SAN DIEGO CONFORMITY WORKING GROUP

The San Diego Conformity Working Group may take action on any item appearing on this agenda.

Wednesday, April 19, 2006

10:30 a.m. to 12 noon (Please note new starting time)

SANDAG, Conference Room 8C
401 B Street, Suite 800
San Diego, CA 92101-4231

Staff Contact: Elisa Arias
(619) 699-1936
ear@sandag.org

AGENDA HIGHLIGHTS

• 2004 RTIP AMENDMENT NO. 16: DRAFT AIR QUALITY CONFORMITY ANALYSIS

• DEVELOPMENT OF 2006 REGIONAL TRANSPORTATION IMPROVEMENT PROGRAM (RTIP)

• INTERIM GUIDANCE FOR IMPLEMENTING THE TRANSPORTATION CONFORMITY PROVISIONS IN SAFETEA-LU

Please contact Elisa Arias prior to the meeting if you wish to participate by conference call.

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To request this document or related reports in an alternative format, please call (619) 699-1900, (619) 699-1904 (TTY), or fax (619) 699-1905.
<table>
<thead>
<tr>
<th>ITEM #</th>
<th>RECOMMENDATION</th>
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<tbody>
<tr>
<td>1.</td>
<td>INTRODUCTIONS</td>
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<td>+2.</td>
<td>SUMMARY OF MARCH 15, 2006, MEETING                  INFORMATION</td>
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<td>PUBLIC COMMENTS/COMMUNICATIONS</td>
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<td>2030 REVENUE CONSTRAINED REGIONAL TRANSPORTATION PLAN (RTP): 2006 UPDATE AND AIR QUALITY CONFORMITY DETERMINATION INFORMATION</td>
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<td>+5.</td>
<td>2004 RTIP AMENDMENT NO. 16: DRAFT AIR QUALITY CONFORMITY ANALYSIS REVIEW AND COMMENT</td>
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<td>On March 24, 2006, SANDAG released the draft air quality analysis for the 2004 RTIP Amendment No. 16 to the CWG for review and comment. Staff will provide an overview of the analysis. The Transportation Committee will be asked to authorize distribution of the 2004 RTIP Amendment No. 16 on April 21, 2006, for public review and comment.</td>
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<td>6.</td>
<td>DEVELOPMENT OF 2006 REGIONAL TRANSPORTATION IMPROVEMENT PROGRAM (RTIP) INFORMATION</td>
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<td>SANDAG has requested submittal of new projects or revisions to projects for inclusion in the 2006 RTIP. Submittals are due on April 7, 2006. SANDAG staff will provide information on this item prior to the CWG meeting under separate cover.</td>
</tr>
<tr>
<td></td>
<td>a) Revenue Constrained Program assumptions</td>
</tr>
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<td></td>
<td>b) Draft list of projects, including exempt projects</td>
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7. UPDATED SCHEDULE FOR THE COMPREHENSIVE 2007 RTP INFORMATION

Work on the 2007 RTP was put on hold as staff developed the 2030 Revenue Constrained RTP: 2006 Update. This technical 2006 update was adopted by the Board on February 24, 2006, and its adoption will keep SANDAG current with federal air quality requirements. Staff has now resumed a full-time effort to develop the 2007 RTP. The schedule for the 2007 RTP was impacted by staff efforts to produce the 2006 update and the delay to two key inputs for 2007: the Independent Transit Planning Review and the Smart Growth Concept Map. The Transportation Committee will be asked to take action on the updated schedule on April 21, 2006. Staff will provide an oral report on this action at the CWG meeting.

8. INTERIM GUIDANCE FOR IMPLEMENTING THE TRANSPORTATION CONFORMITY PROVISIONS IN SAFETEA-LU DISCUSSION

In February 2006, the U.S. Environmental Protection Agency (EPA), Federal Highway Administration, and Federal Transit Administration issued interim guidance for transportation conformity. The CWG will discuss this guidance, which was included in the March 15, 2006 agenda.

9. STATUS OF THE STATE IMPLEMENTATION PLAN (SIP) FOR 8-HOUR OZONE STANDARD AND EMFAC 2007 UPDATE INFORMATION

Staff from the California Air Resources Board will provide updates on the development of the 8-Hour Ozone SIP and the EMFAC emissions model.

10. U.S. EPA HEARINGS ON NATIONAL AMBIENT AIR QUALITY STANDARDS FOR PARTICULATE MATTER AND REVISIONS TO AMBIENT AIR MONITORING REGULATIONS INFORMATION

U.S. EPA staff will provide the CWG with an oral update on the March 8, 2006, hearings held to gather public comment on two proposed rules: "National Ambient Air Quality Standards for Particulate Matter" and "Revisions to Ambient Air Monitoring Regulations." These proposals were published in the Federal Register on January 17, 2006.

11. OTHER BUSINESS

+ next to an item indicates an attachment

The next meeting of the San Diego Region Conformity Working Group is scheduled for Wednesday, May 17, 2006, from 10:30 a.m. to 12 noon at SANDAG.
SUMMARY OF MARCH 15, 2006, MEETING

Item #1 Introductions

Self-introductions were made. See attached attendance list.

Item #2 Summary of February 15, 2006, Meeting

Carl Selnick submitted corrections to the February meeting minutes. Corrections were noted and made.

Item #3 Public Comments/Communications

There were none.

Item #4 2030 Revenue Constrained Regional Transportation Plan (RTP): 2006 Update and Air Quality Conformity Determination

Elisa Arias, SANDAG, reported that the SANDAG Board of Directors adopted the 2030 Revenue Constrained Regional Transportation Plan (RTP): 2006 Update and Air Quality Conformity Determination at their February 24, 2006, meeting and made a finding of conformity. SANDAG has submitted copies of the final RTP document and conformity finding to FHWA and FTA, with copies to the U.S. Environmental Protection Agency for their conformity finding.

Item #5 2004 RTIP Amendments

Elisa Arias reported that Caltrans had submitted a list of projects to be included as amendments to the 2004 RTIP. SANDAG staff has decided to separate the projects into two amendments. Amendment 15 includes exempt projects and Amendment 16 includes a list of mainly capacity-increasing projects that are part of the Go California program. After seeking consultation from the CWG, it is expected that Amendment 16 would be adopted in May 2006.

Elisa Arias provided a briefing on the Go California transportation exempt projects. Mike Brady, Caltrans, noted that “weigh station” might be a more appropriate category for project CAL84: Add FAST Lane at Otay Mesa cargo border crossing. The project is currently categorized as a “truck
climbing lane,” which is a classification that applies outside urban areas. Wade Hobbs, FHWA, concurred with Mr. Brady. Elisa Arias stated that it would not be a problem to change the classification to “weigh station.”

Wade Hobbs inquired if CAL89: Widen single lane exit ramp at SB I-805 to Telegraph Canyon Road, added a new lane or if it was increasing storage. Sandy Johnson, Caltrans District 11, stated that there are no additional lanes beyond the gore point. Ms. Johnson will work with the project manager to get a better job description for the project. The updated description can be done in Project Track.

Sookyung Kim, SANDAG, provided a listing of the Bureau of Indian Affairs (BIA) projects, which are included as exempt projects. Wade Hobbs noted that most of the BIA jobs are usually small resurfacing projects, although on occasion a larger project, such as a roadway servicing a gaming facility can be listed. Mr. Hobbs noted his appreciation for listing these projects individually in the CWG mailing.

Elisa Arias led the CWG through the list of non-exempt Amendment 16 projects. The CWG discussed projects CAL26A, B, and C and the correct programming of the PE funds. Sandy Johnson and Shanin Sepassi, Caltrans District 11, provided an expanded description of CAL82: HOV bypass to SR 94/125 Connector. The description provided by Mr. Sepassi included the addition of a lane past the gore point, and was therefore determined to be capacity-adding and non-exempt for conformity purposes. Ms. Arias noted that a new project description will be included for SR 905.

**Item #6 Consultation on Conformity Criteria and Procedures for 2004 RTIP Amendment**

Elisa Arias, SANDAG, provided information on the conformity procedures and criteria to be used for Amendment 16 to the 2004 RTIP. Ms. Arias noted that a re-determination of conformity will be done for the 2030 Revenue Constrained Regional Transportation Plan (RTP): 2006 Update to comply with any changes included in Amendment 16.

**Latest Planning Assumptions:** SANDAG is located in a maintenance area for carbon monoxide (CO). SANDAG will be utilizing the new CO budgets for analysis. The San Diego region also is a non-attainment area, under Subpart 1 of the Clean Air Act, for 8-hour Ozone. A State Implementation Plan (SIP) is under development.

**Growth Forecast:** The most updated growth forecast is the Final 2030 Population and Employment forecast, which was approved by the SANDAG Board of Directors in December 2003. SANDAG is working on a new forecast, which most likely won’t go to the Board until summer 2006.

Elisa Arias provided an overview on the transportation modeling to be used for the development of the 2006 RTIP. SANDAG will be using TransCad software, which has a strong linkage with Arc Info; the GIS system that SANDAG uses to maintain the transportation network and land use and demographic data. The networks include all roads that are in the jurisdiction’s General Plan. Circulation Elements including: freeways, expressways regional arterial system, and all regionally significant projects included in the RTP and RTIP. There are networks for the years 2000, 2002, 2009, 2010, 2014, 2020, and 2030. SANDAG also has a transit network data set for existing and proposed
transit systems. The majority of the transit system operates on the regional roadways, with the exception of the trolley and commuter lines, which are coded separately.

Trip distribution follows a gravity model. For mode choice SANDAG has highway, transit, bicycle, and walking modes. The highway mode includes: drive alone non-toll, drive alone toll, shared ride high occupancy vehicle (HOV), and shared ride non-HOV. The transit mode includes: rail/bus rapid transit (BRT) mode, express bus, and local bus with three different access modes: walk, drive, or drop-off. SANDAG produces model runs for the a.m. peak (6 to 9 a.m.), p.m. peak (3 to 6 p.m.), and the off-peak, which covers the remaining 18 hours of the day. For highway and transit assignment the multi-modal, multi-class assignment function TransCad is used. Model results are compared with traffic volumes from actual traffic count data bases and the highway performance monitoring system estimates of vehicle miles traveled (VMT).

For motor vehicle emissions modeling SANDAG uses EMFAC 2002, which was approved by the EPA for conformity in April 2003. These data includes 2000 vehicle fleet data. SANDAG will utilize this version as the new version of EMFAC will not be available until later this year.

For emission forecasts for 8-hour ozone, SANDAG has 1-hour ozone budgets from the maintenance plan for 2010 and 2014. These budgets are also utilized for 2020 and 2030. The “no greater that 2002” test will be used for the interim emissions tests for 2009. For ozone summer emissions will be used for reactive organic gases (ROG) and nitrogen oxides (NOx) emissions. The analysis years were chosen to comply with the transportation conformity rule.

For CO SANDAG is utilizing the most current budget. Emissions forecasts will be run for the years 2010, 2020, and 2030, and 2018 will be interpolated. EMFAC will be run for the winter season.

There are four federally approved transportation control measures (TCMs) for the San Diego Region: ride sharing, transit service improvements, traffic flow improvements, and bicycle facilities and programs. These TCMs have been fully implemented and continue to receive funding through the RTIP.

Sookyung Kim highlighted that of the federal side for regional programs (RCP and Congestion Mitigation and Air Quality (CMAQ)), SANDAG is using the apportionments that were sent out by Caltrans. For federal earmarks project budgets are based on federal appropriations, and high-priority projects are based on SAFETEA-LU. For the state program, the 2004 STIP and SHOPP budgets are being utilized. Additionally, individual agency and TransNet funds are also included.

The CWG will discuss the conformity analysis at the April 19th meeting. The amendments will go to the Transportation Committee as a draft on the April 21st meeting. There may be an overlap in the CWG and public 30-day review period due to the speed at which the amendment process is moving. Amendment 16 will go to the Transportation Committee for adoption on May 19, 2006. This process will occur simultaneously with the development of the 2006 RTIP.
Item #7 Development of the 2006 Regional Transportation improvement Program (RTIP)

SANDAG has requested submission of new projects and project revisions for the 2006 RTIP. The information is due no later than April 7, 2006. A draft list of projects will be provided to the CWG for discussion at the April 19, 2006, meeting.

Item #8 Interim Guidance for Implementing the Transportation Conformity Provisions in SAFETEA-LU

This item was postponed for discussion until the April 19, 2006, CWG meeting.

Item #9 Status of the State Implementation Plan (SIP) for 8-Hour Ozone Standard and EMFAC 2007 Update

Dennis Wade and Jean Mazur provided a status update on the SIP and EMFAC. Jean Mazur stated that a letter from the Federal Highway Administration (FHWA) and the EPA is being drafted in response to the letter submitted by ARB, dated January 31, 2006.

Item #10 EPA Hearings on National Ambient Air Quality Standards for Particulate Matter and Revisions to Ambient Air Monitoring Regulations

This item was postponed for discussion until the April 19, 2006, CWG meeting.

Item #11 Other Business

The next meeting of the San Diego Conformity Working Group is scheduled for April 19, 2006, at 10:30 a.m. at SANDAG.
## San Diego Region Conformity Working Group
### Meeting Attendance
March 15, 2006

<table>
<thead>
<tr>
<th>Name</th>
<th>Agency</th>
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<tbody>
<tr>
<td>Mike Brady (phone)</td>
<td>Caltrans</td>
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<tr>
<td>Wade Hobbs (phone)</td>
<td>FHWA</td>
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<tr>
<td>Dennis Wade (phone)</td>
<td>ARB</td>
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<tr>
<td>Jean Mazur (phone)</td>
<td>FHWA</td>
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<td>Sandy Johnson</td>
<td>Caltrans</td>
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<td>Jacque Clayton</td>
<td>Caltrans</td>
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<td>Shanin Sepassi,</td>
<td>Caltrans</td>
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<tr>
<td>Carl Selnick</td>
<td>APCD</td>
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<td>Carla Waletka (phone)</td>
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<td>Elisa Arias</td>
<td>SANDAG</td>
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<tr>
<td>Heather Werdick</td>
<td>SANDAG</td>
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<tr>
<td>Rachel Kennedy</td>
<td>SANDAG</td>
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<td>Sookyung Kim</td>
<td>SANDAG</td>
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2030 REVENUE CONSTRAINED REGIONAL TRANSPORTATION PLAN (RTP): 2006 UPDATE AND AIR QUALITY CONFORMITY DETERMINATION

File Number 3001300

Attachment related to this item:

Mr. Gary Gallegos, Executive Director  
San Diego Association of Governments  
Wells Fargo Plaza  
401 B Street, Suite 800  
San Diego, CA 92101

Dear Mr. Gallegos:

SUBJECT: 2030 Revenue Constrained Regional Transportation Plan for the San Diego Region (2006 Update): Air Quality Conformity Determination

The Federal Highway Administration (FHWA) and the Federal Transit Administration (FTA) have completed our review of the conformity determination for the San Diego Association of Governments’ (SANDAG’s) 2030 Regional Transportation Plan: 2006 Update (RTP). The SANDAG completed this RTP update and conformity determination to meet 40 CFR 93.104(b)(3) and 23 CFR 450.322(a) requiring metropolitan planning organizations in nonattainment areas to update the RTP and corresponding conformity determination every three years. The SANDAG started this update prior to the passage of SAFETEA-LU which changed the three-year update cycle to a four-year update cycle.

The SANDAG made the conformity determination for the RTP on February 24, 2006 (Resolution #2006-3). The conformity analysis submitted to the FHWA/FTA by the SANDAG indicates that all air quality conformity requirements have been met. Based on our review, we find that the RTP conforms to the applicable state implementation plan (SIP) in accordance with the provisions of 40 CFR Parts 51 and 93. In accordance with the July 15, 2004, Memorandum of Understanding (MOU) between the Federal Highway Administration, California Division and the Federal Transit Administration, Region IX, the FTA has concurred with this conformity determination. Additionally, this approval was made after consultation with the EPA, Region 9 office, pursuant to the Transportation Conformity Rule. This conformity determination re-starts the four-year update cycle for the SANDAG’s RTP.
In accordance with the above MOU, this letter constitutes the FHWA and the FTA’s joint air quality conformity determination for the SANDAG’s RTP. If you have any questions pertaining to this conformity determination, please contact Ms. Jean Mazur, of the FHWA, at (916) 498-5732.

Sincerely,

[Signature]

For
Gene K. Fong
Division Administrator
Action Requested: REVIEW AND COMMENT

2004 RTIP AMENDMENT NO. 16: DRAFT AIR QUALITY CONFORMITY ANALYSIS

Attachment related to this item:
- Appendix B of Air Quality Conformity Report.
APPENDIX B
AIR QUALITY PLANNING AND TRANSPORTATION CONFORMITY

BACKGROUND

The federal Clean Air Act (CAA), which was last amended in 1990, requires the U.S. Environmental Protection Agency (EPA) to set National Ambient Air Quality Standards (NAAQS) for pollutants considered harmful to public health and the environment. California has adopted state air quality standards that are more stringent than the NAAQS. Areas with levels that exceed the standard for specified pollutants are designated as non-attainment areas.

The U.S. EPA requires that each state containing non-attainment areas develop plans to attain the NAAQS by a specified attainment deadline. These attainment plans are called State Implementation Plans. The San Diego County Air Pollution Control District (APCD) prepares the San Diego portion of the California State Implementation Plan (SIP). Once the standards are attained, further plans—called Maintenance Plans—are required to demonstrate continued maintenance of the NAAQS.

SANDAG and the U.S. Department of Transportation (DOT) must make a determination that the Regional Transportation Plan (RTP) and the Regional Transportation Improvement Program (RTIP) conform to the SIP for air quality. Conformity to the SIP means that transportation activities will not create new air quality violations, worsen existing violations, or delay the attainment of the national ambient air quality standards.

On March 28, 2003, the SANDAG Board of Directors made a finding of conformity of the 2030 Revenue Constrained RTP and adopted this Plan. The U.S. DOT made its conformity determination on April 9, 2003. The 2004 RTIP was found in conformity with the SIP by the SANDAG Board of Directors and by the U.S. DOT on July 23, 2004, and on October 4, 2004, respectively.

On April 15, 2004, the U.S. EPA designated the San Diego air basin as non-attainment for the new 8-Hour ozone standard. This designation took effect on June 15, 2004. The air basin has been classified as a basic non-attainment area under Subpart 1 of the Clean Air Act and the attainment date for the 8-Hour ozone standard is June 15, 2009. Several areas that are tribal lands in eastern San Diego County were excluded from the non-attainment designation. As shown in Figure B.1 on page 99, La Posta Areas #1 and #2, Cuyapaie, Manzanita, and Campo Areas #1 and #2 are attainment areas for the 8-Hour Ozone NAAQS. In cooperation with the San Diego APCD and SANDAG, the California Air Resources Board (ARB) must develop an 8-Hour Ozone Attainment Plan for submission to the U.S. EPA by June 15, 2007.

The Final Transportation Conformity Rule Amendments for the New 8-Hour Ozone and PM2.5 National Ambient Air Quality Standards of July 2004 require that conformity of the RTP and the RTIP for non-attainment areas be determined to the 8-Hour ozone standard by June 15, 2005. The SANDAG Board of Directors made a finding of conformity of the 2030 RTP and 2004 RTIP, as amended, on April 22, 2005. The U.S. DOT issued its conformity finding on May 20, 2005.

The San Diego region also has been designated by the U.S. EPA as a federal maintenance area for the Carbon Monoxide (CO) standard. On November 8, 2004, ARB submitted the *2004 Revision to the California State Implementation Plan for Carbon Monoxide* to the U.S. EPA. Effective January 30, 2006, U.S. EPA has approved this maintenance plan as a SIP revision. The new CO motor vehicle emissions budgets are the applicable budgets for transportation conformity.

On December 17, 2004, the U.S. EPA designated the San Diego region as a non-attainment area for PM2.5. However, on April 5, 2005, the U.S. EPA modified the designation status of the San Diego air basin to attainment, based on monitoring data for the three-year period of 2002 to 2004.

**TRANSPORTATION CONFORMITY: REGIONAL EMISSIONS ANALYSIS AND MODELING PROCEDURES**

**Introduction**

SANDAG has updated the Revenue Constrained Scenario of the 2030 RTP to conduct the required air quality conformity analysis within a three-year cycle. Conformity of the 2030 RTP expires on April 9, 2006. Chapter 3 provides information on revenue assumptions and Chapter 4 describes the Revenue Constrained Scenario.

**Growth Forecasts**

Every three to five years, SANDAG produces a long-range forecast of population, housing, and employment growth for the San Diego region. The most recent is the Final 2030 Regional Growth Forecast, which was accepted by the SANDAG Board of Directors on December 19, 2003, for use in planning studies.

The forecast process relies on three integrated forecasting models. The first one, the Demographic and Economic Forecasting Model (DEFM), provides a detailed econometric and demographic forecast for the entire region. The second one, the Interregional Commuting Model, provides a forecast of commuting between the San Diego region, southwest Riverside County, and Tijuana/Northern Baja California. The third one, the Urban Development Model, allocates the results of the first two models to subregional areas based upon the current plans and policies of the jurisdictions.

The Final 2030 Regional Growth Forecast is based solely on the adopted general plans and community plans and policies of the 18 cities. For the unincorporated area, the forecast is based on the most recent (December 2002) version of the County’s GP2020 plan update, as directed by the Board of Supervisors.

In July 2005, SANDAG consulted with the San Diego Region Conformity Working Group (CWG) on the use of the Final 2030 Regional Growth Forecast for the air quality conformity analysis of the 2030 Revenue Constrained RTP: 2006 Update. Previously, both U.S. DOT and U.S. EPA concurred that approved plans should be used as input in the air quality conformity process. Table B.1 shows the regional population and employment growth forecast for the San Diego region through 2030.
TABLE B.1—SAN DIEGO REGIONAL POPULATION AND EMPLOYMENT FORECAST

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<tr>
<th>Year</th>
<th>Total Population</th>
<th>Total Employment</th>
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<tr>
<td>2000</td>
<td>2,813,833</td>
<td>1,384,676</td>
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<tr>
<td>2010</td>
<td>3,211,721</td>
<td>1,528,522</td>
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<tr>
<td>2020</td>
<td>3,528,605</td>
<td>1,672,883</td>
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<tr>
<td>2030</td>
<td>3,855,085</td>
<td>1,824,030</td>
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Source: SANDAG, December 2003

Transportation Modeling

SANDAG follows a widely used four-step transportation modeling process of trip generation, trip distribution, mode choice, and assignment to forecast travel activity in the San Diego region. After trip generation, several iterations through the trip distribution, mode choice, and assignment steps are made to bring travel demand into equilibrium with supply. Finally, travel model results are combined with additional input and output functions to form the complete modeling chain. Travel forecasting procedures are described in more detail in SANDAG’s Final 2030 Forecast Process and Model Documentation (April 2004) and the Addendum to Transportation Model Documentation (June 2005).

The estimates of regional transportation-related emissions analysis meet the requirements established in the Transportation Conformity Rule, Sections 93.122(b) and 93.122(c). These requirements relate to the procedures to determine regional transportation-related emissions, including the use of network-based travel models, methods to estimate traffic speeds and delays, and the estimation of vehicle miles of travel.

TransCAD is the transportation planning computer package used by SANDAG to provide a framework for performing much of the computer processing involved with modeling. Another software package used extensively in the modeling process is ArcInfo. This geographic information system (GIS) maintains, manipulates, and displays transportation, land use, and demographic data. SANDAG has written numerous programs that provide a linkage between TransCAD and ArcInfo. Other programs manipulate data and perform some modeling functions such as trip generation and mode choice.

A number of data files and surveys are used to calibrate the transportation models. These include:

- 1995 Travel Behavior Survey
- 2001 Caltrans Statewide Travel Survey
- 2001-2003 San Diego Regional Transit Survey
- External Trip Surveys
- Traffic Generation Studies
- 1991 San Diego Visitor Survey
- 2000 Census Transportation Planning Package
In addition to model parameters derived from these surveys, there are three major inputs to the transportation models:

- growth forecast inputs used to describe existing and planned land use patterns and demographic characteristics
- highway networks used to describe existing roadway facilities and planned improvements to the roadway system
- transit networks used to describe existing and planned public transit service

**Highway Networks**

The regional highway networks in the 2030 Revenue Constrained RTP: 2006 Update include all roads classified by local jurisdictions in their General Plan circulation elements. These roads include freeways, expressways, and the Regional Arterial System (RAS). The RAS consists of all conventional state highways, prime arterials, and selected major streets. In addition, some local streets are included in the networks for connectivity between zones.

The route improvements and additions in the 2030 Revenue Constrained RTP: 2006 Update are developed to provide adequate travel service that is compatible with adopted regional policies for land use and population growth. All regionally significant projects are included in the quantitative emissions analysis. These include all state highways, all proposed National Highway System routes, all regionally significant arterials, and all FHWA functionally classified "Other Principal Arterials."

The networks also account for programs intended to improve the operation of the highway system, including high occupancy vehicle (HOV) lanes and ramp metering. Existing and proposed toll facilities also are modeled to reflect time, cost, and capacity effects of these facilities. The SR 125 South project and SR 241 are the only modeled toll facilities in the San Diego region.

In addition, several managed/HOV lanes are included in the Revenue Constrained Plan. Facilities with proposed managed lanes include I-5, I-15, I-805, and SR 52. Managed lanes are defined as reversible HOV routes and HOV routes with two or more lanes in the peak direction. It is assumed that the excess capacity not utilized by carpools and transit on these facilities would be managed so that single occupant vehicles could use these lanes under a pricing mechanism. Traffic flows would be managed so that the facility would operate at level of service C or better.

Based on the networks and programs described above, the transportation forecasts of the 2030 Revenue Constrained RTP: 2006 Update differentiate between four highway modes: drive alone/non-toll, drive alone/toll, shared-ride/HOV, and shared-ride/non-HOV.

SANDAG normally maintains networks for 2000 (the 2030 Regional Growth Forecast base year) and the years 2010, 2020, and 2030. A 2014 network also was created to conduct air quality conformity analyses of the 2030 Revenue Constrained RTP: 2006 Update to the 2014 1-Hour ozone emissions budgets. Additionally, a base year 2002 network and a 2009 network were created to conduct the interim emissions test for the 8-Hour ozone standard attainment year.

Table 4.5 in Chapter 4 lists the major highway projects included in the analysis and their implementation phasing. The Regional Arterial System shown in Figure 4.2 and a list of those arterials was described in Table...
TA 7.5 of Technical Appendix 7 - Transportation Evaluation Criteria and Rankings of the 2030 RTP (adopted in 2003). Locally funded regionally significant projects also have been included in the air quality conformity analysis. These projects are funded with TransNet funds, a 20-year half-percent local sales tax for transportation that expires in 2008; TransNet extension funds, a 40-year, half-percent local sales tax extension approved by voters in 2004 that expires in 2048; and other local revenue sources.

Transit Networks

SANDAG also maintains transit network datasets for existing and proposed transit systems. Most transit routes run over the same streets, freeways, HOV lanes and ramps used in the highway networks. As a result the only additional facilities that are added to the transportation coverage for transit modeling purposes are:

- trolley and commuter rail lines
- streets used by buses that are not part of local general plan circulation elements

There are seven transit modes, which group routes with similar operating characteristics: commuter rail, trolley, regional bus rapid transit (BRT), corridor BRT, limited express bus, express bus, and local bus. Regional and corridor BRT modes were recently added to represent a new type of transit service proposed in the 2030 RTP. BRT service would have stations and operating characteristics similar to commuter rail and trolleys, but service would be provided by advanced design buses operating on HOV lanes, some grade-separated transit ways, and surface streets. Once TransCAD transit networks have been built, TransCAD finds minimum time paths between transit access points (TAPs). TAPs are selected transit stops that are used to represent walk and auto access to the transit system. The following four sets of paths are created for modes:

- AM peak period local bus
- AM peak period premium service
- Mid-day local bus
- Mid-day premium service

Bus speeds assumed in the transit networks are derived from modeled highway speeds and reflect the effects of congestion. Regional and express transit routes on surface streets are assumed to operate out of congestion due to priority transit treatments. Higher bus speeds may result for transit vehicles operating on highways with HOV lanes and HOV bypass lanes at ramp meters, compared to those routes that operate on highways where these facilities do not exist.

In addition to transit travel times, transit fares are required as input to the mode choice model. TransCAD procedures replicate the San Diego region’s complicated fare policies which differ between:

- buses which collect a flat fare of between $1.75 and $4.00 depending on the type of service,
- trolleys which charge a variable fare of between $1.25 and $3.00 depending on how many stations are traversed,
- commuter rail which has a zone-based fare of between $3.50 and $4.75,
- proposed regional BRT routes which are assumed to charge a distance based fare of between $0.14 and $0.60 per mile that replicates limited express and commuter rail fares, and
- proposed corridor BRT routes which are assumed to use trolley station-based fares.
Fares are expressed in 2004 dollars and are assumed to remain constant in inflation-adjusted dollars over the forecast period.

Near-term transit route changes are drawn from the Regional Short-Range Transit Plan produced in cooperation with the region’s transit agencies. Longer-range improvements are proposed as a part of the RTP development and other transit corridor studies. In addition to federal and state funded projects, locally funded regionally significant transit projects have been included in the air quality conformity analysis of the 2006 Revenue Constrained Scenario of the 2030 RTP. These transit projects also are funded with TransNet funds or other local revenue sources. Once network coding is completed, the transportation models are run for the applicable scenarios (2002, 2009, 2010, 2014, 2020, and 2030). Table 4.2 in Chapter 4 lists the major regional transit projects included in the analysis and their implementation phasing.

**Trip Generation**

Trip generation is the first step in the transportation modeling process. Average weekday trip ends by all forms of transportation starting and ending in each zone are estimated for ten trip types: home-work, home-college, home-school, home-shop, home-other, work-other, and other-other, serve passenger, visitor, and airport. The model computes person trips, which account for all forms of transportation including automobiles, trucks, taxicabs, motorcycles, public transit, bicycling and walking.

The trip generation model works by applying trip rates to zone level growth forecasts. The model calculates each of the trip ends separately, as trip productions and attractions. Trip production rates are expressed as trips per household while trip production rates vary by trip type and structure type. Trip attractions are expressed as trips per acre of nonresidential land use or trips per household. Trip attraction rates vary by trip type and land use category. The Final 2030 Regional Growth Forecast was used to produce trip generation forecasts for the years 2002, 2009, 2010, 2014, 2020, and 2030. Trip generation rates were established by utilizing data from traffic generator studies and expanding rates from the 1995 Travel Behavior Survey and 2001 Caltrans Statewide Travel Survey.

SANDAG’s regional transportation model uses a relatively high trip generation rate for households (8.1 vehicle trips per day), which may account for possible increases in trip making as new facilities are built. Also, the model accounts for travel diversion among facilities.

The model reduces future year person trips by a small amount to reflect increased use of tele-working and e-commerce. Reduction factors of three to five percent were applied to selected trip purposes and land uses.

**Trip Distribution**

After trip generation, trip movements between zones are determined using a doubly-constrained gamma-function gravity model form of the trip distribution model. Inputs to the trip distribution model include zone level trip generation forecasts by trip type, zone-to-zone impedances, and gamma function parameters by trip type. The model is designed to modify trip patterns in response to new development and reflects shortened trip lengths in the vicinity of Smart Growth, mixed-use developments. The model also modifies trip patterns as new roadways are added.

The model is calibrated to match observed trip length frequencies from the 1995 Travel Behavior Survey and 2001 Caltrans Statewide Travel Survey. Zone-to-zone impedances are a composite measure of peak and off-
peak travel times and costs by highway, transit and non-motorized modes. Several iterations of trip distribution, mode choice, and assignment are performed to bring model-estimated highway travel into equilibrium with supply. After each iteration or feedback loop, impedances are recomputed to reflect changes in highway congestion.

**Mode Choice**

At this point in the modeling process, total person trip movements between zones are split into different forms of transportation by highway, transit, and non-motorized modes (bicycling and walking). Highway modes include drive alone/non-toll, drive alone toll, shared-ride/HOV, and shared-ride/non-HOV. Nine transit modes differentiate transit trips by three ride modes (rail/BRT, express bus and local bus) and three access modes (walk, drive, and drop-off). The mode choice model is designed to link mode use to demographic assumptions, highway network conditions, transit system configuration, land use alternatives, parking costs, transit fares, and auto operating costs. Trips between zone pairs are allocated to modes based on the cost and time of traveling by a particular mode compared to the cost and time of traveling by other modes. For example, vehicle trips on a congested route would be more likely to be diverted to light rail than vehicle trips on an uncongested freeway.

Income level also is considered since lower income households tend to own fewer automobiles and therefore make more trips by transit and carpooling. People in higher income households tend to choose modes based on time and convenience rather than cost. The mode choice model is calibrated using 1995 and 2001 Travel Behavior Survey trip tables by mode and income and 2001-2003 Regional Transit Survey transit trip characteristics. Regional level Census 2000 work trip mode shares were also used to fine-tune mode share estimates.

Highway and transit travel times reflect highway congestion effects from the final iteration of the feedback loop. The model produces a.m. peak, p.m. peak, and off-peak period trip tables for vehicles and transit riders. The a.m. peak period is from 6 to 9 in the morning and the p.m. peak period is from 3 to 6 in the afternoon. The off-peak period covers the remaining 18 hours of the day. A series of mode choice model runs were performed in the course of analyzing the 2030 Revenue Constrained RTP: 2006 Update through two model iterations.

**Highway and Transit Assignment**

**Highway**

Highway assignment produces traffic volume estimates for all roadway segments in the system. These traffic volumes are an important input to emissions modeling. Similarly, transit trips are assigned to transit routes and segments.

SANDAG loads traffic using TransCAD’s “Multi-Modal Multi-Class Assignment” function. The highway assignment model works by finding roads that provide the shortest travel impedance between each zone pair. Trips between zone pairs are then accumulated on road segments making up minimum paths. Highway impedances consider posted speed limits, signal delays, congestion delays, and costs. The model computes congestion delays for each segment based on the ratio of the traffic volume to roadway capacity. Motorists may choose different paths during peak hours when congestion can be heavy and off-peak hours when roadways are typically free flowing. For this reason, traffic is assigned separately for a.m. peak, p.m. peak,
and off-peak periods. Vehicle trip tables for each scenario reflect increased trip-making due to population growth and variations in travel patterns due to the alternative transportation facilities/networks proposed.

Model accuracy is assessed by comparing model estimated traffic volumes with actual traffic counts obtained through SANDAG’s traffic monitoring program and Highway Performance Monitoring System (HPMS) estimates of vehicle miles of travel (VMT).

After completing the highway assignments additional processing is needed. Adjustments are made for calibration error volume, HOV/managed lane volume, bus volumes, hourly distribution factors, level-of-service (LOS), and travel time.

Transit

For transit assignment, TransCAD software assigns Transit Access Point (TAP)-to-TAP transit trips to the network. Eight separate transit assignments are produced for peak and off-peak periods; walk and auto access; and local bus and premium service. These individual assignments are summed to obtain total transit ridership forecasts.

Before assigning transit trips, external transit trips coming into San Diego from outside the region need to be added to the internal transit trips estimated by the mode choice model. Currently few transit trips enter from the north or east, however, over 20,000 transit trips cross the Mexican border each day. An external transit trip table for the base year is developed from on-board transit ridership surveys and factored to future years based on border crossing trends to account for these trips.

For accuracy transit ridership forecasts from the transit assignment model are compared with transit counts from SANDAG’s transit passenger counting program to determine whether transit modeling parameters need to be adjusted.

Some of these comparisons of model-estimated boardings with actual boardings include:

- system level boardings, which may reveal transfer rate problems and lead to changes to the transfer wait time factor in the mode choice model,
- boardings by mode, which may reveal modal biases and lead to changes in mode choice modal constants,
- boardings by frequency of service, which may show biases that lead to changes in the first wait factor in the mode choice model,
- Centre City screenline crossings, which may lead to changes in parking costs, boardings by stop location, which may indicate problems which specific generators such as a university

Post-TransCAD Processing

Standard TransCAD output needs to be reformatted and adjusted to be useful for emissions modeling. Several routines and computer programs have been written to accomplish the following major functions:

- Correcting link specific traffic volume forecasts for calibration error
- Adding in estimated travel on roads not in the transportation modeling process
- Computing link speeds based on corrected link volumes, Highway Capacity Manual relationships between congestion and speed (or signal delay)
- Splitting link volumes into heavy-duty truck and other traffic to obtain speed distributions by vehicle class
- Preparing a data set that contains total VMT, number of trip starts, and VMT by speed category by time of day for each vehicle class.

**Motor Vehicle Emissions Modeling**

_Emissions Model_

In October 2002, ARB released EMFAC 2002, an emissions inventory model that calculates emissions for motor vehicles operating in California. It is an integrated model that combines emission rate data with vehicle activity to calculate regional emissions. The U.S. EPA approved EMFAC 2002 for use in conformity determinations on April 1, 2003.

The EMFAC 2002 model supports calculation of emissions for the Burden mode. The Burden mode is used for calculating regional emission inventories. In this mode, the model reports total emissions as tons per day for each pollutant, by vehicle class and the total vehicle fleet. The Burden mode uses emission factors that have been corrected for ambient conditions and speeds combined with vehicle activity to calculate emissions in tons per day. Vehicle activity includes the number of vehicles, daily vehicle miles traveled, and the number of daily trips.

The air quality analysis of the 2030 Revenue Constrained RTP: 2006 Update was conducted using EMFAC 2002’s Burden mode. Projections of daily regional emissions were prepared for reactive organic gases (ROG), nitrogen oxides (NOx), and carbon monoxide (CO).

On-road motor vehicle emissions are attributed to several different processes:

- Starting exhaust
- Running exhaust
- Idle exhaust (calculated for heavy-duty trucks only)
- Resting and diurnal evaporation
- Running losses
- Hot soak evaporation

Emission factors vary by vehicle class, fuel usage, and technology. Thirteen vehicle classes are modeled: passenger car, two types of light-duty trucks, medium-duty truck, two types of light-heavy-duty trucks, medium-heavy-duty truck, heavy-heavy-duty truck, line-haul vehicle, urban bus, school bus, motorcycle, and motor-home. The fuels modeled are gasoline, diesel, and electrically powered vehicles. Technology categories can be grouped into catalyst, noncatalyst, and diesel.

Emission factors for processes that vary by temperature (i.e., starting exhaust, hot soak, and running exhaust) are broken down further by specified temperature ranges. Exhaust emission factors also are broken down by speed range.

**Regional Emissions Forecasts**

Regional transportation forecasts were initiated in August 2005. Output from the TransCAD model was then reformatted and adjusted to be useful for emissions modeling.
**8-Hour Ozone Standard**

The transportation conformity rule prescribes different conformity tests for 8-Hour ozone areas that have 1-Hour Ozone State Implementation Plan (SIP) budgets and for areas that do not have 1-Hour Ozone SIPs. The San Diego 1-Hour Ozone Maintenance Plan established ROG and NOx budgets for 2010 and 2014, but not for 2009. On June 26, 2003, The U.S. EPA approved the Maintenance Plan and motor vehicle emissions budgets as SIP revisions. These SIP revisions became effective on July 28, 2003.

In August 2004, SANDAG consulted with the CWG on various options for interim emissions analysis. The approach agreed by the CWG is as follows:

- Under the new 8-Hour ozone standard, the San Diego air basin falls under Boundary Scenario 2, where the 8-Hour ozone area is smaller than and within the 1-Hour ozone boundary. Figure B.1, on page 99, shows the Eastern San Diego County attainment areas, which are tribal lands (Cuyapaie, La Posta #1 and #2, Campo #1 and #2, and Manzanita). The CWG agreed to use the existing approved budget for the entire 1-Hour ozone non-attainment area for the analysis years for which 1-Hour ozone budgets are available (2010 and 2014) and for the remaining analysis years (2020 and 2030).
- To conduct the interim emissions test for 2009, the CWG agreed to use the no-greater-than-2002 test for the attainment year 2009.

In July 2005, the CWG reaffirmed the approach described above for the 8-hour ozone emissions analysis of the 2006 Revenue Constrained Scenario of the 2030 RTP. Countywide forecasts of average weekday ROG and NOx emissions were produced for 2002, 2009, 2010, 2014, 2020, and 2030 using the EMFAC 2002 model. ROG and NOx emissions are based on the summer season.

The analysis years were selected to comply with Sections 93.106(a) (1) and 93.118 (a) of the Transportation Conformity Rule. According to these sections, the first horizon year (2010) must be within ten years from the base year used to validate the regional transportation model (2000), the last horizon year must be the last year of the transportation plan’s forecast period (2030), and the horizon years may be no more than ten years apart (2020). In addition, as explained above, the interim regional emissions analysis for the 8-Hour ozone standard must be conducted for the emissions budgets in the applicable SIP (ROG and NOx budgets for 2010 and 2014). Finally, emissions forecasts for 2002 and 2009 were prepared to conduct the interim attainment year 2009 test.

**CO Standard**

CO regional emissions were projected for 2010, 2018, 2020, and 2030 for the conformity determination of the 2006 Revenue Constrained Scenario of the 2030 RTP. CO emissions are based on the winter season.

**Emissions Modeling Results**

An emissions budget is the part of the SIP that identifies emissions levels necessary for meeting emissions reduction milestones, attainment, or maintenance demonstrations.

To determine conformity of the 2030 Revenue Constrained RTP: 2006 Update, the plan must comply with the interim emission analysis described in the Regional Emissions Forecast section.

Table B.2 summarizes the 2030 Revenue Constrained RTP: 2006 Update air quality conformity analysis for the 8-Hour ozone standard. This analysis shows that the 2030 Revenue Constrained RTP: 2006 Update
(including interim years) meets the applicable budgets and interim tests. Projected ROG and NOx emissions for 2009 are lower than the base year 2002 and those for 2010, 2014, 2020, and 2030 are below the SIP budgets for 2010 and 2014.

**TABLE B.2—2006 REVENUE CONSTRAINED SCENARIO OF THE 2030 RTP**

Air Quality Conformity Analysis for 8-Hour ozone

<table>
<thead>
<tr>
<th>Year</th>
<th>Average Weekday Vehicle Starts (1,000s)</th>
<th>Average Weekday Vehicle Miles (1,000s)</th>
<th>ROG</th>
<th>NOx</th>
</tr>
</thead>
<tbody>
<tr>
<td>2002</td>
<td>13,251</td>
<td>77,172</td>
<td>---</td>
<td>72</td>
</tr>
<tr>
<td>2009</td>
<td>14,088</td>
<td>84,302</td>
<td>---</td>
<td>43</td>
</tr>
<tr>
<td>2010</td>
<td>14,239</td>
<td>84,897</td>
<td>46</td>
<td>40</td>
</tr>
<tr>
<td>2014</td>
<td>14,799</td>
<td>89,033</td>
<td>36</td>
<td>31</td>
</tr>
<tr>
<td>2020</td>
<td>15,643</td>
<td>94,332</td>
<td>36</td>
<td>24</td>
</tr>
<tr>
<td>2030</td>
<td>17,195</td>
<td>104,698</td>
<td>36</td>
<td>17</td>
</tr>
</tbody>
</table>

Note: Emissions budgets from San Diego Region 1-Hour Ozone Maintenance Plan (Approved as SIP revision in July 2003).

Table B.3, on the following page, shows that projected CO emissions from the 2030 Revenue Constrained RTP: 2006 Update are below the 2003 CO budget of 730 tons per day.

**TABLE B.3—2006 REVENUE CONSTRAINED SCENARIO OF THE 2030 RTP**

Air Quality Conformity Analysis for Carbon Monoxide

<table>
<thead>
<tr>
<th>Year</th>
<th>Average Weekday Vehicle Starts (1,000s)</th>
<th>Average Weekday Vehicle Miles (1,000s)</th>
<th>CO</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>SIP Emissions Budget Tons/Day</td>
</tr>
<tr>
<td>2010</td>
<td>14,239</td>
<td>84,897</td>
<td>730</td>
</tr>
<tr>
<td>2018</td>
<td>15,362</td>
<td>92,445</td>
<td>730</td>
</tr>
<tr>
<td>2020</td>
<td>15,643</td>
<td>94,332</td>
<td>730</td>
</tr>
<tr>
<td>2030</td>
<td>17,195</td>
<td>104,698</td>
<td>730</td>
</tr>
</tbody>
</table>

Exempt Projects

Section 93.126 of the Transportation Conformity Rule exempts certain highway and transit projects from the requirement to determine conformity. The categories of exempt projects include safety, mass transit, air quality (ridesharing and bicycle and pedestrian facilities), and other (such as planning studies).

Table B.4 on the following page illustrates the exempt projects considered in the 2006 Revenue Constrained Scenario of the 2030 RTP. This table shows short-term exempt projects. Additional unidentified projects could be funded with revenues expected to be available from the continuation of existing state and federal programs.

Implementation of Transportation Control Measures

There are four federally-approved TCMs that must be implemented in San Diego, which the SIP refers to as Transportation Tactics. They include ridesharing, transit service improvements, traffic flow improvements, and bicycle facilities and programs.

These TCMs were established in the 1982 SIP, which identified general objectives and implementing actions for each tactic. The TCMs have been fully implemented. Ridesharing, transit, bicycling, and traffic flow improvements continue to be funded, although the level of implementation established in the SIP has been surpassed. No TCMs have been removed or substituted from the 1-Hour Ozone Maintenance Plan, which is the applicable SIP. The list of actions that implemented the TCMs is available at SANDAG.
### TABLE B.4—EXEMPT PROJECTS

<table>
<thead>
<tr>
<th>Project/Program Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Bikeway, Rail Trail and Pedestrian Projects</strong></td>
</tr>
<tr>
<td>Bikeway, Rail Trail and Pedestrian Projects</td>
</tr>
<tr>
<td>Bayshore Bikeway</td>
</tr>
<tr>
<td>Downtown Encinitas Streetscape II</td>
</tr>
<tr>
<td>Castle Park Elementary School Sidewalk Improvements</td>
</tr>
<tr>
<td>Fourth Avenue Sidewalk Improvements</td>
</tr>
<tr>
<td>Hazard Center Road Bike Path Study at SR 163</td>
</tr>
<tr>
<td>Brandon Road Sidewalk</td>
</tr>
<tr>
<td>Julian Avenue Sidewalk</td>
</tr>
<tr>
<td>Plaza Bonita Class I Bikeway</td>
</tr>
<tr>
<td>University Avenue/Yale Avenue pedestrian enhancements</td>
</tr>
<tr>
<td>Mira Mesa Boulevard Bikeway</td>
</tr>
<tr>
<td>Adams Avenue Bikeway</td>
</tr>
<tr>
<td>Balboa Avenue/Tierrasanta Boulevard Bikeway</td>
</tr>
<tr>
<td>Cliff Street Pedestrian/Bicycle Bridge</td>
</tr>
<tr>
<td>Inland Rail Trail</td>
</tr>
<tr>
<td>Coastal Rail Trail</td>
</tr>
<tr>
<td><strong>Regionwide Traffic Incident Management</strong></td>
</tr>
<tr>
<td>Freeway Service Patrol</td>
</tr>
<tr>
<td><strong>Safety Improvement Program</strong></td>
</tr>
<tr>
<td>Hazard Elimination</td>
</tr>
<tr>
<td>Bridge Rehabilitation/Preservation</td>
</tr>
<tr>
<td>Collision Reduction</td>
</tr>
<tr>
<td>Roadway/Roadside Preservation</td>
</tr>
<tr>
<td>Noise Barrier Program</td>
</tr>
<tr>
<td><strong>Transportation Demand Management</strong></td>
</tr>
<tr>
<td>RideLink Regional Rideshare Program</td>
</tr>
<tr>
<td>Regional Vanpool Program</td>
</tr>
<tr>
<td><strong>Transportation Management Systems</strong></td>
</tr>
<tr>
<td>Automated Traveler Information System (ATIS)</td>
</tr>
<tr>
<td>Intermodal Transportation Management System (IMTMS)</td>
</tr>
<tr>
<td>Joint Transportation Operations Center (JTOC)</td>
</tr>
<tr>
<td>Fiber-Optic/Closed-Circuit Camera (I-8/I-15/I-805)</td>
</tr>
<tr>
<td>Traffic Management System (I-805, SR 94)</td>
</tr>
<tr>
<td>Ramp Meters (I-5/I-805, SR 94)</td>
</tr>
</tbody>
</table>
Interagency Consultation Process and Public Input

The consultation process followed to prepare the air quality conformity analysis for the 2030 Revenue Constrained RTP: 2006 Update complies with the San Diego Transportation Conformity Procedures adopted in July 1998. In turn, these procedures comply with federal requirements under 40 CFR 93. Interagency consultation involves SANDAG (as the MPO for San Diego County), the APCD, Caltrans, ARB, U.S. DOT, and U.S. EPA.

Consultation is a three-tier process that:

1. formulates and reviews drafts through a conformity working group
2. provides local agencies and the public with opportunities for input through existing regional advisory committees and workshops
3. seeks comments from affected federal and state agencies through participation in the development of draft documents and circulation of supporting materials prior to formal adoption

SANDAG consulted on the development of the air quality conformity analysis of the 2030 Revenue Constrained RTP: 2006 Update at meetings of the San Diego Region Conformity Working Group (CWG), as follows:

- On July 20, 2005, SANDAG staff presented the schedule for the preparation of the 2030 Revenue Constrained RTP: 2006 Update and its conformity analysis. Staff initiated consultation on criteria and procedures for determining conformity. Items discussed included interim emissions analysis, the use of latest planning assumptions, implementation of TCMs, emissions model and budgets, as well as consultation and public involvement.
- On August 17, 2005, SANDAG staff presented additional information on the 2030 Revenue Constrained RTP: 2006 Update including: revenue-constrained plan assumptions, travel demand modeling, transportation control measures, and public outreach activities.
- On September 19, 2005, SANDAG staff presented the draft list of revenue-constrained highway projects, transit services, and exempt projects as well as revenues and expenditures projected through 2030.
- On October 5, 2005, SANDAG released the draft air quality conformity analysis of the 2030 Revenue Constrained RTP: 2006 Update to the San Diego Region CWG for a 30-day review and comment period. On October 19, 2005, the draft air quality analysis was discussed at the meeting of the San Diego Region CWG and comments were incorporated in this report.

On December 9, 2005, the Transportation Committee authorized the distribution of the draft 2030 Revenue Constrained RTP: 2006 Update and draft conformity analysis for public review and comment. A Public Hearing was held at the January 27, 2006, meeting of the SANDAG Board of Directors. No comments were received on the air quality conformity analysis of the 2030 Revenue Constrained RTP: 2006 Update.

Members of the public are welcomed to provide comments at meetings of the San Diego Region CWG, the Transportation Committee, and the SANDAG Board of Directors.
Figure B.1
Eastern San Diego County Attainment Areas for the 8-Hour Ozone NAAQS

Eastern San Diego County Attainment Areas For The 8-Hour Ozone NAAQS

San Diego County

ORC0400503.1 March 9, 2004

EPA Region II GIS Center