amendments and E-76 forms and that this should be uniformly followed by all Caltrans Districts.
2. Flexible fund transfer process - This process from Caltrans to FHWA in Washington DC is an inordinately lengthy process and was cited as a primary cause for project delivery delays. Because of this track record of lengthy delays in the flexible fund transfer process, some CTC's chose not to transfer ARRA funds to the transit agencies due to the historically lengthy process of transferring flexible funds from Caltrans to FHWA. This process should be streamlined and expedited to prevent future project delivery delays. SCAG is willing to work with the funding agencies to explore options to expedite this process.
3. Environmental document – The environmental document review process is lengthy due to multiple reviews between the project sponsor, Caltrans Districts and, if FHWA approval is required, the federal agencies. One way to streamline and expedite this process would be to have a boiler plate template for environmental documents and required studies which state exactly the type of information that needs to be included in these documents. This would prevent subjectivity on behalf of the reviewers which would serve to expedite the process. At the same time, a task force to examine these issues should be organized and come up with recommendations to expedite and make the environmental process more efficient.
4. Design – The CTC's also raised concerns regarding the design review process. Project sponsors are often asked to change designs to meet standards above and beyond published standards. For these reasons, the CTCs are requesting that the design review process adhere more closely to the published standards and that interpretation of these standards be more uniform in nature. This would serve to expedite the design review process and reduce any misunderstandings.
5. Right of Way – This is an issue due to the fact that property owners can delay acquisition, which is beyond the control of the project sponsor. Changes need to be made in either federal and/or state law which addresses the concerns of the project sponsor on how they may continue to move forward with their project due

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- to the unpredictable actions of property owners in the right of way acquisition process.
6. Expansion of the use of FTIP Administrative Modifications – SCAG and the CTCs are appreciative of the greater flexibility with the new FTIP administrative modification guidelines. SCAG staff participated in the previous FTIP Administrative Modification Taskforce and looks forward to the next update to start discussions for additional flexibility through Administrative Modifications. There are other areas that the taskforce wanted to pursue that will allow project updates through the FTIP Administrative Modification process.
 7. Funding Agency Obligation Process – The CTCs expressed concerns regarding the length of time it takes to obligate projects, such as the review time of obligation packages between agencies. They request review of the current process to simplify and reduce the amount of time to obligate projects. The SCAG region is available to assist in any discussions or taskforces created to address this issue.
 8. Concurrent state and federal review of FTIP Amendments – In the current FTIP Amendment approval process, Caltrans is required to review and approve the proposed FTIP Amendment before the federal agencies start reviewing the proposed FTIP Amendment. This current process adds additional time to the FTIP Amendment process and this may cause a delay in project delivery. SCAG requests concurrent review of FTIP Amendments by the state and federal agencies. This would serve to expedite the FTIP Amendment approval process and expedite project delivery.

PUBLIC PARTICIPATION PLAN

Section 450.316(a) of the metropolitan planning regulations requires that the metropolitan planning process include a public participation plan that is created in consultation with interested parties and provides complete information, timely public notice and full public access to key decisions; and to support early and continuing public involvement in developing plans and TIPs.

- Does the SCAG Public Participation Plan provide reasonable opportunities for interested parties to comment on the content of the metropolitan plan and TIP? Specifically, please address the SAFETEA-LU requirement to include:
 - Representatives of Users of Pedestrian Walkways and Bicycle Transportation Facilities
 - Representatives of the Disabled

For each document (OWP, RTP, and TIP), please address the following questions:

- For the 2008 RTP and TIP, how did SCAG seek out and consider the needs of those traditionally underserved by the existing transportation systems, including, but not limited to low-income and minority households? What issues were raised and how are their concerns documented? In what instances have comments raised during consultation resulted in changes to policy, plans, programs or projects? How does SCAG respond to comments when they do not result in a change? Please discuss and provide documentation on specific initiatives or activities undertaken by SCAG to these groups in the TIP development process.
- How are Indian tribal governments involved in the development of the OWP, RTP and TIP? How were federally recognized Native American populations included in the 2008 RTP and TIP process? Please discuss and provide documentation on specific initiatives or activities undertaken by SCAG to include Native Americans in the RTP and TIP development process.
- If the OWP, RTP, or TIP differs significantly from the one that was made available for public comment, has additional opportunity for public comment on the revised plan or program been made available?
- How are traffic, ridesharing, parking, transportation safety and enforcement agencies including the County Transportation Commission, commuter rail operators, airport authorities, private sector transportation providers and city officials involved in SCAG's planning processes?
- Please identify how SCAG ensures the meaningful access to programs and activities by LEP persons in accordance with Executive Order 13166*.
- Is the effectiveness of the public involvement process routinely evaluated as required by Federal regulations? If so, how?
- During the previous certification review in 2006, SCAG was asked to develop performance standards for its public involvement process and monitor them. Please provide information regarding the status of the Public Participation Plan's performance measures.

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- During the previous certification review in 2006, SCAG was encouraged to develop and publish a “Citizen’s Guide” or similar document to assist citizens in understanding and engaging in the regional planning process. Please provide information regarding this recommendation.

Consultation & Coordination:

Regulatory requirements for consultation are set forth primarily in 23 CFR 450.316(b-e) calling for consultation in developing the RTP and TIP.

- How was the consultation process developed and who participated in its development?
- Has SCAG consulted with any “non-traditional” agencies or groups during the development of policies, programs and/or plans?
- How is the process documented? Please provide a copy of this document.
- Please provide documents outlining consultation and coordination processes established to address good movements.

***Executive Order 13166** states: Recipients are required to take reasonable steps to ensure meaningful access to their programs and activities by LEP persons. While designed to be a flexible and fact-dependent standard, the starting point is an individualized assessment that balances the following four factors: (1) The number or proportion of LEP persons eligible to be served or likely to be encountered by a program, activity, or service of the recipient or grantee; (2) the frequency with which LEP individuals come in contact with the program; (3) the nature and importance of the program, activity, or service provided by the recipient to people's lives; and (4) the resources available to the recipient and costs.

SCAG Response:

Does the SCAG Public Participation Plan provide reasonable opportunities for interested parties to comment on the content of the metropolitan plan and TIP?

Specifically please address the SAFETEA-LU requirement to include:

- **Representatives of the Users of Pedestrian Walkways and Bicycle transportation facilities**
- **Representatives of the Disabled**

Yes, SCAG provides multiple formats and forums for public involvement and participation in the Public Participation Plan (PPP); including workshops, briefings, web posting and email response options. Specifically SCAG utilizes all its outreach efforts to seek public input on proposed safety improvements, strategies to reducing traffic congestion, ways to improve efficiency in freight movement, and innovations to increase intermodal connectivity.

In 2007, SCAG’s PPP was specifically amended to expand the list of Interested Parties as required under SAFETEA-LU, including among other parties, representatives of users of

pedestrian walkways and bicycle transportation facilities and representatives of the disabled (See pages 11-12 of the Public Participation Plan, attached hereto in Exhibit 8)

Specific to Pedestrian and Bicycle organizations and facilities, SCAG has approved and executed several independent and joint studies on pedestrian and bike patterns and how to incorporate these modes of transportation into the larger RTP and TIP. All of the bike and pedestrian studies conducted include outreach to bike and pedestrian organizations and interested facilities.

As for the disabled community, the majority of SCAG public meetings and workshops take place at ADA compliant locations with direct access to transit, and SCAG will accommodate persons who require a modification of accommodations in order to participate in public meetings.

For the 2008 RTP and TIP how did SCAG seek out and consider the needs of those traditionally underserved by existing transportation systems?

The public plays a key role in every aspect of SCAG's regional planning efforts. SCAG implements a public involvement process to provide complete information, timely public notice and full public access to key decisions and to support early and continuing public involvement in developing its regional plans. Furthermore, SCAG seeks to ensure that minority and low-income populations are involved in the regional planning process. The 2008 RTP Update was supported by a comprehensive public involvement process that complied with Title VI and the executive order on Environmental Justice and is fully documented in the 2008 RTP Appendix. Exhibit 8 in the attached Appendix illustrates SCAG's effort to translate and distribute flyers and key documents into Spanish and Chinese as well as outreach events in economically disadvantaged areas.

Goal 5 of SCAG's Public Participation Plan is to enhance the participation process including reaching out to those communities that have been underrepresented and/or underserved. As part of implementing Goal 5, the following strategies, procedures and techniques were established for the 2008 RTP cycle to reach out to traditionally underrepresented and/or underserved audiences (See Public Participation Plan, Appendix A, Section 2):

- *Worked with Member Relations staff and Subregional Coordinators to aid in identifying underrepresented segments of the region.
- *Coordinated with individuals, institutions or organizations to reach out to members in the affected minority and/or low income communities.
- *Explored new opportunities using state-of-the-art communications and for reaching remote audiences.

Citizen Review and Feedback – SCAG regularly circulates its Regional Transportation Plan (RTP), Regional Transportation Improvement Program (RTIP), Overall Work Program (OWP) and its other regional initiatives for extensive public review and feedback. SCAG regularly hosts conferences, workshops and other public forums where

the public is encouraged to attend and interact with SCAG decision-makers and policy experts. All comments are given staff consideration and for the RTP, a summary of comments and full responses to each comment are included as part of an Appendix to the final RTP.

How are Indian tribal governments involved in the development of the OWP, RTP and TIP?

One of the strategic goals of SCAG includes establishing a role for Native Americans in the Regional Planning process. A special effort is made to establish a common growth vision through Compass Blueprint planning initiatives to guide future growth in a way that respects our Indian reservations, sacred land and community development needs. Through targeted outreach to the tribal communities and the provision under SCAG's Bylaws providing for tribal representation on the SCAG Regional Council and policy committees, SCAG seeks to incorporate Native American populations and feedback into the regional planning process.

If the OWP, RTP or TIP differs significantly from the one that was made available for public comment, has additional opportunity for public comment on the revised plan or program been made available?

The underpinning of SCAG's philosophy is collaboration. When SCAG revises the OWP, RTP, or TIP, an amendment is circulated for a minimum 30-day public review and comment period and any comments received are addressed by staff before the draft OWP, RTP or TIP amendment is submitted for final approval by SCAG's Regional Council.

How are traffic, ridesharing, parking, transportation safety and enforcement agencies including County Transportation Commission, commuter rail operators, airport authorities, private sector transportation providers and city officials involved in the SCAG planning processes?

Through regional partnerships, committees and task forces SCAG seeks to engage all transportation organizations and agencies participation and feedback on regional planning and coordination of similar efforts. As an example, under the Transportation Committee, the Regional Council has the Aviation Subcommittee, the Transit Technical Advisory Committee, as well as task forces, including on aviation and goods movement.

Additionally, SCAG participates throughout the region, attending CTC board meetings to keep up to date on planning activities and operations and scheduling one-on-one meetings with specific CTC's or transportation agencies or providers to review plans and data.

Please identify how SCAG ensures the meaningful access to programs and activities by LEP persons in accordance with Executive Order 13166?

All SCAG initiatives, programs and associated collateral material are made available in other languages, including Spanish and Chinese (Mandarin). Outreach is also made to LEP persons, using native speakers on staff to conduct interviews with media outlets in other languages and to answer questions. Additionally, goals, strategies and procedures are included in the Public Participation Plan to address LEP requirements.

Is the effectiveness of the public involvement process routinely evaluated as required by Federal regulations? If so, how?

The process for putting together the Public Participation Plan is a very deliberative one, encompassing a diverse cross-section of input. SCAG is dedicated to improving the effectiveness of its public involvement process. For the 2008 RTP cycle, SCAG's Public Participation Plan included strategies to evaluate public participation activities, including for example, the following: "Continue to monitor outreach presentations and assess whether outreach efforts are being conducted throughout the region, including the outlying areas of the region." Subsequently, in 2009, SCAG opened new satellite offices in each county in the region, and is in the process of installing new video-conference equipment at these offices and allowing for webcasting of Regional Council meetings in order to increase participation throughout the region in SCAG's planning activities.

Additionally, SCAG interviews the persons involved and conducts surveys with partner agencies and community organizations, to evaluate the effectiveness of the outreach and collect feedback on ways to improve the public involvement program for the future. In 2007, the online public participation survey was conducted. This survey was shared with the Regional Council and used to inform the development of the updated Public Participation Plan. These survey results and report were incorporated into the Public Participation Plan Amendment No. 1, Appendix "B," "Summary of Online Public Participation Survey Results and Impact on RTP and RTIP Outreach."

During the previous certification review in 2006, SCAG was asked to develop performance standards for its public involvement process, to monitor them. Please provide information regarding the status of the Public Participation Plan's performance measures.

SCAG's Public Participation as amended in October 2007 sets forth five primary goals, with detailed procedures to obtain the goals, which are used to monitor its performance. SCAG monitors and tracks all public outreach, to ensure information is reaching across the region, to underserved communities, tribal interests, partner agencies and other interested parties.

During the previous certification review in 2006, SCAG was encouraged to develop a citizen’s guide or similar document to assist in citizen understanding and engaging in the regional planning process. Please provide information regarding this recommendation.

SCAG has a “Your Guide to SCAG” booklet, updated and distributed annually, with the goal of informing the public about SCAG’s structure and function as well as increasing understanding of the regional planning process and the different programs in which SCAG is involved. The 2009 update of “Your Guide to SCAG” booklet is attached in Exhibit 8 of the Appendix. Additionally all information is available and updated regularly on the SCAG web site.

Consultation & Coordination

How was the consultation process developed and who participated in its development?

SCAG developed the consultation process by conducting meetings and sending letters to over 200 affected agencies and organizations to seek input on the proposed strategies, procedures and techniques. SCAG also conducted an online survey to help SCAG determine how to improve its public participation techniques. This survey was emailed to 3,600 individuals, all of the contacts in SCAG’s contact database system with valid email addresses.

SCAG implemented the most popular recommendations on the consultation process including:

- Creating the 2008 RTP outreach contact list and allowing individuals to sign-up online
- Providing handouts and presentation materials online prior to a meeting
- Notifying contacts when materials are posted
- Providing hand-outs at meetings
- Allowing more time for debate and discussion of issues

Has SCAG consulted with any “non-traditional” agencies or groups during the development of policies, programs and/or plans?

SCAG took reasonable steps to include non-traditional agencies and groups in the development of policies, programs and plans. First, SCAG held two public workshops to solicit input on environmental mitigation measures. SCAG invited over 300 key contacts to the environmental mitigation workshops held on October 10 and 12, 2006. To initiate consultation with key contacts, SCAG first sent an invitation letter and attached a list of mitigation measures from the 2004 RTP EIR. The contacts included all the planning directors in the region as well as Federal, State, Tribal land use planning, natural resource, wildlife, environmental protection, historic preservation, conservation, and transportation agencies.

Furthermore, as part of the environmental justice outreach effort, SCAG compiled a list of key stakeholders to be contacted regarding RTP programs and policies. This list is comprised of 150 persons and organizations involved with the 2004 RTP as well as additional stakeholders, such as the South Coast Air Quality Management District's (SCAQMD) Environmental Justice Working Group, which included new groups such as local community advocates, air quality non-profit organizations, and unions. In addition to the new participants, SCAG's outreach also included advocacy groups, American Indian tribes, neighborhood coalitions, environmental and public health organizations, industry, business owners, and other interested parties.

On September 19, 2007, SCAG held an Environmental Justice Workshop for the 2008 Regional Transportation Plan (RTP) at the main office in downtown Los Angeles, with videoconferencing available at the Inland Empire SCAG office. Spanish translation was made available for participants. Workshop information was disseminated via electronic and paper notices mailed to the stakeholder list and follow up phone calls to organizations lacking email addresses. Additionally, SCAG's website was utilized to provide information to the public.

How is the process documented? Please provide a copy of this document.

SCAG documented the consultation process for the 2008 RTP in a supplemental report entitled, "Public Participation and Consultation." The report is attached for reference in the Appendix as Exhibit 9. Due to page length, the 700 pages of comments were not included. The full report is on SCAG's website at <http://scag.ca.gov/rtp2008/final.htm>.

Please provide documents outlining consultation and coordination processes established to address goods movement.

SCAG has developed multiple processes to address goods movement. First, during development of the 2008 RTP, SCAG held over 30 outreach events on goods movement and international trade. (Note: The Public Participation and Consultation Report includes information on the events in pages 24 – 34.)

Second, SCAG convened the Goods Movement Task Force, comprised of elected officials as well as stakeholder agency representatives. The goods movement stakeholders have direct input into SCAG's planning processes through this task force. Meeting materials are posted on SCAG's Goods Movement website at <http://scag.ca.gov/goodsmove/>

Third, SCAG also convenes the Steering Committee for the Comprehensive Goods Movement Study and Implementation Plan. The membership includes County Transportation Commissions, ports, Caltrans, California Air Resources Board, rail roads and the trucking industry. The Steering Committee reports to SCAG's Transportation

Committee and addresses issues such as air quality, the regional goods movement system and the refining of projects and strategies identified in the 2008 RTP.

Lastly, in January 2006, the U.S. Department of Transportation (DOT), U.S. Department of the Interior, U.S. Trade Representative, U.S. Fish and Wildlife Service, and U.S. Environmental Protection Agency committed to entering into negotiations on an MOU with regional (including SCAG) and state agencies for the purpose of formalizing a collaborative working relationship.

An outcome of these negotiations was the signing of the Southern California National Freight Collaboration Cooperation Agreement in October 2007. The MOU was signed by regional, state, and federal stakeholders including the U.S. EPA, U.S. DOT, U.S. Army Corps of Engineers, U.S. Fish and Wildlife Service, U.S. National Marine Fisheries Service, California Business, Transportation and Housing Agency (BTH), California EPA (CalEPA), California Resources Agency, California Air Resources Board (CARB), Southern California Association of Governments (SCAG), South Coast Air Quality Management District (SCAQMD), Los Angeles County Metropolitan Transportation Authority (LACMTA), Orange County Transportation Authority (OCTA), Riverside County Transportation Commission (RCTC), San Bernardino Associated Governments (SANBAG), Ventura County Transportation Commission (VCTC), Port of Los Angeles (POLA), Port of Long Beach (POLB), and Port of Hueneme. A copy of the signed MOU is attached.

The first meeting of the signatory agencies was convened in January 2008 at the Arnold and Mabel Beckman Center in Irvine, California. The meeting focused on the region's freight transportation, air quality and public health, and community impact challenges, and on development of a common understanding of the issues by all the signatories (the Collaboration). The meeting also included initial discussion of key tasks needed to carry out the objectives of the Southern California National Freight Gateway Collaboration Cooperation Agreement.

A copy of SCAG's Public Participation Plan is attached in the Appendix in Exhibit 8.

A copy of SCAG's 2008 Public Participation Plan and Consultation Report per 23 CFR 450.316(b-e) is attached in the Appendix as Exhibit 9.

SCAG's Documentation on Consultation and Coordination processes to address goods movement is attached in the Appendix as Exhibit 10.

TITLE VI, ADA, and ENVIRONMENTAL JUSTICE

Please discuss SCAG's efforts in addressing Title VI, ADA, and environmental justice throughout the transportation planning processes. Please address the following questions in the discussion:

- What Title VI and Environmental Justice measures, benchmarks, or criteria has SCAG developed? (Examples: travel time from home to work, number of low-income people who can travel from home to work in under an hour.) How were these measures developed? Who had input in their development? Does the RTP and TIP provide some measure of service across all modes?
- What aspects of the regional transportation system are identified as part of a regional analysis of benefits and burdens? How are benefits and burdens of the regional transportation system distributed across different racial, ethnic and economic groups?
- How are Indian tribal governments and related public agencies involved in the development of transportation plans and programs?
- How does SCAG compare investments across different modes? How are highway capital costs compared to public transit capital costs and costs to support walking and bicycling?
- What does SCAG do to ensure that their services are accessible to persons with disabilities?
- During the previous certification review in 2006, it was recommended that SCAG should apply, on a regional basis, an Environmental Justice measure for the impact of freight activities on low-income and minority communities as they are identified through regional Environmental Justice analysis. Please provide information regarding this recommendation. .

SCAG Response:

SCAG's Public Participation Plan, as amended in 2007, addresses Title VI, ADA and environmental justice requirements in the transportation planning and programming processes. For example, Goal 5 of the Public Participation Plan provides as follows: "Enhance the participation process including seeking out and considering the needs of traditionally underrepresented and/or underserved persons. Ensure that minority and low-income persons have meaningful access to the public outreach and involvement activities." The Public Participation Plan further provides that SCAG will provide assistance, if requested 14 days prior to the event, to people with disabilities, including individuals who are blind, have low-vision or are hearing impaired. On all SCAG public meeting agendas, the agenda states, "SCAG, in accordance with the Americans with Disabilities Act (ADA) will accommodate persons who require a modification of accommodation in order to participate in the meeting."

Additionally, pursuant to the Public Participation Plan procedures, SCAG will translate significant documents, including the Executive Summary of its Draft RTP into Spanish and Chinese (Mandarin), and provides language assistance, if requested 14 days prior to the event, to Limited English Proficient (LEP) Persons. For more details about SCAG's

activities to address Title VI, ADA and environmental justice requirements, please see the SCAG Public Participation Plan, attached in the Appendix in Exhibit 8.

SCAG ENVIRONMENTAL JUSTICE ANALYSIS

Regarding SCAG's efforts to address environmental justice throughout the planning process, SCAG developed a number of performance measures designed to assess overall equity. Performance measures provide a way to quantitatively assess the impact of the Regional Transportation Plan. This analysis, therefore, applies to TIP projects as well. Performance measures for Environmental Justice analysis include the following items:

- Accessibility to Employment Services
- Accessibility to Parks (Open space)
- Distribution of Plan Expenditures (Investments)
- Taxes Paid
- Travel Time Savings
- Auto Travel Distance Reductions
- Environmental Impact Analyses (Air Emissions and Noise)

These performance measures were intended to evaluate how low-income and minority communities fared under transportation investments. The criteria and methodology SCAG developed for those measures are described below:

Accessibility to Employment Services

Accessibility is a foundation for social and economic interactions. As an indicator, accessibility is measured by the spatial distribution of potential destinations, the ease of reaching each destination, and the magnitude, quality, and character of the activities at the destination sites. Employment accessibility is defined as the percentage of total employment opportunities that can be reached within 30 minutes during the peak period. SCAG has determined that access to employment is a reasonable proxy for access to all opportunities, since work trips make up a large percentage of total trips during commute periods. Socioeconomic and transportation data are held at the transportation analysis zone (TAZ) level. Employment accessibility is measured by three modes: 1) automobile; 2) local bus/rail via automobile; and 3) local bus/rail via walking.

Accessibility to Parks (Open space)

Public parks serve all residents. Numerous national parks, state parks, and local parks are all found within the SCAG region. Similar to the method in measuring job accessibility, park accessibility is defined as the percentage of park acreage reachable within a 30-minute off-peak travel time period via automobile; local bus/urban rail via automobile; and local bus/urban rail via walking. Because visits to parks are, by nature, leisure trips, off-peak travel time is used instead of peak travel time. For transit travel time, both the waiting time and the on board time are included. For the purposes of this analysis, three types of parks were considered: local parks; state parks; and national parks.

Distribution of Plan Expenditures (Investments)

One of the most prominent environmental justice issues concerns the transportation investment strategy, which can impact the transportation choices of low income and minority communities. As a performance measure, the allocation of transportation investments intends to evaluate whether the transportation investments are being allocated equitably. SCAG utilized a benefit assessment method that considered to what extent various socioeconomic groups were receiving value from existing and funded transportation investments. SCAG compared the total share of transportation funding borne by low-income households against other income groups. SCAG reported expenditure distribution in several ways. First, SCAG estimated the share of total RTP expenditures allocated to each category of household income. This was done by totaling expenditures on each type of mode (bus, HOV lanes, commuter/ high speed rail, highways/ arterials, and light/ heavy rail). These expenditures were then allocated to income categories based on each income group's use of these modes.

In the SCAG 2008 RTP, approximately 28 percent of Plan investments will be invested in modes predominantly used by the lowest quintile group, while 16 percent will be invested in modes used by the highest income category. Plan investments will be distributed more equitably on the basis of system usage by ethnic/racial groups.

Taxes Paid

Different funding sources (i.e. income taxes, property taxes, sales, fuel, etc.) can impose disproportionate burdens on lower income and minority groups. Sales and gasoline taxes, which are the primary sources of funding for the region's transportation system, were evaluated for the purposes of this analysis. The amount of taxes paid was analyzed to demonstrate how tax burdens fall on various demographic groups.

Travel Time Savings

Travel time savings was another performance measure SCAG analyzed to determine the share of benefits and burdens. Transportation modeling results were used with data on mode usage by income groups to determine travel time savings. Results were calculated for trips made by automobile (the most common mode of travel) and for trips made by transit. This analysis involved measuring the average travel time for both work trips and non-work trips. SCAG assessed the distribution of travel time savings that are expected to result from the Plan's implementation. Using the demographics of each TAZ, an estimate for the time savings for each income group was able to be measured. SCAG conducted this analysis for transit (i.e. bus and light rail) and automobile. These travel time savings were reported as a proportion of the total travel time savings for each mode.

Auto Travel Distance Reductions

Another way of estimating benefits is to calculate savings in terms of person miles traveled (PMT). These results indicate that the share of auto travel distance savings, like that for auto travel time savings, generally resembles the share of usage and taxes paid. This is another way of estimating the benefits of land-use strategies.

Environmental Impact Analyses (Air Emissions and Noise)

Minorities and low-income groups may be particularly vulnerable to the effects of air pollution. SCAG's air pollutant emissions analysis was based on emission estimates for pollutants that have localized health effects: carbon monoxide (CO) and particulate matter (PM). Analysis was also conducted for PM exhaust emissions from heavy-duty vehicles: an indicator for diesel toxic air contaminants. The results were computed based on the average emissions at the TAZ level and weighted according to the population of each ethnic or income group in that TAZ. SCAG's analysis of noise considers two sources: aviation noise (from aircraft at the region's airports) and highway noise.

To identify potentially impacted populations, the anticipated population within the 65 dB Community Noise Equivalent (CNEL) contour was calculated by the following steps:

1. Calculating the percentage of TAZs that would lie within a 65 dB CNEL
2. Assigning the SCAG projected population to the TAZ.
3. Applying the demographic breakdown of the TAZ as a whole to the population within the 65 dB CNEL contour.

What Title VI and Environmental Justice measures, benchmarks, or criteria has SCAG developed? How were these measures developed? Who had input in their development? Does the RTP and TIP provide some measure of service across all modes?

Please refer to the above description regarding criteria and methodology developed. Many groups have provided input, such as the South Coast Air Quality Management District's (SCAQMD) Environmental Justice Working Group. Key stakeholder groups included non-profit organizations, advocacy groups, American Indian tribes, neighborhood coalitions, environmental and public health organizations, industry, business owners, and other interested parties. Performance measures used in evaluating the Regional Transportation Plan alternatives were used across all modes. Key performance measures used that depict measures of service are mobility, accessibility, reliability, and safety. The analysis on the RTP alternatives apply to the RTP projects as well as to the RTIP projects, since the RTIP is consistent with the RTP.

What aspects of the regional transportation system are identified as part of a regional analysis of benefits and burdens? How are benefits and burdens of the regional transportation system distributed across different racial, ethnic and economic groups?

Please refer to the above performance measures description on Distribution of Plan Expenditures (Investments), Travel Time Savings, Auto Travel Distance Reductions, and Environmental Impact Analyses (Air Emissions and Noise).

How are Indian tribal governments and related public agencies involved in the development of transportation plans and programs?

As previously discussed, one of the strategic goals of SCAG includes establishing a role for Native Americans in the regional planning process. A special effort is made to establish a common growth vision through Compass Blueprint planning initiatives to guide future growth in a way that respects our Indian reservations, sacred land and community development needs. Through targeted outreach to the tribal communities and the provision under SCAG's Bylaws for tribal representation on the SCAG Regional Council and policy committees, SCAG seeks to engage tribal governments in its transportation planning process.

SCAG's public outreach and consultation activities are intended to assure that all members of the public have an opportunity to participate meaningfully in the planning process.

As part of the environmental justice outreach effort, SCAG compiled a list of key stakeholders to be used for environmental justice outreach efforts. This list is comprised of persons and organizations involved with the SCAG Regional Transportation Plan (RTP) as well as additional stakeholders, such as the South Coast Air Quality Management District's (SCAQMD) Environmental Justice Working Group. Key stakeholder groups included non-profit organizations, advocacy groups, American Indian tribes, neighborhood coalitions, environmental and public health organizations, industry, business owners, and other interested parties.

As part of the ongoing outreach efforts, a number of workshops were held. On September 19, 2007, SCAG held the first Environmental Justice Workshop for the 2008 RTP at the main office in downtown Los Angeles, with videoconferencing available at the Inland Empire SCAG office. Spanish translation was made available for participants.

How does SCAG compare investments across different modes? How are highway capital costs compared to public transit capital costs and costs to support walking and bicycling?

One of the most prominent environmental justice issues concerns the transportation investment strategy, which can impact the transportation choices of low income and minority communities. A disproportionate allocation of resources for various transit investments can indicate a pattern of discrimination.

As a regional MPO, SCAG aims to identify and address the Title VI of the Civil Rights Act and the environmental justice implications of its planning processes and investment decisions. As a performance measure, the allocation of transportation investments intends to evaluate whether the transportation investments are being allocated equitably. SCAG utilized a benefit assessment method that considered to what extent various

socioeconomic groups were receiving value from existing and funded transportation investments.

SCAG compared the total share of transportation funding borne by low-income households against other income groups. In this analysis, SCAG reported expenditure distribution in several ways. First, SCAG estimated the share of total RTP expenditures allocated to each category of household income. This was done by totaling expenditures on each type of mode (bus, HOV lanes, commuter/high speed rail, highways/arterials, and light/heavy rail). These expenditures were then allocated to income categories based on each income group's use of these modes.

SCAG analyzed the distribution of transportation expenditures based on mode usage information by income quintile. The analysis in SCAG's 2004 RTP showed that 57 percent of total public expenditures under the Plan would be on modes most commonly used by the lower three income quintiles, or the lowest 60 percent of the population, in terms of income. While the modes most commonly used by the lowest income group received the lowest transportation investment in the 2004 RTP, this is reversed in the 2008 RTP analysis.

Approximately 28 percent of Plan investments in the 2008 RTP will be invested in modes predominantly used by the lowest quintile group, while 16 percent will be invested in modes used by the highest income category. A total of 68 percent of transportation investments would go to modes likeliest to be used by the lower three income households in the 2008 RTP.

What does SCAG do to ensure that their services are accessible to persons with disabilities?

Identifying low-income and minority populations is necessary both for conducting effective public participation and for assessing the distribution of benefits and burdens of transportation plans and projects. SCAG also developed population distribution for both the mobility disabled and the elderly (age 65 and older). Both groups were analyzed in the 2008 RTP in terms of accessibility and mobility as described above.

During the previous certification review in 2006, it was recommended that SCAG apply on a regional basis an Environmental Justice measure for the impact of freight activities on low-income and minority communities as they are identified through regional Environmental Justice analysis. Please provide information regarding this recommendation.

Environmental pollution from the movement of freight is becoming a major public health concern at the national, regional and community levels. The distribution of freight involves an entire system of transportation facilities, including seaports, airports, railways, truck lanes, logistics centers, and border crossings. The distribution of goods

involves diesel-powered vehicles and equipment almost every step of the way, resulting in significant emissions of particulate matter (PM), nitrogen oxides (NO_x), hydrocarbons, and other air toxics throughout the process.

Since pollutant concentration levels could not be estimated, the geographic emissions distribution analysis presented here focuses on pollutants that tend to have localized effects which are generally proportionate to emissions – CO and the particulate matter (PM₁₀). The analysis does not cover pollutants that do not have localized effects proportionate to emissions, but are regionally distributed as a result of chemical interactions, photochemical reactions and meteorology (VOC, NO_x, and SO_x). In addition to not being based on concentrations, this methodology assumes that all residents in a given TAZ are equally exposed. Generally both CO and PM₁₀ tend to impact those located closest to the source of emissions. Thus, in a TAZ containing a roadway, those closest to the roadway would experience greater emissions and potential health impacts than those located further away. This difference, as it might exist within TAZs, is not addressed by this analysis - only differences between the aggregate demographic totals of different TAZs are addressed. Notwithstanding these assumptions, the methodology presents a reasonable gross measure of air quality impacts of mobile sources in the region.

CONGESTION MANAGEMENT PROCESS

As a TMA, SCAG is required to have a Congestion Management Process (CMP) that complies with the provisions of 23 CFR 500.109.

Please discuss SCAG's Congestion Management Process (CMP). Provide documentation of SCAG's CMP. As part of the discussion, please address the following questions:

- How has SCAG incorporated the provisions of 23 CFR 450.320 and 500.109 into its CMP? (Please discuss each provision of 450.320 and 500.109)
- How are the results of the CMP incorporated into the transportation planning process?
- How does SCAG assure that any project increasing single occupancy vehicle (SOV) capacity has resulted from a congestion management strategy prior to programming the project?
- How are travel demand reduction and operation management strategies provided for in the CMP?
- Explain how SCAG's planning process provides for periodic evaluation of the effectiveness of the congestion management strategies/projects.
- Is SCAG's CMP impacted by infill development?
- Are Federal funds programmed for any project that would result in a significant increase in carrying capacity of SOVs?
- If so, how does the CMP support this result, in complying with Federal regulations?
- Have travel demand reduction and operational management strategies been incorporated into the SOV project?
- What reasonably available strategies were incorporated to manage the SOV facility effectively? Have other travel demand reduction and operational management strategies been identified in the corridor, separate from SOV projects?
- How have these projects been analyzed and demonstrated through the CMP?

In order to evaluate whether or not the CMP requirement is being met, please select three capacity-increasing projects from the current TIP and submit to the review team the documentation to support that those projects were forwarded based on the CMP.

SCAG Response:

How has SCAG incorporated 23CFR 450.320 and 500.109 into its CMP (discuss each provision)?

There are many provisions under 23 CFR450.320 and 500.109. Each provision is delineated below with the appropriate response for each underneath.

23CFR450.320 c) The congestion management process shall be developed, established, and implemented as part of the metropolitan transportation planning process that includes

coordination with transportation system management and operations activities. The congestion management process shall include:

23CFR450.320 c) (1) Methods to monitor and evaluate the performance of the multimodal transportation system, identify the causes of recurring and non-recurring congestion, identify and evaluate alternative strategies, provide information supporting the implementation of actions, and evaluate the effectiveness of implemented actions;

In compliance with the sections of the Metropolitan Planning Regulations [23 U.S.C. 134 and 49 U.S.C. 5303 - 5305], SCAG's CMS process is comprised of the following Regional Congestion Management Elements:

- The Regional Transportation Plan (RTP)
- The counties' Congestion Management Programs (CMPs)
- SCAG's Federal Transportation Improvement Program (FTIP)

County CMPs are developed on a bi-annual basis and are reviewed for consistency with the RTP. Projects programmed in the FTIP must be consistent with the RTP and the applicable CMP.

County Congestion Management Programs

According to 23CFR 540.320 (f), State laws, rules, or regulations pertaining to congestion management systems or programs may constitute the congestion management process, if the FHWA and the FTA find that the State laws, rules, or regulations are consistent with, and fulfill the intent of, the purposes of 23 U.S.C. 134 and 49 U.S.C. 5303. The State of California requires each county to develop a congestion management program as required by California Government Code 65089.

In the SCAG region, the Los Angeles, Orange, Riverside, San Bernardino, and Ventura counties are contained within the Transportation Management Areas (TMAs). The County Transportation Commission in each county also functions as a Congestion Management Agency (CMA) under California regulations. Under California law (California Government Code, Section 65089), the Congestion Management Programs are prepared and maintained by the respective CMAs:

- The Los Angeles County Metropolitan Transportation Authority (Metro)
- The Orange County Transportation Authority (OCTA)
- The Riverside County Transportation Commission (RCTC)
- The San Bernardino Associated Governments (SANBAG)
- The Ventura County Transportation Commission (VCTC)

Each county's congestion management program shall include

- Traffic level of service standards (including a deficiency plan where required)
- A multi modal performance element, including performance measures
- A Travel Demand Element

-
- A program to analyze the impacts of land use decisions
 - A seven year capital improvement program

The Capital Improvement Programs are integrated into their TIP submissions to SCAG.

SCAG's Federal Transportation Improvement Program.

County Transportation Commissions have the responsibility under State law of proposing county projects, using the current RTP's policies, programs, and projects as a guide, from among submittals by cities and local agencies. The locally prioritized lists of projects are forwarded to SCAG for review. From this list, SCAG develops the FTIP based on consistency with the current RTP, inter-county connectivity, financial constraint and conformity satisfaction.

SCAG's FTIP (now called the Federal Transportation Improvement Program or FTIP) has a number of guidelines for County Transportation Commission submissions. In the 2011 FTIP Guidelines (page 6), SCAG recommends each County program the following Transportation Demand Management (TDM) and non-motorized goals for the 2011 FTIP submissions.

- ◆ Program public funds in the FTIP to help maintain the public sector share of the existing rideshare market and to increase the number of carpools
- ◆ Identify current dedicated funding sources and work with County Transportation Commissions and partners on identifying additional new funding sources.
- ◆ Encourage the addition of dedicated bicycle facilities where appropriate and safe.
- ◆ Encourage pedestrian and bicycle safety in all maintenance projects where new striping will be required or existing striping is to be replaced.
- ◆ Encourage the use of intersection control devices that detect bicyclists, particularly left turn signals.

In addition, the 2011 FTIP encourages Transportation Control Measures (TCMs) that overlap various TDM measures. These are located on Page 51 of the 2011 FTIP Guidelines.

Only those projects meeting the specifications defined in the prevailing State Implementation Plan are designated as TCMs. These categories define the region's transportation strategies and control measures to reduce air pollution emissions from on-road mobile sources and provide guidance on the types of projects that can be considered in the event that a TCM substitution becomes necessary.

23CFR450.320 c) (2) Definition of congestion management objectives and appropriate performance measures to assess the extent of congestion and support the evaluation of the effectiveness of congestion reduction and mobility enhancement strategies for the movement of people and goods. Since levels of acceptable system performance may vary among local communities, performance measures should be tailored to the specific needs of the area and established cooperatively by the State(s), affected MPO(s), and local officials in consultation with the operators of major modes of transportation in the coverage area;

As part of California Government Code 65089 (b)(2), each county in the SCAG region (exception is Imperial County) is required to have a performance element of their Congestion Management Programs. Performance measures include:

Los Angeles County

Highways and arterials

Level of Service (AM/PM peak Period)

Orange County

Highways

Level of Service

Riverside County

Highways

Two Tiered Level of Service (LOS)

locally established minimum traffic LOS - or – ceiling

CMP minimum LOS standard - or - "floor

San Bernardino County

Timely Access

Average Person Trip Travel Time

Mobility Index (average person trip travel time adjusted for transit, non-motorized, telecommuting)

Lost time (Actual travel time - normative travel time)

Goods Movement

Average travel speed between origins and destinations critical to goods movement

Reliability (variance between actual and anticipated travel times)

Cost Effectiveness

Total cost to expand, operate, and maintain system per:

person-miles traveled

person-hours saved

person-trip

Air Quality

Tons of criteria pollutant emissions from on-road and other transportation sources.

Cost per ton of criteria pollutant emissions reduced.

Ventura County
Highways
Level of Service
Annual Average Daily Traffic (AADT)
Transit
Total Annual Passengers (One Way Trips)
Total Annual Service Hours
Total Annual Service Miles
Passengers per Service Mile
Passengers per Service Hour

SCAG's performance measures are located in the "Performance Measures" supplemental Report to the 2008 RTP.

<http://www.scag.ca.gov/rtp2008/pdfs/finalrtp/reports/fPerformanceMeasures.pdf>

Relevant Performance Measures are summarized on the following page.

Performance Measure	Measure(s)	Performance Target	Calculation Data Sources
Mobility	Speed Delay	Improvement over base year	Travel demand model outputs AM peak, PM peak, Off-peak, Daily Link speeds, travel times, trips
Accessibility	% PM peak period work trips within 45 minutes of home Distribution of work trip travel times	Improvement over base year	Travel demand model outputs PM peak OD travel times OD person trips
Reliability	% variation in travel time	Improvement over base year	Highways – PeMS Transit - National Transit Database or triennial audit reports
Cost Effectiveness	Benefit to Cost (B/C) Ratio	Improvement over base year	Travel demand model outputs Revenue forecasts RTP project expenditures Other cost estimates
Productivity	% capacity utilized during peak conditions	Improvement over base year	Highways - PeMS Transit - National Transit Database or triennial audit reports
Sustainability	Total cost per capita to sustain system performance at base year levels	Improvement over base year	Sub-regional submittals Regional population forecast
Preservation	Maintenance cost per capita to preserve system at base year conditions	Improvement over base year	Sub-regional submittals Regional population forecast

23CFR450.320 c) (3) Establishment of a coordinated program for data collection and system performance monitoring to define the extent and duration of congestion, to contribute in determining the causes of congestion, and evaluate the efficiency and effectiveness of implemented actions. To the extent possible, this data collection program should be coordinated with existing data sources (including archived operational/ITS data) and coordinated with operations managers in the metropolitan area;

Federal regulations require establishment of a traffic monitoring system (TMS). The State of California Department of Transportation has been working with SCAG and local agencies to develop a TMS.

In 2002, SCAG developed the initial component of a Regional Transportation Monitoring Information System (RTMIS). The initial component includes the downloading of the Performance Measurement System (PeMS) data and access to the Highway Performance Monitoring System (HPMS) data. In fiscal year 2008-2009 SCAG began the process of enhancing the Regional Transportation Monitoring Information System. The objective is to implement a regional tool for evaluating effectiveness of regional strategies for moving people, goods, and services in relation to costs and time. This will assist SCAG to meet federal requirements detailed as part of the Safe, Accountable, Flexible, Efficient, Transportation Equity Act – A Legacy for Users (SAFETEA-LU). The integrated RTMIS will track performance measures of various modes of transportation including Highway, Transit, Aviation, Maritime, and Non-motorized. An integrated RTMIS will also improve efficiency, Accessibility, Data Quality and Sustainability. This system when fully implemented in July 2010 will give end users including County Transportation Commission, Transit Operators and other stakeholders the capability to go to a one stop web based application to monitor system performance instead of having to get information from disparate sources. Performance Measure categories that will be addressed through the system include: Mobility, Accessibility, Reliability, Safety, Effectiveness, Environmental Justice, Productivity and Sustainability.

SCAG, working in conjunction with the California Department of Transportation, is responsible for the coordination, training and collecting of data from each jurisdiction for the Highway Performance Monitoring System. The Highway Performance Monitoring System (HPMS) is a federally mandated inventory system and planning tool, designed to assess the nation's highway system. HPMS is used as a management tool by State and Federal governments and local agencies to analyze the system's condition and performance. Over the past several year SCAG, working with Caltrans, has collected information about every roadway segment on the federal aid system.

The California Department of Transportation and the California Highway Patrol have established various Transportation Management Centers (TMCs) in each region. Real time traffic information is gathered from many sources such as electronic sensors in the pavement, freeway call boxes, video cameras, 911 calls, officers on patrol, Caltrans highway crews, ramp meter sensors, etc. This merging of traveler information and intelligent transportation system data allows for a response to recurring and non-recurring congestion.

23CFR450.320 c) (4) Identification and evaluation of the anticipated performance and expected benefits of appropriate congestion management strategies that will contribute to the more effective use and improved safety of existing and future transportation systems based on the established performance measures. The following categories of strategies, or combinations of strategies, are some examples of what should be appropriately considered for each area:

- (i) Demand management measures, including growth management and congestion pricing;
 - (ii) Traffic operational improvements;
 - (iii) Public transportation improvements;
 - (iv) ITS technologies as related to the regional ITS architecture; and
- Where necessary, additional system capacity;

The CMPs prepared by the County Transportation Commissions in the SCAG region consider all of these categories of strategies in conjunction with the performance objectives described under the requirements under 23CFR450.320 c) (2) described above.

23CFR450.320 c) (5) Identification of an implementation schedule, implementation responsibilities, and possible funding sources for each strategy (or combination of strategies) proposed for implementation;

The CMPs identify implementation schedule, implementation responsibilities, as well as possible funding strategies or sources for each strategy. Each county's Congestion Management Plan is required to have a deficiency plan in place if levels of service standards deteriorate to a certain level. With some counties, the city where the failing facility is located is required to provide the deficiency plan. In developing their FTIP submittals to SCAG, each County Transportation Commission incorporates its Congestion Management Program's Capital Improvement Program into the submission.

23CFR450.320 c) (6) Implementation of a process for periodic assessment of the effectiveness of implemented strategies, in terms of the area's established performance measures. The results of this evaluation shall be provided to decision-makers and the public to provide guidance on selection of effective strategies for future implementation.

Each County Transportation Commission is required to update their CMP periodically pursuant to the regulatory requirements through an acceptable public review process. Both SCAG's RTP and FTIP are reviewed and adopted by our elected Regional Council. The updates of these documents are informed by the results of evaluation of effectiveness of CMP strategies.

23CFR450.320 (d) In a TMA designated as nonattainment area for ozone or carbon monoxide pursuant to the Clean Air Act, Federal funds may not be programmed for any project that will result in a significant increase in the carrying capacity for SOVs (*i.e.*, a new general purpose highway on a new location or adding general purpose lanes, with the exception of safety improvements or the elimination of bottlenecks), unless the project is addressed through a congestion management process

The 2008 RTP contains a number of projects to widen existing, or construct new, highway facilities adding general purpose lanes. While such projects increase the carrying capacity of

SOVs, each project was included in the 2008 RTP through a deliberate process that assessed the need and merit of these projects using the performance measures described earlier and addressing the requirements of the Congestion Management Process. The net effect of these projects is to improve mobility, safety and reliability, within the context of a conforming RTP.

23CFR450.320 (e) In TMAs designated as nonattainment for ozone or carbon monoxide, the congestion management process shall provide an appropriate analysis of reasonable (including multimodal) travel demand reduction and operational management strategies for the corridor in which a project that will result in a significant increase in capacity for SOVs (as described in paragraph (d) of this section) is proposed to be advanced with Federal funds. If the analysis demonstrates that travel demand reduction and operational management strategies cannot fully satisfy the need for additional capacity in the corridor and additional SOV capacity is warranted, then the congestion management process shall identify all reasonable strategies to manage the SOV facility safely and effectively (or to facilitate its management in the future). Other travel demand reduction and operational management strategies appropriate for the corridor, but not appropriate for incorporation into the SOV facility itself, shall also be identified through the congestion management process. All identified reasonable travel demand reduction and operational management strategies shall be incorporated into the SOV project or committed to by the State and MPO for implementation.

As part of the Congestion Management Process, each county is required to develop a travel demand component, as well as a deficiency plan for any deficient roadway identified in the plan under California Government Code 65089.

23CFR450.320 (f) State laws, rules, or regulations pertaining to congestion management systems or programs may constitute the congestion management process, if the FHWA and the FTA find that the State laws, rules, or regulations are consistent with, and fulfill the intent of, the purposes of 23 U.S.C. 134 and 49 U.S.C. 5303.

California Government Code 65089 requires each county in the SCAG region (Imperial County excepted) to develop and maintain a congestion management program.

§23CFR 500.109 CMS.

23CFR 500.109 (a) For purposes of this part, congestion means the level at which transportation system performance is unacceptable due to excessive travel times and delays. Congestion management means the application of strategies to improve system performance and reliability by reducing the adverse impacts of congestion on the movement of people and goods in a region. A congestion management system or process is a systematic and regionally accepted approach for managing congestion that provides accurate, up-to-date information on transportation system operations and performance and assesses alternative strategies for congestion management that meet State and local needs.

The spirit and intent of this provision is well reflected in the system management philosophy depicted by the mobility pyramid in the 2008 RTP as described earlier.

23CFR 500.109 (b) The development of a congestion management system or process should result in performance measures and strategies that can be integrated into transportation plans and programs. The level of system performance deemed acceptable by State and local officials may vary by type of transportation facility, geographic location (metropolitan area or subarea and/or non-metropolitan area), and/or time of day. In both metropolitan and non-metropolitan areas, consideration needs to be given to strategies that manage demand, reduce single occupant vehicle (SOV) travel, and improve transportation system management and operations. Where the addition of general purpose lanes is determined to be an appropriate congestion management strategy, explicit consideration is to be given to the incorporation of appropriate features into the SOV project to facilitate future demand management strategies and operational improvements that will maintain the functional integrity of those lanes.

California Government Code 65089 requires each county in the SCAG region (Imperial County excepted) to develop and maintain a congestion management program. As part of the Congestion Management Process, each county is required to develop a travel demand component, as well as a deficiency plan for any deficient roadway identified in the plan under California Government Code 65089.

How are the results of the CMP incorporated into the transportation planning process?

In the SCAG region the results of the CMP process are reflected directly in the Congestion Management Programs (CMPs) developed and adopted by each County Transportation Commission in the SCAG region. The CMPs, in turn, serve as direct input to the RTP and are reflected in the RTP by reference as well as by ensuring that the projects, programs and strategies identified through the CMP process are consistent with the adopted RTP and FTIP.

How does SCAG assure that any project increasing SOV capacity has resulted from a CMP strategy prior to programming the project?

Prior to programming a project that potentially increases SOV capacity, SCAG reviews the project for its consistency with the applicable CMP as well as the adopted RTP. SCAG assumes that such a project has gone through necessary review prior to its consideration for inclusion in the CMP as project or as a policy.

How are Travel demand reduction strategies and Ops management strategies provided for in the CMP?

California Government Code 65089 requires each county in the SCAG region (Imperial County excepted) to develop and maintain a congestion management program. Travel Demand reduction strategies and Operational Management Strategies are integral components of the CMP. They are integrated into the CMPs as policies as well as specific programs and strategies.

Explain how SCAG's planning process provides for periodic evaluation of the effectiveness of the CMP projects/strategies

As part of California Government Code 65089 (b)(2), each county in the SCAG region (with the exception of Imperial County) is required to have a performance evaluation element in their Congestion Management Program. Additionally, SCAG's planning process includes an implementation and monitoring component outlined in SCAG's RTP Implementation Plan which is updated periodically. Such evaluations are intended to inform the periodic updates of the CMP as well as the RTP. CMPs are updated every two years and RTP is updated every four years. Effectiveness of most strategies and projects identified in the CMPs can only be evaluated over long periods of time. So, evaluating them more frequently than the planning cycles will not necessarily yield better results.

Is SCAG's CMP impacted by infill development?

While SCAG does promote more compact infill developments that compliment transportation investments though its Compass program, it is voluntary program that may not yield noticeable results in the near term or even in mid term. Even under best of circumstances, such programs,

by their very nature, are expected to require a long lead time to have impact. So, SCAG has not yet undertaken a study to make this connection empirically. However, the theoretical connection is quite clear. So, it is quite likely that SCAG may undertake such a study in the future as this program matures and there are more empirical data readily available.

Are federal funds programmed for any project that will result in a significant increase in SOV capacity?

The RTP includes several mixed-flow projects that will increase the capacity of the region's highway system. The largest of these would be the addition of mixed-flow lanes on I-710 in Los Angeles County between the Port of Long Beach and Downtown Los Angeles. There are also mixed-flow projects on I-5 and I-405 in Orange County, SR-91 in Orange and Riverside Counties, I-15 in Riverside County, and SR-210 and I-215 in San Bernardino County. The RTP proposes to increase the regional mixed-flow freeway network from about 10,988 lane-miles (2035 Baseline) to 11,698 lane-miles (2035 Plan), an increase of 710 lane-miles or 6%.

The RTP includes significant investment in the HOV lane capacity of San Bernardino and Riverside Counties, on the I-10, I-15, and I-215 freeways. The RTP proposes to increase the regional HOV network from about 903 lane-miles (2035 Baseline) to 1,151 lane-miles (2035 Plan), an increase of 248 lane-miles or 27.5%.

Finally, the RTP includes expansion of highway capacity via HOT lanes on I-15 and SR-91 in Riverside County and toll lanes along the east-west High Desert Corridor in northern Los Angeles and San Bernardino Counties and along the SR-710 gap closure between I-10 and I-210 in Los Angeles County. Additional tolled truck-only lanes are identified along I-710 in Los Angeles County, I-15 in San Bernardino County, and along an east-west corridor between the I-710 and I-15 (specific route pending completion of SCAG's Regional Goods Movement Study and assumed for modeling purposes to be located along SR-60). The RTP proposes to increase the regional toll-lane network from about 553 lane-miles (2035 Baseline) to 1,409 lane-miles (2035 Plan), an increase of 856 lane-miles or 155%.

If so, how does the CMP support the result, in complying with federal regulations?

Major highway projects ultimately selected for inclusion in the final RTP are based on a deliberate and lengthy process that includes reviewing the CMPs developed by each of the TMA in the SCAG region. The development of the RTP starts with a thorough assessment of major gaps and system improvement needs identifying major choke points, bottlenecks and other severe congested conditions. In a region as large and complex as SCAG, the need to include projects that increase SOV capacity in our plans and programs is inevitable in order to address congestion. Only projects that are deemed to be absolutely necessary are identified and carried forward into the RTP through a combination of planning processes that include alternatives evaluation, RSTIS, conformity analysis etc.

Have travel demand reduction and operational management strategies been incorporated into the SOV project?

Alternatives analysis work that supports capacity enhancing projects is required to consider TDM/TSM as part of the alternatives to be considered. Such TSM/TDM strategies are incorporated into the locally preferred strategy and become a part of the capacity enhancing project.

What reasonably available strategies were incorporated to manage the SOV facility effectively? Have other TDM reduction and OM strategies been identified in the corridor, separate from SOV projects?

Using the I-15 Corridor Study as an example, the following strategies were considered:

- Additional ramp metering at interchanges.
- Improved freeway directional signage.
- Increased traffic enforcement.
- Expanded truck emission reduction programs.
- Coordination with major truck trip generators to maximize off-peak truck usage of the corridor.
- Increased 'Express Bus' service.
- Enhanced local bus service (local circulators).
- Expanded corridor Intelligent Transportation Systems (ITS).
- Emphasize ITS connectivity and dissemination of information.
- Enhanced Freeway Service Patrol during peak travel periods.
- Coordination with major intermittent event trip generators (such as Glen Helen Pavilion, California Speedway) to minimize impacts during peak travel periods.

How have these projects been analyzed and demonstrated through the CMP?

Using the I-15 study mentioned above as an example, the strategies are consistent with the CMP. The various strategies were developed as part of a comprehensive corridor study. Phase one of the implementation plan is the TDM alternative.

In order to evaluate whether the CMP is being met, please select three capacity increasing projects from the current TIP and submit to the review team the documentation to support that those projects were forwarded based on the CMP.

The following projects are identified for your review:

VEN070201 (Entered as Program Code CAX62 "Highway/Road Improvements-Lane Additions with HOV lane(s): REGIONALLY SIGNIFICANT"). State Route 101 - Near La Conchita from Mobil Pier rd to Santa Barbara County line add HOV lanes in each direction plus its features and close 3 median openings; add pedestrian undercrossing in La Conchita
http://www.goventura.org/files/Chapter_4_TDM_090526.pdf

20061201 (No Program Code Entered) I-15/I-215 I/C Improvements-Devore I/C-S/O Glen Helen Prkwy to Kenwood & on I-215 from S/O Devore Rd.I/C to I-15 I/C(I215 PM 16.0-17.8) Add 1 mixed flow lane in each direction to existing 3 m/f lanes from 3000' S/O Glen Helen Prkwy to 1200' N/O I-215 I/C including truck bypass lanes
http://www.sanbag.ca.gov/planning/I-15_study/I-15_03-06-.pdf
<http://www.sanbag.ca.gov/planning/cmp/cmp07-full%20version.pdf> page 22

1238J (Entered as Program Code CAX63 "Highway/Road Improvements-Lane Additions with no HOV lanes: REGIONALLY SIGNIFICANT"). In Simi Valley widen Rt 118 from Tapo Canyon eb from Tapo St to Kuehner (widen from 3 to 4 lns eb) & construct soundwalls & ITS items (ITS items Rt 23 / LA Cnty line) & 4 bridge widenings.
http://www.goventura.org/files/Chapter_4_TDM_090526.pdf

A copy of documentation on SCAG's Congestion Management Process and a copy of documentation from the current FTIP on three capacity-increasing projects based on the Congestion Management Process are attached in the Appendix as Exhibit 11.

INTELLIGENT TRANSPORTATION SYSTEMS (ITS)

Identified in 23 CFR 940 are the policies and procedures for implementing section 5206(e) of the Transportation Equity Act for the 21st Century (TEA-21), Public Law 105-178, 112 Stat. 457, pertaining to conformance with the National Intelligent Transportation Systems Architecture and Standards.

Please discuss SCAG's Intelligent Transportation Systems (ITS). As part of the discussion, please address the following questions:

- Who is responsible for maintaining and updating the regional ITS architecture? Who is responsible for ensuring that all future ITS projects are consistent with the regional ITS architecture?
- How is the planning/consideration of ITS being mainstreamed and incorporated into the overall planning process?
- Please describe the role ITS has had in goods movement planning and operations, and how SCAG has supported that role.
- Please identify any potential ITS improvements identified as a result of the CMP.
- What role does SCAG fulfill in building professional capacity among its members to better respond to the challenges in implementing and operating ITS investments?
- During the 2006 certification review, it was recommended that SCAG consider reallocating or seeking additional funds for ITS planning needs. Please discuss any updates.

SCAG Response:

Who is responsible for maintaining and updating the regional ITS architecture?

SCAG is responsible for maintaining and updating the regional ITS Architecture in the SCAG region. SCAG developed the regional ITS Architecture in partnership with local, county, state and federal stakeholders with the assistance of a consultant team. SCAG is currently in the process of conducting a major update to the regional ITS Architecture.

Who is responsible for ensuring that all future ITS projects are consistent with the regional ITS architecture?

Responsibility of ensuring that all future ITS projects are consistent with the regional ITS Architecture lies equally with the implementing or sponsoring agency, applicable County Transportation Commission (CTC), and SCAG. Sponsoring agencies are expected to develop and define their ITS projects to be consistent with the adopted regional ITS Architecture. CTCs responsible for programming are expected to ensure proposed projects are fully consistent with the regional ITS architecture prior to including them in the county program. Finally, SCAG reviews ITS projects to ensure consistency prior to including them in the FTIP.

How is the planning/consideration of ITS being mainstreamed and incorporated into the overall planning process?

The role of ITS in the Regional Transportation Plan (RTP) is to further the deployment and integration of technologies to maximize the efficiency and safety of the investments we are making. Operation and maintenance of the transportation system includes ITS components and systems. Consideration of ITS has been incorporated into the regional planning process, as evidenced by the use of the mobility pyramid as a guiding framework for managing and improving the region's transportation system. At the corridor level, ITS strategies are being considered in the development of corridor system management plans. The region will continue to update the capabilities of Caltrans transportation management centers, expand ramp metering and corridor management strategies, fill detection gaps, increase the use of signal system controls, and increase and improve the technical capabilities for transit bus and rail systems.

Please describe the role ITS has had in goods movement planning and operations, and how SCAG has supported that role.

The ports of Los Angeles and Long Beach have identified ITS technologies, specifically automated vehicle location (AVL), as a major component in their proposed air quality mitigation strategies.

SCAG is updating the regional ITS architecture to include goods movement based on a study performed by a SCAG subregion that encompasses the ports. As much of the freight from the ports travels throughout the region, it is appropriate that the regional ITS architecture is updated to include Goods Movement.

SCAG is also updating the regional ITS architecture to include Positive Train Control technologies. While this is primarily for heavy rail transit, the benefits will also apply to heavy rail freight trains.

The current Comprehensive Regional Goods Movement Plan and Implementation Strategy effort includes work towards the identification of ITS and Other System Management Technologies. We are inventorying existing ITS and system management strategies already in use and identifying options for expanding these programs. Based on work supporting the Federal Motor Carrier Safety Administration (FMCSA) "Smart Roadside" program, we will prepare a white paper on how the new wave of Commercial Vehicle Operations (CVO) and Commercial Vehicle Infrastructure Integration (CVII) technologies could be applied to goods movement issues in Southern California, particularly those that have the highest potential of increasing the performance of the proposed truck lanes.

Please identify any potential ITS improvements identified as a result of the CMP.

ITS improvements include various 511 systems and transportation management centers throughout the region.

What role does SCAG fulfill in building professional capacity among its members to better respond to the challenges in implementing and operating ITS investments?

SCAG sponsored an ITS 101 session at its Los Angeles office. SCAG also helped to promote an ITS Engineering course held at Caltrans District 7. SCAG has had discussions with Jesse Glazer at FHWA on expanding the training to other counties in the region.

During the 2006 certification review, it was recommended that SCAG consider reallocating or seeking additional funds for ITS planning needs.

Since the 2006 review, SCAG has consistently identified ITS planning needs and sought higher level of funding through SCAG's OWP process each year. This fiscal year SCAG has identified additional funds to update the regional ITS architecture and will continue to seek higher levels of funding for ITS architecture to ensure that ITS plays a larger role in future planning efforts consistent with the system management approach adopted in the 2008 RTP.

Please discuss any updates.

Since the 2006 review, SCAG has updated the regional ITS architecture to include a security component (June 2008). SCAG has most recently filed a Request for Proposals to update the regional ITS architecture to accommodate recent advances in ITS research in the region. These include:

- Positive Train Control
- Freight movement
- Non-motorized transportation
- HOT Lanes
- Existing and planned cross county services
- Updating for Section 1201 compliance when rule is finalized.

TRAVEL DEMAND MODELING

Please discuss SCAG's travel demand modeling activities.

- Briefly describe SCAG's previous use with travel demand models?
- Does the metropolitan area plan to apply for an FTA transit new start grant?
- Does the transportation plan include any major projects that will significantly increase highway capacity?
- Is the metropolitan area proposing any transportation projects where there is strong and coordinated opposition by local advocacy groups?
- Has SCAG been a defendant in, or threatened with, legal action in which the adequacy of their travel forecasting methods was challenged? If so, what was outcome of this action?
- Who is responsible for travel forecasting at SCAG?
- What formal training has SCAG's technical staff received in travel demand forecasting?
- Does SCAG's technical staff require training in specific technical areas?
- Does SCAG have a strategic plan and a guaranteed minimum level of funding in its Overall Work Program (OWP) for maintenance and improvements to its travel forecasting methods?
- Has SCAG convened a peer review or other independent assessment of their travel forecasting methods? If so, how have you responded to the comments generated during that review?

Please provide a summary of SCAG's inventory of current conditions, planning assumptions, and forecasting methods.

SCAG Response:

Briefly describe SCAG's previous use with travel demand models.

SCAG is the primary agency responsible for the development and maintenance of travel demand forecasting models for the six county SCAG region. SCAG has been developing and improving these travel demand forecasting models since 1967. SCAG applies the models to provide state of the practice quantitative analysis for the RTP, RTIP, and air quality management plans (AQMPs). The Model is also used to evaluate transportation proposals and major transportation projects within the Region. The Regional Model is typically updated and validated for each cycle of the RTP.

The Region's first travel demand model was developed by Caltrans in the late 1960s. The Model was then updated and validated for use in the analysis and evaluation of the RTP. SCAG has prepared a transportation model validation and summary report for the base year of each of the previous planning cycle: 1980, 1984, 1987, 1990, and 1994, 1997, 2000, 2004, and 2008.

SCAG follows the decennial Census in timing travel surveys. The SCAG region has conducted Origin and Destination Household Travel Surveys in 1967, 1976, 1991, and 2001. Travel characteristics from the Travel Surveys are a key component in the model development and

improvement projects. The next travel survey is planned to be conducted in year 2011, and will be used to calibrate the Regional Travel Demand Model.

SCAG also maintains an active subregional modeling program by promoting the development of subregional models. SCAG understands the mutual benefits of a hierarchical modeling program. Subregional model development costs are greatly reduced and model quality is enhanced by using the Regional Model as a starting point in their model development process. The use of the Regional Model structure and parameters greatly streamlines the subregional model development process. In addition, similar modeling approaches and model inputs help to ensure that model outputs are comparable between the various models within the Region. Continuous coordination of the Regional and subregional modeling programs is required to insure that the models maintain consistency.

Does the Metropolitan area plan to apply for an FTA transit new start grant?

Yes, the SCAG region does plan to submit a number of FTA new start grant applications in the near future. In the SCAG region, County Transportation Commissions (CTC) are the implementing agencies and have the direct programming responsibility and authority within the boundaries of their respective counties. Specifically, LA Metro, the CTC for Los Angeles County, intends to submit new start grant applications for two major rail projects that are being currently planned, the Subway Extension to Westwood and the Regional Connector.

Does the transportation plan include any major projects that will significantly increase capacity?

The RTP includes several mixed-flow projects that will increase the capacity of the region's highway system. The largest of these would be the addition of mixed-flow lanes on the I-710 in Los Angeles County between the Port of Long Beach and Downtown Los Angeles. There are also mixed-flow projects on the I-5 and I-405 in Orange County, the SR-91 in Orange and Riverside Counties, the I-15 in Riverside County, and the SR-210 and I-215 in San Bernardino County. The RTP proposes to increase the regional mixed-flow freeway network from about 10,988 lane-miles (2035 Baseline) to 11,698 lane-miles (2035 Plan), an increase of 710 lane-miles or 6%.

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Finally, the RTP includes expansion of highway capacity via HOT lanes on the I-15 and SR-91 in Riverside County and toll lanes along the east-west High Desert Corridor in northern Los Angeles and San Bernardino Counties and along the SR-710 gap closure between the I-10 and I-210 in Los Angeles County. Additional tolled truck-only lanes are identified along the I-710 in Los Angeles County, I-15 in San Bernardino County, and along an east-west corridor between

the I-710 and I-15 (specific route pending completion of SCAG's Regional Goods Movement Study and assumed for modeling purposes to be located along the SR-60). The RTP proposes to increase the regional toll-lane network from about 553 lane-miles (2035 Baseline) to 1,409 lane-miles (2035 Plan), an increase of 856 lane-miles or 155%.

Is the metropolitan area proposing any transportation projects where there is strong and coordinated opposition by local advocacy groups?

Any large scale highway or transit project is bound to attract some local opposition, particularly where the adjacent communities perceive negative impacts related to right-of-way, environmental, and/or environmental justice issues. Perhaps the strongest and most coordinated opposition by local advocacy groups can be found for the SR-710 tunnel gap closure proposed between I-10 and I-210 in Los Angeles County. The City of South Pasadena has for over 30 years opposed the completion of the 710 freeway through its community. In 2002, Caltrans proposed the idea of building the facility as a tunnel, and the City Council of South Pasadena voted not to oppose research of a tunnel option. In 2006, the Los Angeles County Metropolitan Transportation Authority (Metro) and Caltrans completed a tunnel technical feasibility study which concluded that a tunnel option was technically feasible. In November 2008, Los Angeles County voters approved the Measure R sales tax for transportation, and the expenditure plan included \$780 million for the 710 gap closure. The City of South Pasadena believes further study is needed on the environmental and financial feasibility of the tunnel option, and also formally opposed the inclusion of funds for the project in Measure R. A lawsuit filed by the City against Metro is continuing.

The I-710 truck lane and mixed flow project between the Ports of Los Angeles and Long Beach and Downtown Los Angeles also faced community opposition, particularly due to the negative impact of truck-related diesel particulate matter emissions along the corridor. Through the Major Investment Study and now the Draft EIR/EIS, community and stakeholder input has been made integral to the planning and project implementation process through an intricate framework of corridor and local advisory committees providing direct review of reports, assumptions, and conclusions.

Has SCAG been a defendant in, or threatened with, legal action in which the adequacy of their travel forecasting methods was challenge? If so, what was the outcome of this action?

No, SCAG has not been a defendant in, or threatened with, legal action in which the adequacy of their travel forecasting methods was challenged.

Who is responsible for travel forecasting at SCAG?

SCAG Staff are responsible for the maintenance of the models, updates to the models including performing periodic model validation, and applying the models as part of SCAG's planning functions.

Within the Planning Methods, Assessment & Compliance Department, there are two Divisions that work directly with transportation modeling. The Model/Tool Development, Data/GIS & Forecasting Section is responsible for the development of new modeling tools and forecasting of socio-economic data. The Transportation Model, Air Quality and Conformity Division is responsible for the updates of existing models and for model application and model maintenance, including modeling for the RTP, RTIP, special planning studies, and other travel forecasting efforts.

SCAG's Regional & Comprehensive Planning Department also interprets and summarizes model output to develop travel forecasts to support SCAG's planning program. The Regional & Comprehensive Planning Department uses model output to analyze various performance measures to test various transportation scenarios and project alternatives.

What formal training has SCAG technical staff received in travel demand forecasting?

Most of SCAG technical modeling staff have advanced degrees. Many of the technical staff's degrees are either in transportation modeling/planning or include specific course work in related topics such as transportation modeling, traffic engineering, and statistics. In addition, modeling staff regularly attend conferences and training courses relating to transportation modeling and air quality.

As part of its last model improvement cycle, SCAG changed modeling software to TransCAD. Considerable staff training has been conducted over the past 18 months to facilitate the software conversion process. In addition to standard software training, staff has also received training in TransCAD code development and in advanced TransCAD modeling techniques.

SCAG is currently conducting two major model development efforts: the Activity-Based Model and the Land Use Model. As part of both efforts, resources have been reserved for staff training. The goal is that at the conclusion of both model development efforts, staff will have adequate skills to maintain and apply the models into the future.

Does SCAG's technical staff require training in specific technical areas?

SCAG has initiated an ambitious model development/enhancement program in response to the new State RTP Guidelines and to incorporate the requirements of SB 375. Essentially, all of SCAG's modeling tools and supporting databases are being updated and new analytical tools are being developed. In addition, new modeling tools are being developed to better model the effects of pricing, high-speed rail, and to provide accurate estimates of non-motorized

transportation modes. The new tools include the development of next generation land use and activity-based models.

A comprehensive training program is being conducted concurrently with the development of these two models. The desire is to have technical staff fully trained in the maintenance and application of these tools at the completion of the model development processes. The training program includes modeling theory, model software code development, database development and maintenance, and model applications.

Given SCAG recently changed modeling software platforms to TransCAD, the technical staff continues to receive training in advanced modeling applications using TransCAD.

Does SCAG have a strategic plan and a guaranteed minimum level of funding in the Overall Work Plan (OWP) for maintenance and improvements to its travel forecasting Model?

SCAG currently maintains a modeling staff of 10 technical experts responsible for development and maintenance of the transportation and air quality models. Major model development work is accomplished with the support of consultants.

SCAG has a preliminary Business Plan that outlines the overall mission and approach on the development and enhancement of its travel forecasting model. The Business Plan also outlines an overall modeling and data maintenance and improvement strategy. In addition, the Business Plan provides a detailed listing of individual tasks and schedule. SCAG's Business Plan specifies that SCAG strives to develop and apply state-of-the-art models. Therefore, considerable resources have been dedicated to fund a very aggressive model improvement program. Each of the major components of the Business Plan, the activity-based model, the land use model, and the travel survey are multi-million dollar efforts. SCAG has a minimum level of funding to maintain the model, while also seeking additional funding for enhancement and development of a new model.

Below is a listing of SCAG's current major model improvement efforts:

Trip-Based Regional Model Improvement - The objective of this project is to refine the existing Regional Travel Demand Model to enhance model elasticity to changes in transportation networks and pricing, and to provide additional modeling capabilities to quantify the effects of smart growth for 2012 RTP. SCAG is currently conducting a major congestion pricing study and it is expected that the mode choice models' pricing capabilities will be greatly enhanced. Subtasks include re-estimation of the mode choice model, refinement of the auto ownership model, update to the trip generation model, and development of a destination choice model. In addition, a primary objective is to ensure the updated Mode Choice Model is New-Starts compliant. This project is also being closely coordinated with development of the Activity-Based Model. Traditional transportation demand models ("four-step models") are insensitive to important land use characteristics (the "4-Ds"). A primary goal is to modify/enhance SCAG's Regional Model to reflect these "intra-zonal" changes. Macro level (TAZ to TAZ) reflecting the

primary commute travel will be captured by applying regional four-step travel forecasting model. Micro level travel (Intra-zonal) composed primarily of non-work travel will be captured by applying a 4-D procedure.

Activity-Based Model - SCAG recently embarked on a multi-year project to develop a new activity-based model capable of performing the analysis required by the State RTP Guidelines as well as SB 375. The activity-based model is being developed to be sensitive to factors related to local land use strategies such as residential density, mixed use development, neighborhood walkability, transit access, transit-oriented development (TOD), etc, reflect the response to pricing policies, as well as the changes in travel cost such as fuel prices and/or the costs of parking. The Model will be designed to forecast the full range of transportation modes.

PECAS Land Use Model - SCAG is developing a new PECAS (Production, Exchange, Consumption, Allocation System) land use model that will integrate land use and transportation models to meet the modeling requirements of the State RTP Guidelines and AB32/SB375. This PECAS modeling system includes two specific modules, the Activity Allocation (AA) Module and the Space Development (SD) Module. The modeling system integrates with a transportation demand model. The SCAG PECAS Model will provide a reliable assessment of complex interactions of proposed changes in land use, economic, and transportation systems, by analyzing the dynamic relationship between transportation and land use.

Regional Heavy-Duty Truck (HDT) Model – SCAG developed the original HDT model in 1999 and has continually updated and utilized the model for regional planning. SCAG recently commissioned a consultant team to implement improvements and enhancements to the HTD Model. The model improvements are targeted to support project and policy planning in the following areas: 1) port access improvements, 2) clean technology truck lanes, 3) rail investment, 4) alternative technology goods movement systems, 5) freight development and land use strategies, 6) air quality – conformity and GHG analysis, 7) economic analysis, and 8) operational strategies.

Local Sustainability Planning Model – The objective of this project is to develop a quick response sketch planning tool for local jurisdictions to analyze the impact of different land use scenarios on vehicle ownership, vehicle use, mode split, and associated impacts on emissions reductions in real time.

Data Systems – To support the major model enhancement activities, SCAG is conducting major improvements to the existing data inventories and data forecasting capabilities. Additional data items at very disaggregate levels are required to support the new modeling tools. Major initiatives are being conducted to develop the following databases: parcel/grid cell land use data, freight data, employment data, socio-economic data, highway attributes, speed/count data, and general plan data.

Year 2010 Travel Survey – To support SCAG’s aggressive model improvement strategy, new and enhanced travel survey data is required. In addition to standard travel characteristics gathered from previous travel survey, the next survey will include activity and tour information needed to develop the activity based model. Add-on surveys will be required to gather

supplemental survey data and test consumer preferences. Additional survey information may include: 1) parking location and parking rate, 2) toll modes and willingness to pay, 3) additional data on walk/bike modes, 4) TDM participation, 5) fuel efficiency and fuel usage, and 6) auto ownership. SCAG is actively coordinating SCAG's regional travel survey efforts with State and Federal survey efforts.

Has SCAG convened a peer review of other independent assessment of their travel forecasting models? If so, how have you responded to the comments generated during the review?

SCAG understands the vital importance of peer review to improving the modeling tools and increasing model credibility. Peer review has been integrated into each of SCAG's major model improvement programs, and a final review of the modeling system will be performed by a model peer review committee. To date, separate expert panel reviews have been conducted on the Heavy-Duty Truck Model and the congestion pricing component of the model. Recommendations from these groups are being integrated into the consultant scopes of works to refine the model development efforts.

The last full Peer review of SCAG's modeling system occurred in January 2006. The peer review was sponsored by the FHWA's Travel Model Improvement Program, and assisted by the Volpe National Transportation Systems Center. The recommendations included:

- Vehicle Availability Model - Test the sensitivity of the vehicle availability model.
- Mode Choice Model – Consider the location of commuter rail in the nesting structure of the mode choice model.
- Trip Distribution Model - Move to destination choice type distribution model.
- Other Possible Model Improvements - A) develop methodology for including HOT lanes; B) incorporate peak spreading, C) destination-choice for trip distribution.
- Validation - Devote significant resources to validation of the overall model.
- Assigning On-board Survey Data – Consider checking the transit network and impedances through assignment of a trip table developed from the on-board survey data.
- Model Run Time – Work toward reducing model run time.
- Survey Data Sharing - SCAG has an impressive set of survey datasets. Make these survey datasets available to other agencies.

SCAG agreed with the panel findings and committed to implement the recommendations. SCAG is addressing and/or exceeding each of these recommendations in the current update of the four-step model and in the development of the new activity-based model.

Please provide a summary of SCAG's: 1) inventory of current conditions, 2) planning assumptions, and 3) forecasting methods.

A complete description of the baseyear modeling assumptions and results may be downloaded from SCAG Website at: <http://www.scag.ca.gov/modeling/> under "Year 2003 Model Validation and Summary: Regional Transportation Model".

1) Inventory of Current Conditions - the following provides an inventory of current conditions with respect to both transportation supply and demand.

Table 1 summarizes the Year 2003 Highway Network. The network summary is accomplished by tallying the number of highway facility route and lane-miles represented in the network, for each county and facility type. A route mile summary (see Table 4-7) includes both directions of travel, even if the section of roadway is represented by two separate one-way links in the coded network.

Table 1

YEAR 2003 HIGHWAY NETWORK SUMMARY							
FACILITY	COUNTY						TOTAL
	Imperial	Los Angeles	Orange	Riverside	San Bernardino	Ventura	
AM PEAK PERIOD							
FREEWAY:							
Centerline Miles	93	536	143	300	447	91	1,610
Lane Miles (AM Peak Period)	375	4,240	1,161	1,651	2,226	509	10,162
Lane Miles (Midday Period)	375	4,240	1,161	1,651	2,226	509	10,162
Lane Miles (PM Peak Period)	375	4,240	1,161	1,651	2,226	509	10,162
Lane Miles (Night Period)	375	4,240	1,161	1,651	2,226	509	10,162
MAJOR ARTERIAL:							
Centerline Miles	89	2,290	664	355	579	266	4,243
Lane Miles (AM Peak Period)	329	8,656	3,136	1,315	1,821	883	16,140
Lane Miles (Midday Period)	329	8,562	3,135	1,315	1,821	883	16,045
Lane Miles (PM Peak Period)	329	8,677	3,135	1,315	1,821	883	16,160
Lane Miles (Night Period)	329	8,565	3,135	1,315	1,821	883	16,048
MINOR ARTERIAL:							
Centerline Miles	343	2,951	871	1,103	1,591	356	7,215
Lane Miles (AM Peak Period)	673	9,226	3,130	3,293	4,289	983	21,594
Lane Miles (Midday Period)	673	9,171	3,133	3,293	4,289	983	21,542
Lane Miles (PM Peak Period)	673	9,218	3,130	3,293	4,289	983	21,586
Lane Miles (Night Period)	673	9,166	3,130	3,293	4,289	983	21,534
COLLECTOR							
Centerline Miles	1,175	1,497	150	1,479	2,699	267	7,267
Lane Miles (AM Peak Period)	2,374	3,359	449	3,612	5,977	623	16,394
Lane Miles (Midday Period)	2,374	3,359	449	3,612	5,977	623	16,394
Lane Miles (PM Peak Period)	2,374	3,359	449	3,612	5,977	623	16,394
Lane Miles (Night Period)	2,374	3,359	449	3,612	5,977	623	16,394
HOV							
Centerline Miles	0	201	93	26	39	0	359
Lane Miles (AM Peak Period)	0	415	191	54	78	0	738
Lane Miles (Midday Period)	0	415	191	54	78	0	738
Lane Miles (PM Peak Period)	0	415	191	54	78	0	738
Lane Miles (Night Period)	0	415	191	54	78	0	738
TOTALS							
Centerline Miles	1,700	7,475	1,921	3,263	5,355	980	20,335
Lane Miles (AM Peak Period)	3,751	25,896	8,067	9,925	14,391	2,998	64,649
Lane Miles (Midday Period)	3,751	25,747	8,069	9,925	14,391	2,998	64,881
Lane Miles (PM Peak Period)	3,751	25,909	8,066	9,925	14,391	2,998	65,040
Lane Miles (Night Period)	3,751	25,745	8,066	9,925	14,391	2,998	64,876

Table 2 summarizes the number of transit patterns/routes represented in the peak and off-peak transit networks, by “transit mode”.

Table 2

YEAR 2003 TRANSIT NETWORK ROUTE PATTERNS, ROUTE MILES, AND SERVICE MILES							
TRANSIT MODE NUMBER	DESCRIPTION	ROUTES PATTERNS		ROADWAY ROUTE MILES		DAILY SERVICE MILES	
		Peak	Off Peak	Peak	Off Peak	Peak	Off Peak
10	Commuter Rail	30	19	1,711	1,201	7,831	3,473
11	MTA Local Bus	377	393	6,430	6,488	129,851	132,360
12	MTA Express Bus	37	25	990	747	18,500	13,597
13	Urban Rail (MTA Metrorail)	12	10	187	150	8,428	7,368
14	Los Angeles County Express Bus	100	65	2,805	1,881	29,182	14,094
15	Los Angeles County Local Bus (Group 1)	76	73	1,217	1,153	12,120	15,425
16	Los Angeles County Local Bus (Group 2)	226	217	2,581	2,508	31,631	38,679
17	Los Angeles County Local Bus (Group 3)	57	54	473	455	13,902	18,382
18	Los Angeles County Local Bus (Group 4)	4	4	54	42	326	408
19	All Other Local Bus	418	383	7,093	6,601	72,411	82,165
20	All Other Express Bus	14	10	246	139	1,484	731
22	MTA Rapid Bus	12	12	193	193	9,316	8,448

Table 3 presents a summary of socioeconomic data totals by county and for the SCAG Region.

Table 3

YEAR 2003 SCAG MODEL SOCIOECONOMIC INPUT DATA										
POPULATION AND WORKERS					SCHOOL ENROLLMENT					
COUNTY	RESIDENT POPULATION	GROUP QUARTERED POPULATION**	TOTAL POPULATION	RESIDENT WORKERS	COUNTY	K THRU 12 ENROLLMENT		COLLEGE AND UNIVERSITY ENROLLMENT		
Imperial	142,647	11,917	154,564	54,405	Imperial	37,380		11,419		
Los Angeles	9,846,198	183,786	10,029,984	4,024,830	Los Angeles	2,104,364		747,161		
Orange	2,951,175	44,495	2,995,670	1,385,731	Orange	582,863		248,703		
Riverside	1,702,739	45,098	1,747,837	674,903	Riverside	383,272		66,366		
San Bernardino	1,828,843	47,264	1,876,107	717,695	San Bernardino	440,633		123,473		
Ventura	783,472	13,877	797,349	358,179	Ventura	166,272		57,700		
TOTAL	17,255,074	346,437	17,601,511	7,215,743	TOTAL	3,714,784		1,254,822		
EMPLOYMENT					HOUSEHOLDS					
COUNTY	RETAIL EMPLOYMENT	SERVICE EMPLOYMENT	OTHER EMPLOYMENT	TOTAL EMPLOYMENT	COUNTY	LOW INCOME***	MEDIUM INCOME	HIGH INCOME	TOTAL	SIZE
Imperial	7,173	16,016	32,365	55,554	Imperial	16,829	11,943	12,832	41,604	3.43
Los Angeles	437,706	2,162,675	1,759,180	4,359,561	Los Angeles	942,654	863,624	1,369,727	3,176,005	3.10
Orange	162,722	779,635	621,351	1,563,708	Orange	166,020	234,648	562,732	963,400	3.06
Riverside	75,147	282,496	231,796	589,439	Riverside	156,165	160,251	244,291	560,707	3.04
San Bernardino	77,425	312,851	248,660	638,936	San Bernardino	157,411	161,524	234,639	553,574	3.30
Ventura	37,721	146,287	150,481	334,489	Ventura	43,678	60,588	150,215	254,481	3.08
TOTAL	797,894	3,699,960	3,043,833	7,541,687	TOTAL	1,482,757	1,492,578	2,574,436	5,549,771	3.11

Table 4 presents an overview of the highway assignment statistics for each model time period and daily total. The Regional Transportation Model forecasts 371,973,000 VMT on an average weekday in Year 2003 within the expanded model area for both light and medium duty vehicles. In addition, the Regional Model forecasts 29,524,000 VMT for heavy-duty vehicles in the expanded model area. The total for all vehicle types combined is 401,497,000 VMT.

Table 4

YEAR 2003 HIGHWAY ASSIGNMENT STATISTICS BY TIME PERIOD					
Light and Medium Duty Vehicles	AM PEAK	PM PEAK	MIDDAY	NIGHT	TOTAL
Average Speed (mph)	30.9	26.6	35.2	43.1	31.7
Vehicle Miles Traveled ('000)	77,515	128,557	108,137	57,765	371,973
Vehicle Hours Traveled ('000)	2,508	4,826	3,075	1,341	11,751
Vehicle Hours Delay ('000)	723	1,778	583	82	3,167
Heavy Duty Vehicles	AM PEAK	PM PEAK	MIDDAY	NIGHT	TOTAL
Average Speed (mph)	35.7	31.0	40.5	52.4	40.0
Vehicle Miles Traveled ('000)	3,833	6,266	10,322	9,103	29,524
Vehicle Hours Traveled ('000)	107	202	255	174	739
Vehicle Hours Delay ('000)	33	79	56	12	180
All Vehicles Combined	AM PEAK	PM PEAK	MIDDAY	NIGHT	TOTAL
Average Speed (mph)	31.1	26.8	35.6	44.1	32.1
Vehicle Miles Traveled ('000)	81,347	134,823	118,459	66,868	401,497
Vehicle Hours Traveled ('000)	2,616	5,028	3,330	1,515	12,490
Vehicle Hours Delay ('000)	756	1,857	639	94	3,346

Table 5 presents VMT comparisons of the SCAG-modeled VMT to VMT estimates from the HPMS by county and by air basin.

Table 5

YEAR 2003 VMT COMPARISON BY COUNTY AND BY AIR BASIN (IN THOUSANDS)												
COUNTY		VC SCCAB		SCAB		MDAB		SSAB		TOTAL		COUNTY TOTAL
		Auto	Truck	Auto	Truck	Auto	Truck	Auto	Truck	Auto	Truck	
IMPERIAL	Model	-	-	-	-	-	-	4,343	737	4,343	737	5,080
	HPMS	-	-	-	-	-	-	4,335	607	4,335	607	4,941
LOS ANGELES	Model	-	-	185,519	13,064	6,114	408	-	-	191,633	13,471	205,104
	HPMS	-	-	197,363	11,656	7,268	389	-	-	204,631	12,045	216,676
ORANGE	Model	-	-	65,391	3,573	-	-	-	-	65,391	3,573	68,964
	HPMS	-	-	66,509	3,774	-	-	-	-	66,509	3,774	70,283
RIVERSIDE	Model	-	-	35,553	2,842	1,626	692	8,175	1,396	45,355	4,931	50,285
	HPMS	-	-	28,577	2,516	1,484	520	9,288	1,469	39,349	4,505	43,854
SAN BERNARDINO	Model	-	-	28,544	2,067	20,424	3,728	-	-	48,968	5,795	54,763
	HPMS	-	-	31,191	3,159	17,094	2,809	-	-	48,285	5,968	54,253
VENTURA	Model	16,283	1,017	-	-	-	-	-	-	16,283	1,017	17,301
	HPMS	17,414	1,214	-	-	-	-	-	-	17,414	1,214	18,627
TOTAL	Model	16,283	1,017	315,008	21,546	28,164	4,827	12,518	2,134	371,973	29,524	401,497
	HPMS	17,414	1,214	323,641	21,105	25,845	3,717	13,622	2,076	380,522	28,112	408,634
	Ratio	0.935	0.838	0.973	1.021	1.090	1.299	0.919	1.028	0.978	1.050	0.983

The Year 2003 transit assignment loaded 2,185,927 unlinked passenger trips on the Year 2003 transit network. Table 6 presents the model estimated daily transit boardings for the four predominant transit mode categories, compared to actual transit boarding statistics for Year 2003.

Table 6

YEAR 2003 DAILY TRANSIT BOARDINGS - MODEL VS ACTUAL COUNTS			
TRANSIT MODE	MODEL ESTIMATED BOARDING	ACTUAL BOARDING	RATIO
Commuter Rail	34,612	34,600	1.00
Urban Rail	222,626	218,500	1.02
MTA Bus	1,118,573	1,095,800	1.02
Other Transit	810,116	749,900	1.08
Total Boardings	2,185,927	2,098,800	1.04

Auto operating cost (in cents/mile) is a key parameter in the calculation of the marginal utility cost functions used in mode choice. In the current mode split model, auto operating cost is defined as an out-of-pocket expense consisting of fuel (primarily gasoline) cost and “other” costs. Other costs include repairs, maintenance, tires, and accessories. Table 7 presents the auto operating cost utilized in the Regional Model.

Table 7

AUTO OPERATING COST CALCULATION		
Description	Value	Based on
2003 On-road miles/gallon	22.30	MPG for SCAG Region
Avg. Year 2003 cents/gallon	189.50	Price & volume sold by fuel grade
Converted to 1989_cents*/gallon	130.00	
Fuel Cost (1989_cents/mile)	5.83	Gallon/mile * cents/gallon
Other Costs (1989_cents/mile)	4.80	Repairs, maint., tires, accessories
Total Cost/Mile (1989 cents)	10.63	
Total Cost/Mile (1999 cents)	13.76	

Note: *1989/2003 CPI = 128.3/187 = 0.686

Transit Fare – Fare estimation is based on a composite of the different fares charged for different categories and weighted appropriately and considers the following:

- Cash fares including the various discounts offered to students, the elderly, and the disabled
- The use of monthly passes by various categories for the initial boarding, and transferring between buses
- The average effective express and rail zone charge for both cash and pass users
- Table 8 shows the transit fares utilized in the Regional Model. This assumes no real cost increase in transit fares from 2003 to 2035.

Table 8

Transit Mode	Description	Boarding Fare
10	Commuter Rail	\$2.96
11	MTA Local Bus	\$0.75
12	MTA Express Bus	\$0.75
13	Urban Rail (MTA Metrorail)	\$0.75
14	Los Angeles County Express Bus	\$1.03
15	Los Angeles County Local Bus (Group 1)	\$0.69
16	Los Angeles County Local Bus (Group 2)	\$0.40
17	Los Angeles County Local Bus (Group 3)	\$0.19
18	Los Angeles County Local Bus (Group 4)	\$0.00
19	All Other Local Bus	\$0.75
20	All Other Express Bus	\$0.75
22	MTA Rapid Bus	\$0.75

Non-Motorized Trips – Plan scenario (all years) assumes that there will be a shift of 1 percent of the motorized trips to non-motorized forms of travel (i.e., walking and bicycling) due to the Regional Transportation Plan’s investment in non-motorized facilities.

Capacity and Free Flow Speed – Highway capacities (including for heavy duty truck) used in the Model for each of the facility types vary, depending on area location (i.e., CBD, urban, suburban,

rural, or mountain). Free flow speeds are based on posted speeds. A complete description of how the speeds/capacities were derived is contained in SCAG’s model validation report – “2003 Model Validation & Summary”. Table 9 shows the free flow speeds utilized in the Regional Model.

Table 9

Facility Type	Vehicles / Lane / Hour	Free Flow Speed (mph)
Freeway (MF, HOV)	1,900 – 2,100	55 – 70
Principal Arterial	500 – 850	20 – 60
Other Arterial	450 – 800	20 – 55
Collector	400 – 750	20 – 55

Toll Roads – Currently there are four toll roads in the SCAG Region. All of the toll facilities are freeways and are located in Orange County. The toll facility on the SR-91 Freeway is approximately 10 miles long and is part of the Riverside Freeway which consists of 8 lanes of mixed flow and 4 lanes of toll roads (located in the center lanes of the freeway). The other three toll facilities were designed and built by private funding and require all vehicles to pay toll fees. The effect of the toll charges on the toll roads was incorporated into the highway assignment procedure. The toll charge was added to each toll facility by inserting the cost to the appropriate link and identifying the link with a unique Toll Class Number. Toll costs (in 1999 dollars) were converted to a time value (in minutes) in the network assignment step.

2) Planning Assumptions (Future Conditions) - The following section provides a summary of SCAG’s planning assumptions regarding growth and distribution of population, developed land, and individual travel preferences.

Integrated Growth Forecast

In February 2005, SCAG initiated the 2008 RTP Growth Forecast Update Process, now known as the 2008 “Integrated Growth Forecasting” process. The resulting Integrated Growth Forecast established the population, employment, households and housing units forecasted in the region for use in both the RTP and the state-mandated Regional Housing Needs Assessment completed in July 2007. SCAG’s Plans & Programs Technical Advisory Committee assisted in the process by providing technical input. Policy Committees of the Regional Council were periodically informed of progress and provided additional direction to the process.

The Integrated Growth Forecast sets the optimal stage for a future regional growth scenario as it ties housing to transportation planning, considering both needs simultaneously in communities throughout the region. This approach ensures that the resulting assumptions are consistent with planned transportation infrastructure. Based on a combination of recent and past trends,

reasonable key technical assumptions, and existing and new local policy options, the Integrated Growth Forecast provides the basis for developing the land use assumptions at the regional and small area levels which build the Plan Alternative.

Development of the Integrated Growth Forecast

Development of the Integrated Growth Forecast involved several steps. The first entailed an analysis of recent regional growth trends and the collection of significant local plan updates. A variety of large area estimates and projections were collected from the federal and state governments. The sources included information from the following agencies:

- U.S. Department of Commerce, Census Bureau and Bureau of Economic Analysis
- U.S. Department of Labor, Bureau of Labor Statistics
- U.S. Internal Revenue Service (IRS)
- U.S. Citizenship and Immigration Services
- U.S. Department of Health and Human Services
- California Department of Finance (DOF)
- California Employment Development Department
- Information received through the Intergovernmental Review process, and
- Small area estimates and projections were also available from aerial land use data, data from ES202, CTPP, general plan, parcel level data from tax assessor's office, building permits from Construction Industry Research Board and demolition data from the DOF

Next was the review and update of the 2004 regional growth forecast methodology and key assumptions used as part of SCAG's 2004 Regional Transportation Plan. The widely used methodology included the cohort-component and shift-share methods. The key technical assumptions included updates regarding the fertility rate, mortality rate, net immigration, domestic in-migration, domestic out-migration, labor force participation rates, double jobbing rates, unemployment rates, and headship rates.

The next step was to develop and evaluate the draft regional Integrated Growth Forecast scenarios with small area distributions. Regional growth forecast scenarios were developed and allocated into the smaller geographic levels using public workshops. The small area distributions of the regional growth were evaluated using transportation and emission modeling results and environmental impact review. Lastly, was the selection and adoption of a preferred regional growth forecast and small area distributions.

An organized forecasting decision making process is required to develop a consensus regional growth forecast in an efficient, open, and fair manner. Various forms of input were used in the forecasting process, including a panel of experts, subregional/local review, stakeholders/data users, public outreach, technical committee, policy committee, and the Regional Council. Steps included:

- Survey of local jurisdictions regarding recent changes in general plan and developments that could affect the long-term growth patterns envisioned in the 2004 RTP/Growth Vision policy forecast.

-
- Provision to Transportation Modelers of the extended Year 2000 socioeconomic data set for new model development and calibration.
 - Collaboration with subregions/local jurisdictions, review and revision of the 2003 base year small area distribution of employment, population, and household, and completion/delivery of the 2003 extended socioeconomic data set to Modeling Division.
 - Request and receipt of input from subregions regarding their perspectives of future growth in population, employment and household.
 - Review and presentation of recent trends in population, employment and household growth and completion of preliminary 2008 RTP no-project growth forecasts at regional, county, subregion levels.

During 2006, the following major milestones were accomplished for the 2008 Integrated Growth Forecasting process:

- January 2006: Convened the Panel of Experts to review and comment on 2008 RTP growth forecast at regional/county/subregion level
- February 2006: Counties/subregions and local jurisdictions were invited to present their perspectives on growth and any pertinent growth issues to SCAG staff and the Panel of Experts
- March – August 2006: Presented the updated 2008 RTP growth forecasts at region and county levels to the Plans & Programs Technical Advisory Committees and Panel of Experts
- September 14, 2006: CEHD approved and directed staff to proceed with the disaggregation of the draft 2008 integrated regional/county forecasts into smaller geographic levels and scheduling of subregion/local jurisdiction workshops and inputs process
- October – January 2007: Completed 15 subregional workshops, including interactive exercise of 2035 growth scenarios, and RHNA exercise 2005-2014 at which AB 2158 factors forms filled out
- Formal and informal comments were received
- Follow-up meetings with local subregions/jurisdictions

Detailed Description: A complete description of the growth forecasting process may be downloaded from SCAG's web site at

<http://www.scag.ca.gov/rtp2008/pdfs/finalrtp/reports/fGrowthForecast.pdf>

A report showing SCAG's growth forecast by city and census tract may be download form SCAG's web site at" <http://www.scag.ca.gov/forecast/index.htm>

3) Forecasting Methodology - Regional Travel Demand Model Overview

SCAG's Regional Travel Demand Model follows a standard four-step modeling approach. SCAG's modeling methodologies, parameters, and inputs are periodically being updated to reflect current travel conditions and demographic changes. The Model is subject to periodic peer reviews to insure that the model is valid and represents the current state of the practice for transportation modeling. The Model was validated for the Year 2003, which is the base year for the 2008 RTP (note, this differs from the "conformity base year" previously described). Key modeling features are described below:

Modeling Area – The SCAG's Regional Transportation Modeling area covers the entire SCAG region, including Counties of Imperial, Los Angeles, Orange, Riverside, San Bernardino, and Ventura. For transportation analysis purposes, this modeling area is divided into 4109 Transportation Analysis Zones (TAZ's) with an additional 40 external cordon stations, 12 airport nodes, and 31 port nodes for the Port of Los Angeles and Port of Long Beach.

Highway Networks – The highway networks were initially developed from the Thomas Brothers GIS database and then updated with street inventory survey data. The networks include freeways for each direction coded as one-way links, freeway access/egress ramps, and freeway to freeway connectors (mixed flow and HOV where applicable). In addition, all highways/roads above the minor collector level are represented in the highway network.

Transit Networks – Transit networks were developed from the highway networks and therefore are consistent with the highway networks. For modeling purposes, transit services in SCAG region are grouped into 13 transit modes to represent different transit operators and transit operating characteristics.

Trip Generation Models – Trip generation models were applied to nine different trip purposes (14 trip types): home-based work, home-based school, home-based college and university, home-based shopping, home-based social-recreational, home-based serving passenger, home-based other, work-based other, and non-home-based other trips. Home-based work trips were further split into six categories: direct low income, direct medium income, direct high income, strategic low income, strategic medium income, and strategic high income trips. "Direct" home-work trips are trips that go directly between home and work while "Strategic" home-work trips are trips that include at least one intermediate stop between home and work.

Trip Distribution Models – The Regional Model uses a gravity model approach to distribute trips. SCAG's trip distribution models are applied to the productions and attractions from trip generation models for each of the 14 trip types. The productions and attractions are split into two time periods (peak and off-peak) using the trips-in-motion factors. The distribution models are run for each trip type by each time period. This distribution process creates a total of 28 zone-to-zone person trip matrices, one for each trip type in the "peak" and "off peak" time periods.

Mode Choice Models – These consist of eight separate mode choice models for the trips of home-based work direct, home-based work strategic, home-based school, home-based shopping,

home-based college and university, home-based other, work-based other, and other-to-other. These mode choice models are nested logit models with auto trips further split into drive alone, 2-person carpool, shared-ride of 3 or more people. Transit trips are further split into local bus, express bus, urban rail, and commuter rail, by access mode. Each model is applied for both the peak and off-peak periods. The travel modes outputs from the models also include school bus and non-motorized (walking or bicycling).

Heavy Duty Truck (HDT) Models – These consist of two major components: internal truck trip models and external truck trip models. The internal truck trips are generated using a cross-classification method by applying truck trip rates for a two-digit code by the North American Industry Classification System (NAICS) to the number of employees in that category and also the number of households within each zone. The daily truck trip ends are distributed using a gravity model to create daily truck trips for each of the three truck types: 1) light HDT, 2) medium HDT, and 3) heavy HDT. The external truck trips are developed using an econometric model to estimate inbound and outbound commodity flows by counties. The county to county commodity data is allocated to the zonal level based on NAICS employee distribution and then converted to trucks trips using observed data collected during model development. Seaport and airport related truck trips were included as special generator truck trips. The daily truck trips by truck types are allocated to four time periods and merged with the auto trips in trip assignment.

Airport Passenger Trip Tables – Airport passenger trip tables were obtained from the RADAM Model, developed and maintained by consultants. RADAM estimated airport passenger trips at the RADAM zone level (about 100 zones) for two trip purposes: 1) business, and 2) non-business. These trips were then disaggregated to a Traffic Analysis Zone (TAZ) system of about 4109 zones based on NAICS employment data for business trips and household data for non-business trips. The daily passenger vehicle trips were split into four time periods by three modes of travel: drive alone, 2-person carpool, and 3-or-more person carpools. The airport vehicle trips were merged with the other auto vehicle trips prior to network assignment.

Airport Air Cargo Trip Tables – These were also developed from the RADAM Model. The RADAM Model generated air cargo truck trips at the RADAM zones. These trips were then disaggregated to the TAZ based on NAICS employment data. The daily air cargo trips were split into four time periods by three truck types: light HDT, medium HDT, and heavy HDT. The air cargo trips were merged with the HDT truck trips prior to network assignment.

Time of Day Factors – These factors for allocating the daily auto trips to the four time periods (AM peak 6:00-9:00 am, midday 9:00 am-3:00pm, PM peak 3:00-7:00 pm, night 7:00pm-6:00 am) were developed using the Travel Survey data.

Network Assignments – Network assignments consist of series of multi-class simultaneous equilibrium assignments for six classes of vehicles (drive alone, 2-person carpool, 3+ person carpool, light HDT, medium HDT, and heavy HDT) and for each of the four time periods. During this assignment process, trucks are converted to PCE for each link based on 1) percentage of trucks, 2) percentage of grade, 3) length of the link, and 4) level of congestion (v/c ratios). Transit vehicles are also included in the highway assignment.

Convergence Process – A 5-loop model run was conducted for each model year and modeling scenario. The following provides a detailed description of the process:

The trip generation, trip distribution, and the mode choice models were run using the initial speeds or the “observed speeds” coded on the input highway networks to develop the initial AM peak period and mid-day period trip tables.

This set of initial trip tables for each time period and for each vehicle class was assigned to the corresponding highway networks. This process produced the first pass (loop) highway assignments and yielded model-estimated congested speeds for the highway networks.

The congested speeds were then fed back into the trip generation, trip distribution, and mode choice models to produce a second set of congested speeds for the AM and mid-day highway networks. An averaging process was utilized to smooth the volume variation between the first pass (loop) of the trip assignment and the second pass of the trip assignment step. A new set of congested speeds was then created and fed back into trip generation, trip distribution, and mode choice models to produce a new set of trip tables for the third pass of trip assignment. This process was repeated one more time to produce a set of reasonably converged AM peak and mid-day networks (the 4th loop).

The congested speeds were then fed back into the trip generation, trip distribution, and mode choice models to produce trip tables for the last loop trips assignments. The final assignment of trips was performed for all four time periods (AM, mid-day, PM, and night period).

Highway Performance Monitoring System (HPMS) Vehicle Miles Traveled (VMT) Factors – In order to maintain consistency of model results with HPMS VMT estimates, a set of base year HPMS VMT to model VMT ratios (factors) is developed for each subarea of county by air basin, based on the year 2003 model validation results. Separate factors were generated for autos and trucks. These same factors are applied to final network assignments of each model run to yield final network flows and congestion.

It is noted that for the San Bernardino County portion of the Western MDAB ozone non-attainment area (MDAB_SB), an HPMS adjustment was not made to the heavy-duty truck VMT after reviewing locally developed county-based data and per agreement among U.S. EPA, ARB, FHWA, and SCAG and additional interagency consultation as allowed for by the Federal Conformity Regulation Section 93.122(b)(3).

SCAG’s Travel Demand Model used for the regional emissions analysis meets the federal modeling requirements reflected in Section 93.122 (Procedures for determining regional transportation related emissions) of the Transportation Conformity Rule.

TRANSPORTATION SAFETY PLANNING

Please discuss SCAG's efforts in addressing safety throughout the transportation planning processes. Please address the following questions in the discussion:

- How is the safety planning factor considered in your planning process?
- Describe the collaborative process for developing safety goals, objectives, performance measures, and strategies.
 - Who are the safety partners that are involved?
 - Is the collaboration institutionalized or ad hoc?
 - How does the TMA safety process relate to the SHSP process?
 - Please describe SCAG's involvement in the California SHSP. How does SCAG work with the MPOs to incorporate the SHSP in their processes?
 - For example, one of the Actions of the SHSP is to develop a program for local roadways that monitor 2- and 3- lane roadways for cross centerline collision concentrations. Please describe how the results of this monitoring (as well as other SHSP Actions) identified specific projects for inclusion in the TIP.
- How is safety addressed as an explicit goal in your planning process and your RTP?
 - What safety related goals and objectives have been identified?
 - Have safety goals and objectives been developed to cover all modes of transportation (transit, bicyclists, pedestrian, freight)?

Data Analysis

- What safety data does the MPO collect or obtain from other sources? (i.e., fatalities, serious injuries, crash rates, crash hot spots, collision inventories, pedestrian injuries, behavior statistics, driver's age, location, GIS, and roadway inventory data etc.)?
- How are safety performance measures incorporated in the planning process? If so, what metrics are used?

Planning Process

- How is safety addressed in public involvement activities of the MPO?
- How do the RTP and TIP consider safety of all road users on all public roads?

Implementation

- What are the plans for addressing safety in the next TIP and RTP update?

SCAG Response:

How is the safety planning factor considered in your planning process?

The safety of the region's multimodal system is a critical priority for SCAG and Caltrans. The 2008 RTP continues the commitment to improve safety for the region. Through 2035, the RTP forecasts expenditures of \$10 billion for safety-related projects and services. Various safety projects are exempt from conformity. This is in addition to safety standards considered as part of every project design. The scope of this RTP goes beyond specific funding for safety preparedness or emergency response. It emphasizes the collaboration among SCAG, Caltrans,

and their stakeholders to examine safety on a system basis so the region can use all the tools available to decrease traffic injuries and fatalities. The result of this collaboration, the California Strategic Highway Safety Plan, has been incorporated into the 2008 RTP. The SHSP identifies 16 challenge areas to reduce accidents, fatalities, and injuries, and SCAG has identified and proposed an appropriate regional response to each area

Describe the collaborative process for developing safety goals, objectives, performance measures and strategies.

The primary process has been in the development of the SHSP implementation plan. SCAG has participated in seven of the committees and challenge areas. In addition, SCAG has worked on various disaster scenarios, the first of which was Operation Golden Guardian, which examined the impacts of a significant earthquake in Southern California. The event took place in November, 2008.

SCAG is currently working with the State of California and other partners in the development of a Southern California Catastrophic Earthquake Response Plan using the same scenario and data from the 2008 Operation Golden Guardian. It is anticipated that this preparation will enhance not only the regional response to an earthquake, but also the response to a terrorism incident in the region.

Who are the safety partners that are involved?

For the SHSP, Safety Partners include:

- California Highway Patrol
- Office of Traffic Safety
- Los Angeles County Sheriffs Department
- Department of Motor Vehicles
- UC Berkeley, Traffic Safety Center
- National Highway Traffic Safety Administration
- Federal Railroad Administration
- American Automobile Association
- California Bicycle Coalition

Other organizations. A full listing of stakeholders can be found at <http://www.dot.ca.gov/hq/traffops/survey/SHSP/SHSPSAFETYSTAKEHOLDERSTEAM.xls>

Is the collaboration institutionalized or ad hoc?

SHSP collaboration is institutionalized. Each challenge area team met on a monthly basis to develop the various action steps. In addition, a steering committee was formed to oversee the work of the challenge area teams, reducing duplication of efforts on common areas. Once the action steps were finalized, the teams still met to discuss progress on implementing the action steps. When changes need to be made, or new action steps develop, the teams meet more often to discuss the specific issues.

How does the TMA safety process relate to the SHSP process?

The TMA safety process and SHSP process are interlinked. The SHSP implementation plan, once complete, will further integrate specific strategies designed to reduce injuries/fatalities into the FTIP guidelines for project submission.

Please describe SCAG's involvement in the SHSP. How does SCAG work with the MPOs to incorporate the SHSP in their processes?

SCAG has been part of the SHSP process since its inception at Caltrans. SCAG staff is represented on the Steering Committee and on the following Challenge Area Committees:

- Challenge 2: Reduce the Occurrence and Consequence of Leaving the Roadway and Head-on Collisions
- Challenge 7: Improve Intersection and Interchange Safety for Roadway Users
- Challenge 8: Make Walking and Street Crossing Safer
- Challenge 9: Improve Safety for Older Roadway Users
- Challenge 11: Improve Commercial Vehicle Safety
- Challenge 13: Improve Bicycling Safety
- Challenge 16: Improve Safety Data Collection, Access, and Analysis

SCAG has incorporated the main areas of the SHSP in the Safety Chapter of the 2008 Regional Transportation Plan. At the time the action steps for each challenge area were not adopted by Caltrans. Once these were adopted, SCAG incorporated relevant challenge areas into the 2011 FTIP guidelines.

For example, one of the actions of the SHSP is to develop a program for local roadways that monitor 2-3 lane roadways for cross centerline collision concentrations. Please describe how the results of this monitoring (as well as other SHSP actions) identified specific projects for inclusion in the TIP.

Implementation of the monitoring program is not yet complete. The SHSP implementation team (to which SCAG belongs) is identifying the appropriate strategies. One involves geo-coding the California Highway Patrol's State Wide Integrated Traffic Record System (SWITRS) data to provide a visual representation of injury and/or fatality accidents. SCAG hopes to use this geo-data extensively throughout its safety planning process to identify potential safety projects in partnership with the implementing agencies.

How is safety addressed as an explicit goal in your planning process and RTP?

Safety is explicitly listed as a performance measure in SCAG's RTP planning process. Performance is measured in accidents per million vehicle miles by mode for:

- Fatalities
- Injuries
- Property

The performance target is "0" accidents, injuries, and fatalities for all modes.

The data sources to monitor performance are accident rates from Caltrans, including SWITRS, and the National Transit Database or triennial audit reports.

What safety related goals and objectives have been identified?

SCAG has an RTP goal to "Ensure Travel safety and reliability for all people and goods in the region." The collaboration in developing the Strategic Highway Safety Plan reinforces that goal. SCAG's performance measure target for safety is "0" accidents, injuries, and fatalities for all modes.

The performance measure target for the SHSP is to reduce absolute numbers of traffic fatalities to below 2000 levels for various modes, including bicycling, walking, rural road safety, older driver safety, younger driver safety, motor carrier safety.

While the SHSP examined four areas (engineering, education, enforcement and emergency response), SCAG, as a transportation planning agency, focuses on policies designed to assist subregions in developing their projects, to incorporate the SHSP in the planning and design of transportation improvements.

Have safety goals and objectives been developed to cover all modes of transportation (transit, bicyclists, pedestrian, freight)?

The performance measure target for the SHSP is to reduce absolute numbers of traffic fatalities to below 2000 levels for various modes, including

- Reduce the occurrence and consequence of leaving the roadway and head-on collisions
- Improve driver decisions about rights of way and turning
- Improve intersections and interchanges safety for roadway users
- Make walking and street crossing safer
- Improve safety for older roadway users
- Improve commercial vehicles safety
- Improve bicycle safety

What safety data does the MPO collect or maintain from other sources?

The data sources that SCAG uses to monitor safety performance are accident rates from Caltrans, including SWITRS, and the National Transit Database or triennial audit reports.

How are safety measures incorporated in the planning process? If so, what metrics are used?

Safety is a performance measure in our regional transportation planning process. The key indicator is the accident rate measured in accidents per million vehicle miles by mode for fatalities, injuries and property damage. The performance target is zero for all accident types and modes. Data sources include SWITRS data, and for transit, National Transit Database or triennial audit reports.

How is safety addressed in public involvement activities of the MPO?

SCAG's work with the SHSP and catastrophic earthquake response plan involves regular meetings with numerous stakeholders, and collaboration in the development of documents and action plans.

How do the RTP and TIP consider safety of all road users on all public roads?

SCAG has safety as a planning factor for planning and projects. Various safety projects are exempt from conformity. SCAG has summarized the SHSP in the 2008 RTP. SCAG has placed the various engineering related challenge areas of the SHSP into the 2011 FTIP Guidelines. The guidelines encourage project sponsors to consider incorporating safety into their project proposal and planning process.

What are the plans for addressing safety in the next TIP and RTP update?

SCAG plans on greater integration of SHSP action steps into the RTP and FTIP, as they relate to engineering. In addition, SCAG is looking to become a greater source of information to local governments in terms of safety and the development of their transportation safety programs. The geo-coding of SWITRS data by the Berkeley Institute of Transportation Studies is but one example to help visually represent accident clusters and correlations. SCAG also hopes to work more closely with the stakeholders in developing transportation projects and incorporating safety considerations early on in the project development process.

CMP Follow-up Questions & Responses

The County CMP's are reviewed for consistency with SCAG's regional CMP. What factors are reviewed during this review?

Congestion Management Process in the SCAG region is comprised of a combination of activities, which include:

- ◆ Development and biennial update of County CMPs
- ◆ Regional Transportation Plan update
- ◆ Regional Transportation Improvement Program update
- ◆ Air Quality Management Plan (AQMP) update
- ◆ Regional Significant Transportation Improvement Studies (RSTIS) process

All of these activities are inter-linked and require high level of coordination. The key to SCAG's Congestion Management Process is to ensure consistency between all of these activities so that the end result is the reduction in congestion to an acceptable level as defined in the CMPs.

Major elements, statutorily required of all County CMPs include:

- ◆ CMP System Definition/Identification
- ◆ Transportation Demand Modeling
- ◆ Multi-modal Transportation System Performance
- ◆ Transportation Demand Management
- ◆ Local Land Use impacts analysis on transportation system
- ◆ Capital Improvement Program
- ◆ Deficiency Plan, if, when and where needed

SCAG reviews each county CMP to ensure consistency of each of these elements with SCAG's adopted plans and programs.

Most notably, SCAG pays particular attention to:

1. consistency with the policies, programs and projects included in the Regional Transportation Plan, including related socio-economic data,
2. use of transportation model and data that is consistent with SCAG's regional model,
3. compatibility, consistency and continuity with other CMPs developed within the SCAG region, and
4. whether the CMP's Capital Improvement Plan is consistent with the adopted Federal Transportation Improvement Program

a) How different are the priorities from county to county for selection of CMP strategies at the local level?

The difference in priorities is primarily related to the socio-economic and geo-political differences between the counties. However, the goals are the same, to reduce congestion. For example, more suburban counties such as Riverside,

San Bernardino and Ventura must rely more on roadway improvements and TDM/TSM strategies to achieve their congestion reduction goals, compared to transit rich Los Angeles County. Each county requires their individual cities to develop a deficiency plan, if warranted, for those transportation facilities within their jurisdiction that are determined to be operating at unacceptable level of Service pursuant to statutory requirements. Priorities identified in the deficiency plans also tend to reflect variations in socio-economic and geo-political landscape.

b) Does the County CMP TDM component allow specificity as to strategies/actions recommended for implementation in the various “deficiency plans”?

‘Deficiency plans’ are typically associated with a roadway or intersection that exceed prescribed or acceptable Level of Service. It is conceivable that the mitigation could entail inclusion of some form of specific TDM strategies.

Furthermore, the County CMP TDM component does allow identification and inclusion of specific strategies. All of the county CMPs include some variation of specific strategies such as model TDM ordinance for local jurisdictions to adopt to discourage solo driving or encourage ridesharing, encourage employment based rideshare programs, encourage some form of parking cash out programs, encourage biking and walking, encourage use of public transportation, increase educational campaigns etc.

c) What role do the transit operators play in the County CMP process?

Transit Operators play a significant role in the development of CMP in each county. Transit is a major modal component of every CMP. Although, transit criteria vary somewhat between counties, every county adopts some form of transit performance criteria through the CMP process. Transit element of CMP would not work without the necessary buy-in from the transit operators. Furthermore, for LA and Orange Counties, the county transportation commissions also serve as the primary transit providers for their respective counties so that their involvement in the development of CMP can be said to be direct.

In Riverside County, the Riverside County Transportation Commission (RCTC) is responsible for planning and coordinating all public mass transit services within the jurisdiction of the Commission and between the jurisdiction of other county commissions or transit operators. The performance measures outlined in the Short Range Transit Plans prepared by transit agencies in Riverside County were included in the CMP.

In San Bernardino and Ventura counties transit operators provide direct input in prioritizing transit capital projects included in the CIP and helped develop transit performance criteria/methodology and provide data support.

d) If interregional travel is excluded from the County CMP LOS calculations, are there implications to regional system level performance in the context of congestion management and mitigation?

County CMPs typically include major interregional travel corridors in their respective CMP systems, such as US-101 between LA and Ventura County, I-5 and I-405 between LA and Orange County, SR-91 between Orange and Riverside and so on. As such, each county captures LOS calculations for interregional travel within their county.

If the LOS calculations result in a finding that a facility does not meet the LOS minimum requirements, then a deficiency plan must be developed.

The deficiency plan identifies the cause of congestion, the improvements needed to solve the problem, and the cost and timing of the proposed improvements.

When developing the deficiency plan, the analysis of that deficiency must exclude interregional travel, construction impacts, ramp metering, traffic signal coordination, traffic generated by the provision of low income housing, and high density residential development within ¼ mile of a fixed rail passenger station, as proscribed under California Government Code 65089.4.

Typically, if the analysis concludes that the deficiency is caused by an exclusionary factor, the county may document in the CMP that the facility is statutorily exempt, detailing the reason. In addition, if, by removing Interregional travel from their calculations, the facility would then meet the LOS minimum requirements, then that would be acceptable under the regulations.

SCAG also takes into account interregional travel, incorporating those trips into the regional transportation model, which is used for the Regional Transportation Plan. The factors used by SCAG include other calculations than LOS. These include freeway and arterial speeds, vehicle miles traveled, vehicle hours traveled. In addition, SCAG works with the counties in developing solutions to congestion that may be caused by interregional travel. Examples include the OC/LA Intercounty Transportation Study, OC/Riverside Inter-county Corridor Study, the Ventura/Santa Barbara Commuter Rail Study and the Multi-County Goods Movement Action Plan.

What counties in the SCAG region have opted out of the State CMP process? Describe what activities SCAG staff will undertake to plug these

gaps in the entire regional transportation system complying with Federal CMP requirements.

No county in the SCAG region has opted out, as the requirements are quite significant (a majority of cities within the county representing a majority of the population must adopt resolutions to opt out). If a county does opt out of the state process, they would still be required to meet the federal CMP requirements, rendering the opt out provision essentially moot. In addition, various local funding measures have been tied to the CMP, making it even more difficult to opt out.

The closest example may be Imperial County. Although the population is not yet high enough for the county to be declared a congestion management agency (requires an urban area of >50,000) under California law, SCAG will be working with the county to integrate the congestion management process into the county transportation planning process, complying with federal requirements.

Describe how the County Transportation Commissions evaluate the effectiveness of CMP strategies selected for implementation. Is this done when the County CMP's are updated?

Yes, comprehensive evaluation of CMP strategies are performed every two years when the CMPs are updated. Each county reviews the performance of their CMP network compared to an established base year. The data is collected on the CMP network at least once every two years. The results are compared to the base year and are incorporated into the CMP update and subsequently inform the development of improvement strategies for inclusion in the updated CMP. Performance measures (primarily LOS) are used to track the effectiveness of the CMP over time.

Please describe how a typical CSMP conducted by Caltrans uses results/outcomes from the County CMPs or SCAG's regional CMP.

From an alternatives development and analysis standpoint, a typical CSMP conducted by Caltrans will incorporate the programmed and planned short-term (10 to 15 years) projects from the adopted TIP and RTP, including operational improvements from the SHOPP. In this manner, the results and outcomes from the County and regional CMPs are used as a foundation for CSMP analysis and recommendations. Once the benefits of these committed and planned projects are assessed, the CSMP will identify any additional operational or minor capital improvements that may address the identified bottlenecks and improve corridor operations and performance.

Where would an interested stakeholder find a discussion of non-recurring congestion, e.g. causes and implementation actions, in the context of the regional CMP?

Non-recurring congestion is the primary cause of deterioration of travel time reliability on transportation corridors. SCAG added reliability as a performance indicator in the 2008 RTP. Reliability is simply a measure of travel time variability over time. Lower travel time variability depicts a more reliable system. Reliability and travel time variability is discussed in the 2008 RTP under Mobility challenges on page 67 and Plan Performance on page 169.

The system monitoring and evaluation section starting on Page 2 of the SCAG CMP summarizes the use of transportation management centers to monitor and respond to incidents (non-recurring congestion) such as vehicle accidents, special events, etc.

Although not mentioned, urbanized counties, particularly Los Angeles County, have freeway response units (including tow trucks) positioned to respond quickly to vehicle breakdowns and accidents to clear the congestion as quickly as possible.

Please expand upon how the RSTIS process ensures alternative strategies and improvements are considered before capacity expansion is the selected option. How are these strategies incorporated into the SOV project or committed to by the State and MPO for implementation?

SCAG adopted the RSTIS program as part of the 2001 Regional Transportation Plan.

RSTIS is a planning tool to aid decision-making with regard to an identified transportation need. *RSTIS* address a mobility need or problem on a corridor or subarea scale by identifying all reasonable alternative strategies. *RSTIS* produce information on the costs, benefits, and impacts of these alternatives so that an informed choice can be made. The *RSTIS* evaluation process leads to a decision on the design concept and scope for a corridor/subarea transportation investment. *RSTIS* also lead to the refinement of SCAG's RTP by selecting a locally preferred improvement strategy.

SCAG's adopted RSTIS Procedures provide for "a cooperative and collaborative process to establish the range of alternatives to be studied" and call for "a proactive public involvement process that provides opportunities for the public and various interests to participate." In practice, RSTIS efforts typically include a no-build alternative and a transportation systems management/transportation demand management (TSM/TDM) alternative, in addition to several build alternatives. Typically, the TSM/TDM strategies are incorporated into the build alternatives and are therefore incorporated into a Locally Preferred Strategy (LPS) at the conclusion of the RSTIS. The LPS is adopted by the board of the lead agency, and the LPS is subsequently moved forward into engineering,

environmental, and construction activities. Funding commitments for the LPS are obtained through the state (STIP) and federal (FTIP) programming processes.

For example, the Riverside-to-Orange County Major Investment Study completed by the Orange County Transportation Authority and Riverside County Transportation Commission in January 2006 focused on identifying mixed-flow and managed-lane improvements to the SR-91 freeway corridor. The LPS also included a number of short- and long-term transit improvements including Metrolink commuter rail service expansion, a new intermodal transportation center, and express bus service improvements. These improvements were incorporated into the 91 Implementation Plan, a document which the agencies are using to monitor and report on funding and implementation to stakeholders and decision-makers.