



# Stanislaus Council of Governments

## Air Quality Conformity Document

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**FINAL CONFORMITY ANALYSIS FOR  
THE 2011 FEDERAL TRANSPORTATION  
IMPROVEMENT PROGRAM  
AND  
2011 REGIONAL TRANSPORTATION PLAN**

JULY 2010

STANISLAUS COUNCIL OF GOVERNMENTS

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## **EXECUTIVE SUMMARY**

This report presents the Conformity Analysis for the 2011 Federal Transportation Improvement Program (FTIP) and the 2011 Regional Transportation Plan (RTP). The Stanislaus Council of Governments (StanCOG) is the designated Metropolitan Planning Organization (MPO) in Stanislaus County, California, and is responsible for regional transportation planning.

The Clean Air Act Section 176(c) (42 U.S.C. 7506(c)) and U.S. Environmental Protection Agency (EPA) transportation conformity regulations (40 CFR 93 Subpart A) require that each new RTP and TIP be demonstrated to conform to the State Implementation Plan (SIP) before the RTP and TIP are approved by the MPO or accepted by the U.S. Department of Transportation (DOT). This analysis demonstrates that the criteria specified in the transportation conformity regulations for a conformity determination are satisfied by the 2011 FTIP and 2011 RTP; a finding of conformity is therefore supported. The 2011 FTIP and 2011 RTP and corresponding Conformity Analysis were approved by the StanCOG Policy Board on July 21, 2010. FHWA/FTA last issued a finding of conformity for the 2009 TIP and 2007 RTP, including amendments, on January 29, 2009.

The 2011 TIP and 2011 RTP have been financially constrained in accordance with the requirements of 40 CFR 93.108 and consistent with the U.S. DOT metropolitan planning regulations (23 CFR Part 450). A discussion of financial constraint and funding sources is included in the appropriate documents.

The applicable Federal criteria or requirements for conformity determinations, the conformity tests applied, the results of the conformity assessment, and an overview of the organization of this report are summarized below.

### **CONFORMITY REQUIREMENTS**

The Federal transportation conformity regulations (40 Code of Federal Regulations Parts 51 and 93) specify criteria and procedures for conformity determinations for transportation plans, programs, and projects and their respective amendments. The Federal transportation conformity regulation was first promulgated in 1993 by the U.S. EPA, following the passage of amendments to the Federal Clean Air Act in 1990. The Federal transportation conformity regulation has been revised several times since its initial release to reflect both EPA rule changes and court opinions. The transportation conformity regulation is summarized in Chapter 1.

The conformity regulation applies nationwide to “all nonattainment and maintenance areas for transportation-related criteria pollutants for which the area is designated nonattainment or has a maintenance plan” (40 CFR 93.102). Currently, the San Joaquin Valley (or portions thereof) is designated as nonattainment with respect to Federal air quality standards for ozone, and particulate matter under 2.5 microns in diameter (PM<sub>2.5</sub>); and has a maintenance plan for particulate matter under 10 microns in diameter (PM<sub>10</sub>), as well as a maintenance plan for carbon monoxide (CO) for the urbanized/metropolitan areas of Kern, Fresno, Stanislaus and San Joaquin Counties. Therefore, transportation plans and programs for the nonattainment areas for

the Stanislaus County area must satisfy the requirements of the Federal transportation conformity regulation.

Under the transportation conformity regulation, the principal criteria for a determination of conformity for transportation plans and programs are:

- (1) the TIP and RTP must pass an emissions budget test using a budget that has been found to be adequate by EPA for transportation conformity purposes, or an interim emission test;
- (2) the latest planning assumptions and emission models specified for use in conformity determinations must be employed;
- (3) the TIP and RTP must provide for the timely implementation of transportation control measures (TCMs) specified in the applicable air quality implementation plans; and
- (4) interagency and public consultation.

On-going interagency consultation is conducted through the San Joaquin Valley Interagency Consultation Group to ensure Valley-wide coordination, communication and compliance with Federal and California Clean Air Act requirements. Each of the eight Valley MPOs and the San Joaquin Valley Unified Air Pollution Control District (Air District) are represented. The Federal Highway Administration (FHWA), Federal Transit Administration (FTA), the U.S. EPA, the California Air Resources Board (CARB) and Caltrans are also represented on the committee. The final determination of conformity for the TIP and RTP is the responsibility of FHWA, and FTA within the U.S. DOT.

FHWA has developed a Conformity Checklist (included in Appendix A) that contains the required items to complete a conformity determination. Appropriate references to these items are noted on the checklist.

## **CONFORMITY TESTS**

The conformity tests specified in the Federal transportation conformity regulation are: (1) the emissions budget test, and (2) the interim emission test. For the emissions budget test, predicted emissions for the TIP/RTP must be less than or equal to the motor vehicle emissions budget specified in the approved air quality implementation plan or the emissions budget found to be adequate for transportation conformity purposes. If there is no approved air quality plan for a pollutant for which the region is in nonattainment or no emission budget has been found to be adequate for transportation conformity purposes, the interim emission test applies. Chapter 1 summarizes the applicable air quality implementation plans and conformity tests for carbon monoxide, ozone, PM-10, and PM2.5.

## **RESULTS OF THE CONFORMITY ANALYSIS**

A regional emissions analysis was conducted for the years 2011, 2012, 2014, 2017, 2018 (via interpolation), 2020, 2023, 2025 and 2035 for each applicable pollutant. All analyses were

conducted using the latest planning assumptions and emissions models. The major conclusions of the StanCOG Conformity Analysis are:

- For carbon monoxide, the total regional on-road vehicle-related emissions associated with implementation of the 2011 FTIP and the 2011 RTP for the analysis years are projected to be less than the approved emissions budget established in the *2004 Revision to the California State Implementation Plan for Carbon Monoxide*. The applicable conformity test for carbon monoxide is therefore satisfied.
- For ozone, the total regional on-road vehicle-related emissions (ROG and NO<sub>x</sub>) associated with implementation of the 2011 FTIP and the 2011 RTP for all years tested are projected to be less than the adequate emissions budgets specified in the *2007 Ozone Plan*. The conformity tests for ozone are therefore satisfied.
- For PM-10, the total regional vehicle-related emissions (PM-10 and NO<sub>x</sub>) associated with implementation of the 2011 FTIP and the 2011 RTP for all years tested are either (1) projected to be less than the approved emissions budgets, or (2) less than the emission budgets using the approved PM-10 and NO<sub>x</sub> trading mechanism for transportation conformity purposes from the *2007 PM-10 Maintenance Plan*. The conformity tests for PM-10 are therefore satisfied.
- For PM<sub>2.5</sub>, the total regional on-road vehicle-related emissions associated with implementation of the 2011 FTIP and the 2011 RTP for the analysis years are projected to be less than the adequate emission budgets specified in the *2008 PM<sub>2.5</sub> Plan*. The conformity tests for PM<sub>2.5</sub> for both the 1997 and 2006 standards are therefore satisfied.
- The 2011 FTIP and the 2011 RTP will not impede and will support timely implementation of the TCMs that have been adopted as part of applicable air quality implementation plans. The current status of TCM implementation is documented in Chapter 4 of this report.
- Since the local SJV procedures (e.g., Air District Rule 9120 Transportation Conformity) have not been approved by EPA, consultation has been conducted in accordance with Federal requirements.

## REPORT ORGANIZATION

The report is organized into six chapters. Chapter 1 provides an overview of the applicable Federal and State conformity regulations and requirements, air quality implementation plans, and conformity test requirements. Chapter 2 contains a discussion of the latest planning assumptions and transportation modeling. Chapter 3 describes the air quality modeling used to estimate emission factors and mobile source emissions. Chapter 4 contains the documentation required under the Federal transportation conformity regulation for transportation control measures. Chapter 5 provides an overview of the interagency requirements and the general approach to compliance used by the San Joaquin Valley MPOs. The results of the conformity analysis for the TIP/RTP are provided in Chapter 6.

Appendix E includes public meeting documentation conducted on the 2011 FTIP and 2011 RTP and corresponding Conformity Analysis on May 19, 2010. Comments received on the conformity



analysis and responses made as part of the public involvement process are included in Appendix F.

## **CHAPTER 1: FEDERAL AND STATE REGULATORY REQUIREMENTS**

The criteria for determining conformity of transportation programs and plans under the Federal transportation conformity regulation (40 CFR Parts 51 and 93) and the applicable conformity tests for the San Joaquin Valley nonattainment areas are summarized in this section. The Conformity Analysis for the Draft 2011 Federal Transportation Improvement Program (TIP) and the Draft 2011 Regional Transportation Plan (RTP) was prepared based on these criteria and tests. Presented first is a review of the development of the applicable conformity regulation and guidance procedures, followed by summaries of conformity regulation requirements, air quality designation status, conformity test requirements, and analysis years for the Conformity Analysis.

The Stanislaus Council of Governments (StanCOG) is the designated Metropolitan Planning Organization (MPO) for Stanislaus County in the San Joaquin Valley. As a result of this designation, StanCOG prepares the TIP, RTP, and associated conformity analyses. The TIP serves as a detailed four-year programming document for the preservation, expansion, and management of the transportation system. The 2011 RTP has a 2035 horizon that provides the long term direction for the continued implementation of the freeway/expressway plan, as well as improvements to arterial streets, transit, and travel demand management programs. The TIP and RTP include capacity enhancements to the freeway/expressway system commensurate with available funding.

### **A. FEDERAL AND STATE CONFORMITY REGULATIONS**

#### **CLEAN AIR ACT AMENDMENTS**

Section 176(c) of the Clean Air Act (CAA, 1990) requires that Federal agencies and MPOs not approve any transportation plan, program, or project that does not conform to the approved State Implementation Plan (SIP). The 1990 amendments to the Clean Air Act expanded Section 176(c) to more explicitly define conformity to an implementation plan to mean:

“Conformity to the plan's purpose of eliminating or reducing the severity and number of violations of the national ambient air quality standards and achieving expeditious attainment of such standards; and that such activities will not (i) cause or contribute to any new violation of any standard in any area; (ii) increase the frequency or severity of any existing violation of any standard in any area; or (iii) delay timely attainment of any standard or any required interim emission reductions or other milestones in any area.”

Section 176(c) also provides conditions for the approval of transportation plans, programs, and projects, and requirements that the Environmental Protection Agency (EPA) promulgate conformity determination criteria and procedures no later than November 15, 1991.

## FEDERAL RULE

The initial November 15, 1991 deadline for conformity criteria and procedures was partially completed through the issuance of supplemental interim conformity guidance issued on June 7, 1991 for carbon monoxide, ozone, and particulate matter ten microns or less in diameter (PM-10). EPA subsequently promulgated the Conformity Final Rule in the November 24, 1993 *Federal Register* (EPA, 1993). The 1993 Rule became effective on December 27, 1993. The Federal Transportation Conformity Final Rule has been amended several times from 1993 to 2002. These amendments have addressed a number of items related to conformity lapses, grace periods, and other related issues to streamline the conformity process.

On July 1, 2004 EPA published the final rule, Transportation Conformity Rule Amendments for the New 8-hour Ozone and PM2.5 National Ambient Air Quality Standards and Miscellaneous Revisions for Existing Areas; Transportation Conformity Rule Amendments – Response to Court Decision and Additional Rule Changes (EPA, 2004a).

EPA issued a final rule on May 6, 2005 to add the following particulate matter 2.5 microns or less in diameter (PM2.5) precursors to the transportation conformity rule: nitrogen oxides (NOx), volatile organic compounds (VOCs), sulfur oxides (SOx), and ammonia (NH3) (EPA, 2005). The rule specifies when each of these precursors must be considered in PM2.5 nonattainment areas, before and after PM2.5 SIPs are submitted.

In late March 2006, EPA and the Federal Highway Administration (FHWA) published “Transportation Conformity Guidance for Qualitative Hot-Spot Analyses in PM2.5 and PM10 Nonattainment and Maintenance Areas”. This guidance affects Federal project-level approvals for “projects of air quality concern” in PM2.5 and PM10 nonattainment areas on or after April 5, 2006.

EPA issued a final rule on January 24, 2008 regarding changes to make the rule consistent with the Clean Air Act as amended by the most recent transportation funding legislation, the Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users (SAFETEA-LU).

EPA published the Transportation Conformity Rule PM2.5 and PM10 Amendments on March 24, 2010; the rule became effective on April 23, 2010 (EPA, 2010a). This PM amendments final rule amends the conformity regulation to address the 2006 PM2.5 national ambient air quality standard (NAAQS). The final PM amendments rule also addresses hot-spot analyses in PM2.5 and PM10 and carbon monoxide nonattainment and maintenance areas.

## MULTI-JURISDICTIONAL GUIDANCE

EPA issued “multi-jurisdictional” guidance on July 21, 2004 to clarify how nonattainment areas with multiple agencies should conduct conformity determinations based on the changes to the Conformity Rule (EPA, 2004b). This guidance applies to the San Joaquin Valley since there are multiple MPOs within a single nonattainment area. The main principle of the guidance is that one regional emissions analysis is required for the entire nonattainment area. However, separate modeling and conformity documents may be developed by each MPO.

Part 3 of the guidance applies to nonattainment areas that have adequate or approved conformity budgets addressing a particular air quality standard. This Part currently applies to the San Joaquin Valley for carbon monoxide, ozone and PM-10. The guidance allows MPOs to make independent conformity determinations for their plans and TIPs as long as all of the other subareas in the nonattainment area have conforming transportation plans and TIPs in place at the time of each MPO and the Department of Transportation (DOT) conformity determination.

With respect to PM2.5, the Transportation Conformity Rule PM2.5 and PM10 Amendments published on March 24, 2010 effectively incorporates the “multi-jurisdictional” guidance directly into the rule.

EPA published a budget adequacy determination for the 2012 conformity budget contained in the 2008 PM2.5 Plan May 12, 2010, effective May 27, 2010. The Rule allows MPOs to make independent conformity determinations for their plans and TIPs as long as all of the other subareas in the nonattainment area have conforming transportation plans and TIPs in place at the time of each MPO and DOT conformity determination.

## **DISTRICT RULE**

The San Joaquin Valley Unified Air Pollution Control District (Air District) adopted Rule 9120 Transportation Conformity on January 19, 1995 in response to requirements in Section 176(c)(4)(c) of the 1990 Clean Air Act Amendments. Rule 9120 contains the Transportation Conformity Rule promulgated November 24, 1993 verbatim. The Rule provides guidance for the development of consultation procedures and processes at the local level. As required by the Transportation Conformity Rule, Rule 9120 was submitted to EPA on January 24, 1995 as a revision to the State SIP. The rule becomes effective on the date EPA promulgates interim, partial, or final approval in the Federal Register.

To date, the Rule has not received approval by EPA. Section 51.390(b) of the Transportation Conformity Rule states: “Following EPA approval of the State conformity provisions (or a portion thereof) in a revision to the applicable implementation plan, conformity determinations would be governed by the approved (or approved portion of the) State criteria and procedures.” It should also be noted that EPA has changed 40 CFR 51.390 to streamline the requirements for State conformity SIPs. Since a transportation conformity SIP has not been approved for the SJV, the Federal transportation conformity rule still governs.

## **B. CONFORMITY REGULATION REQUIREMENTS**

The Federal regulations identify general criteria and procedures that apply to all transportation conformity determinations, regardless of pollutant and implementation plan status. These include:

- 1) *Conformity Tests* — Sections 93.118 and 93.119 specify emissions tests (budget and interim emissions) that the TIP/RTP must satisfy in order for a determination of conformity to be found. The final transportation conformity regulation issued on July 1, 2004 requires a submitted SIP motor vehicle emissions budget to be found adequate or approved by EPA prior to use for making conformity determinations. The budget must be used on or after the effective date of EPA’s adequacy finding or approval.

2) *Methods / Modeling:*

*Latest Planning Assumptions* — Section 93.110 specifies that conformity determinations must be based upon the most recent planning assumptions in force at the time the conformity analysis begins. This is defined as “the point at which the MPO begins to model the impact of the proposed transportation plan or TIP on travel and/or emissions. New data that becomes available after an analysis begins is required to be used in the conformity determination only if a significant delay in the analysis has occurred, as determined through interagency consultation” (EPA, 2010b). All analyses for the Conformity Analysis were conducted using the latest planning assumptions and emissions models in force at the time the conformity analysis started in February 2010 (see Chapter 2).

*Latest Emissions Models* — Section 93.111 requires that the latest emission estimation models specified for use in SIPs must be used for the conformity analysis. EMFAC2007 was used in the Conformity Analysis and is documented in Chapter 3.

3) *Timely Implementation of TCMs* — Section 93.113 provides a detailed description of the steps necessary to demonstrate that the new TIP/RTP are providing for the timely implementation of TCMs, as well as demonstrate that the plan and/or program is not interfering with this implementation. TCM documentation is included in Chapter 4 of the Conformity Analysis.4) *Consultation* — Section 93.105 requires that the conformity determination be made in accordance with the consultation procedures outlined in the Federal regulations. These include:

- MPOs are required to provide reasonable opportunity for consultation with State air agencies, local air quality and transportation agencies, the USDOT and EPA (Section 93.105(a)(1)).
- MPOs are required to establish a proactive public involvement process, which provides opportunity for public review and comment prior to taking formal action on a conformity determination (Section 93.105(e)).

The TIP, RTP, and corresponding conformity determinations are prepared by each MPO. Copies of the Draft documents are provided to member agencies and others, including FHWA, Federal Transit Administration (FTA), EPA, Caltrans, CARB, and the Air District for review. Both the TIP and RTP are required to be publicly available and an opportunity for public review and comment is provided. The consultation process for the conformity analysis includes a 30-day comment period followed by a public meeting. However, the comment period for this conformity analysis was 45 days concurrent with the Draft 2011 TIP and RTP, and associated California Environmental Quality Act (CEQA) documents.

## **C. AIR QUALITY DESIGNATIONS APPLICABLE TO THE SAN JOAQUIN VALLEY**

The conformity regulation (section 93.102) requires documentation of the applicable pollutants and precursors for which EPA has designated the area nonattainment or maintenance. In addition, the nonattainment or maintenance area and its boundaries should be described.

StanCOG is located in the federally designated San Joaquin Valley Air Basin. The borders of the basin are defined by mountain and foothill ranges to the east and west. The northern border is consistent with the county line between San Joaquin and Sacramento Counties. The southern border is less defined, but is roughly bounded by the Tehachapi Mountains and, to some extent, the Sierra Nevada range. Conformity for the 2011 FTIP and RTP includes analysis of existing and future air quality impacts for each applicable pollutant.

The San Joaquin Valley is currently designated as nonattainment for the NAAQS for 8-hour ozone, and PM<sub>2.5</sub>; and has a maintenance plan for PM-10, as well as a maintenance plan for carbon monoxide (CO) for the urbanized/metropolitan areas of Kern, Fresno, Stanislaus and San Joaquin Counties. State Implementation Plans have been prepared to address carbon monoxide, ozone, PM-10 and PM<sub>2.5</sub>:

- The 2004 Revision to the California State Implementation Plan for Carbon Monoxide was approved by EPA on November 30, 2005 (effective January 30, 2006).
- EPA published a budget adequacy determination for the 2011, 2014, and 2017 conformity budgets contained in the 2007 Ozone Plan on January 22, 2009, effective February 6, 2009.
- The 2007 PM-10 Maintenance Plan, which included revisions to the attainment plan, was approved (with minor technical corrections to the conformity budgets) by EPA on November 12, 2008.
- EPA published a budget adequacy determination for the 2012 conformity budget contained in the 2008 PM<sub>2.5</sub> Plan on May 12, 2010, effective May 27, 2010.

On November 13, 2009, EPA published Air Quality Designations for the 2006 24-hour PM<sub>2.5</sub> standard, effective December 14, 2009. Nonattainment areas are required to meet the standard by 2014; transportation conformity applies by December 14, 2010. In the San Joaquin Valley, the 1997 standards (both 24-hour and annual) will continue to apply. It is important to note that the 2006 24-hour PM<sub>2.5</sub> nonattainment area boundary for the San Joaquin Valley is exactly the same as the nonattainment area boundary for the 1997 annual standard.

## **D. CONFORMITY TEST REQUIREMENTS**

The conformity (Section 93.109(c)–(k)) rule requires that either a table or text description be provided that details, for each pollutant and precursor, whether the interim emissions tests and/or the budget test apply for conformity. In addition, documentation regarding which emissions budgets have been found adequate by EPA, and which budgets are currently applicable for what analysis years is required.

Specific conformity test requirements established for the San Joaquin Valley nonattainment areas for carbon monoxide, ozone, and particulate matter are summarized below.

Section 93.124(d) of the 1997 Final Transportation Conformity regulation allows for conformity determinations for subregional emission budgets by MPOs if the applicable implementation plans (or implementation plan submission) explicitly indicates an intent to create such subregional budgets for the purpose of conformity. In addition, Section 93.124(e) of the 1997 rules states: "...if a nonattainment area includes more than one MPO, the implementation plan may establish motor vehicle emission budgets for each MPO, or else the MPOs must collectively make a conformity determination for the entire nonattainment area." Each applicable implementation plan and estimate of baseline emissions in the San Joaquin Valley provides motor vehicle emission budgets by county, to facilitate county-level conformity findings.

**CARBON MONOXIDE**

The urbanized/metropolitan areas of Kern, Fresno, Stanislaus and San Joaquin Counties are classified maintenance for carbon monoxide. The motor vehicle emission budgets for carbon monoxide are specified in the *2004 Revision to the California State Implementation Plan for Carbon Monoxide* in tons per average winter day. EPA published a direct final rulemaking approving the plan on November 30, 2005, effective January 30, 2006.

For carbon monoxide, the Federal transportation conformity regulation requires that the TIP and RTP must pass an emissions budget test with a budget that has been approved by EPA for transportation conformity purposes. New conformity budgets have been approved for 2003, 2010 and 2018 for portions of the San Joaquin Valley as provided in the following table.

**Table 1-1:  
 On-Road Motor Vehicle CO Emissions Budgets**

<b>County</b>	<b>2003 Emissions (winter tons/day)</b>	<b>2010 Emissions (winter tons/day)</b>	<b>2018 Emissions (winter tons/day)</b>
Fresno	240	240	240
Kern	180	180	180
San Joaquin	170	170	170
Stanislaus	130	130	130

**OZONE**

Under the existing conformity regulation, regional emissions analyses for ozone areas must address nitrogen oxides (NOx) and volatile organic compounds (VOC) precursors. It is important to note that in California, reactive organic gases (ROG) are considered equivalent to and are used in place of volatile organic compounds (VOC). The motor vehicle emission budgets for ozone are specified in the 2007 Ozone Plan in tons per average summer day. EPA published the notice of adequacy determination for the 2011, 2014, and 2017 budgets in the Federal Register on January 22, 2009, effective February 6, 2009.

The SJV was reclassified from a Serious nonattainment area for the 8-hour ozone standard to Extreme effective June 4, 2010. The 2007 Ozone Plan requested an Extreme nonattainment classification and attainment date of 2023, and includes the corresponding additional RFP years. The SIP has identified subarea budgets for each MPO in the nonattainment area. For this Conformity Analysis, the SJV will continue to conduct determinations for subarea emission budgets as established in the applicable implementation plan.

The adequate conformity budgets from Table 9.3 of the Plan are provided in the table below. These budgets will be used to compare to emissions resulting from the 2011 FTIP and RTP. CARB subsequently updated Madera County and San Joaquin County budgets; these updates are reflected in the table below.

**Table 1-2:  
 Adequate Budgets from the 2007 Ozone Plan**  
 (summer tons/day)

County	2011		2014		2017	
	ROG	NOx	ROG	NOx	ROG	NOx
Fresno	15.5	47.9	12.9	37.2	11.1	29.1
Kern (SJV)	15.7	79.4	13.5	64.1	11.6	49.5
Kings	3.4	15.9	2.8	12.3	2.3	9.4
Madera	3.7	12.2	3.1	9.7	2.6	7.7
Merced	6.2	28.8	5.1	22.3	4.2	17.1
San Joaquin	12.1	34.7	10.1	27.8	8.6	21.3
Stanislaus	9.0	22.3	7.5	17.2	6.5	13.4
Tulare	9.2	20.9	7.7	16.6	6.7	13.1

**PM-10**

The 2007 PM-10 Maintenance Plan was approved (with minor technical corrections to the conformity budgets) by EPA on November 12, 2008, which contains motor vehicle emission budgets for PM-10 and NOx, as well as a trading mechanism. Motor vehicle emission budgets are established based on average annual daily emissions. The motor vehicle emissions budget for PM-10 includes regional reentrained dust from travel on paved roads, vehicular exhaust, travel on unpaved roads, and road construction.

The conformity budgets from Tables 6 and 7 of the Plan are provided below (including the minor technical corrections) and will be used to compare emissions for each analysis year. CARB subsequently updated the 2005 attainment budgets; these updates are reflected in the table below.



**Table 1-3:  
On-Road Motor Vehicle PM-10 Emissions Budgets**  
(tons per average annual day)

County	2005		2020	
	PM-10	NOx	PM-10	NOx
Fresno	13.5	59.2	16.1	23.2
Kern <sup>(a)</sup>	12.1	88.3	14.7	39.5
Kings	3.1	16.7	3.6	6.8
Madera	3.6	13.9	4.7	6.5
Merced	6.2	39.4	6.4	12.9
San Joaquin	9.1	42.6	10.6	17.0
Stanislaus	5.6	29.7	6.7	10.8
Tulare	7.3	25.1	9.4	10.9

<sup>(a)</sup> Kern County subarea includes only the portion of Kern County within the San Joaquin Valley Air Basin

The PM-10 SIP allows trading from the motor vehicle emissions budget for the PM-10 precursor NOx to the motor vehicle emissions budget for primary PM-10 using a 1.5 to 1 ratio. The trading mechanism allows the agencies responsible for demonstrating transportation conformity in the San Joaquin Valley to supplement the 2005 budget for PM-10 with a portion of the 2005 budget for NOx, and use these adjusted motor vehicle emissions budgets for PM-10 and NOx to demonstrate transportation conformity with the PM-10 SIP for analysis years after 2005. As noted above, EPA approved the 2007 PM-10 Maintenance Plan (with minor technical corrections to the conformity budgets) on November 12, 2008, which includes continued approval of the trading mechanism.

The trading mechanism will be used only for conformity analyses for analysis years after 2005. To ensure that the trading mechanism does not impact the ability to meet the NOx budget, the NOx emission reductions available to supplement the PM-10 budget shall only be those remaining after the NOx budget has been met.

### PM2.5

EPA and FHWA have indicated that areas violating both the annual and 24-hour standards for PM2.5 must address both standards in the conformity determination. The San Joaquin Valley currently violates both standards, and the conformity determination includes both analyses. Please note that this includes both the 1997 standards and the 2006 24-hour standard (see discussion under Air Quality Designations Applicable to the San Joaquin Valley above).

The 2008 PM2.5 Plan contains motor vehicle emission budgets for PM2.5 and NOx established based on average annual daily emissions. The motor vehicle emissions budget for PM2.5 includes directly emitted PM2.5 motor vehicle emissions from tailpipe, brake wear and tire wear. VOC, SOx, ammonia, and dust (from paved roads, unpaved roads, and road construction) were found to be insignificant and not included in the motor vehicle emission budgets for conformity purposes. The conformity budgets from Table 7-2 of the Plan are provided below and will be used to compare emissions resulting from the 2011 FTIP and RTP.

The Clean Air Act requires all states to attain the 1997 PM<sub>2.5</sub> standards as expeditiously as practicable beginning in 2010, but by no later than April 5, 2015. States must identify their attainment dates based on the rate of reductions from their control strategies and the severity of the PM<sub>2.5</sub> problem. Modeling must be used to verify that the control strategy is as expeditious as practicable. The 2008 PM<sub>2.5</sub> Plan shows that the San Joaquin Valley PM<sub>2.5</sub> nonattainment area can attain the annual PM<sub>2.5</sub> NAAQS in 2014. The SIP has identified subarea budgets for each MPO in the nonattainment area. For this Conformity Analysis, the SJV will continue to conduct determinations for subarea emission budgets as established in the applicable implementation plan.

**Table 1-4:  
 On-Road Motor Vehicle PM<sub>2.5</sub> Emissions Budgets**  
 (tons per average annual day)

County	2009		2012		2014	
	PM <sub>2.5</sub>	NO <sub>x</sub>	PM <sub>2.5</sub>	NO <sub>x</sub>	PM <sub>2.5</sub>	NO <sub>x</sub>
Fresno	2.2	56.5	1.9	44.2	1.1	26.0
Kern (SJV)	3.4	87.7	3.0	74.2	1.4	41.6
Kings	0.7	17.9	0.6	14.6	0.3	8.1
Madera	0.6	14.1	0.5	11.4	0.3	6.7
Merced	1.5	33.6	1.2	26.7	0.6	14.8
San Joaquin	1.6	39.1	1.4	32.8	0.9	20.3
Stanislaus	1.0	25.8	0.9	20.8	0.5	12.4
Tulare	0.9	23.3	0.8	19.5	0.5	12.2

As noted above, the Transportation Conformity Rule PM<sub>2.5</sub> and PM<sub>10</sub> Amendments published on March 24, 2010 (effective April 23, 2010) allows 2006 PM<sub>2.5</sub> areas with adequate or approved 1997 PM<sub>2.5</sub> budgets to determine conformity for both of the NAAQS at the same time, using the budget test.

**E. ANALYSIS YEARS**

The conformity regulation (Section 93.118[b] and [d]) requires documentation of the years for which consistency with motor vehicle emission budgets must be shown. In addition, any interpolation performed to meet tests for years in which specific analysis is not required need to be documented.

For the selection of the horizon years, the conformity regulation requires: (1) that if the attainment year is in the time span of the transportation plan, it must be modeled; (2) the last year forecast in the transportation plan must be a horizon year; and (3) horizon years may not be more than ten years apart. In addition, the conformity regulation requires that conformity must be demonstrated for each year for which the applicable implementation plan specifically establishes motor vehicle emission budgets.

Section 93.118(b)(2) clarifies that when a maintenance plan has been submitted, conformity must be demonstrated for the last year of the maintenance plan and any other years for which the maintenance plan establishes budgets in the time frame of the transportation plan. Section

93.118(d)(2) indicates that a regional emissions analysis may be performed for any years, the attainment year, and the last year of the plan’s forecast. Other years may be determined by interpolating between the years for which the regional emissions analysis is performed.

**Table 1-5:  
San Joaquin Valley Conformity Analysis Years**

<b>Pollutant</b>	<b>Budget Years<sup>1</sup></b>	<b>Attainment/ Maintenance Year</b>	<b>Intermediate Years</b>	<b>RTP Horizon Year</b>
CO	NA	2018	2017/2025	2035
Ozone	2011/2014/2017	2023	2025	2035
PM-10	NA	2020	2025	2035
PM2.5	2012	2014	2017/2025	2035

Section 93.118(d)(2) indicates that the regional emissions analysis may be performed for any years in the time frame of the transportation plan provided they are not more than ten years apart and provided the analysis is performed for the attainment year (if it is in the time frame of the transportation plan) and the last year of the plan’s forecast period. Emissions in years for which consistency with motor vehicle emissions budgets must be demonstrated, as required in paragraph (b) of this section (i.e., each budget year), may be determined by interpolating between the years for which the regional emissions analysis is performed. For CO, the analysis year 2018 will be interpolated from 2017 and 2025

For PM2.5, the attainment year is 2014 for both the 1997 and 2006 Standards. On March 8, 2005, EPA issued Guidance for Determining the “Attainment Year” for Transportation Conformity in new 8-hour ozone and PM2.5 Nonattainment Areas (EPA, 2005b). Per CAA section 172(a)(2), all PM2.5 nonattainment areas will have an initial maximum statutory attainment date of April 5, 2010. However, the submitted 2008 PM2.5 Plan shows that the San Joaquin Valley PM2.5 nonattainment area can attain the annual PM2.5 NAAQS in 2014. In addition, the attainment year for the 2006 PM2.5 areas will be 2014. Since this is the same attainment year as the 1997 standards noted above, no changes to the conformity analysis years are required.

<sup>1</sup> Budget years that are not in the time frame of the transportation plan are not included as analysis years (e.g., CO 2003 and 2010, Ozone 2008, PM-10 2005, PM2.5 2009), although they may be used to demonstrate conformity.

## **CHAPTER 2: LATEST PLANNING ASSUMPTIONS AND TRANSPORTATION MODELING**

### **A. LATEST PLANNING ASSUMPTIONS**

The Clean Air Act states that “the determination of conformity shall be based on the most recent estimates of emissions, and such estimates shall be determined from the most recent population, employment, travel, and congestion estimates as determined by the MPO or other agency authorized to make such estimates.” On January 18, 2001, the USDOT issued guidance developed jointly with EPA to provide additional clarification concerning the use of latest planning assumptions in conformity determinations (USDOT, 2001).

According to the conformity regulation, the time the conformity analysis begins is “the point at which the MPO or other designated agency begins to model the impact of the proposed transportation plan or TIP on travel and/or emissions.” The conformity analysis and initial modeling began in February, 2010. On January 21, 2010, a summary of transportation model updates and latest planning assumptions was transmitted to the San Joaquin Valley Interagency Consultation Group (IAC) for review and comment or concurrence. Both EPA and FHWA subsequently indicated that there were no comments or concerns regarding the summary and provided concurrence.

Key elements of the latest planning assumption guidance include:

- Areas are strongly encouraged to review and strive towards regular five-year updates of planning assumptions, especially population, employment and vehicle registration assumptions.
- The latest planning assumptions must be derived from the population, employment, travel and congestion estimates that have been most recently developed by the MPO (or other agency authorized to make such estimates) and approved by the MPO.
- Conformity determinations that are based on information that is older than five years should include written justification for not using more recent information. For areas where updates are appropriate, the conformity determination should include an anticipated schedule for updating assumptions.
- The conformity determination must use the latest existing information regarding the effectiveness of the transportation control measures (TCMs) and other implementation plan measures that have already been implemented.

StanCOG uses the Cube transportation modeling software developed by Citilabs to estimate travel. The model was validated in 2009 for the 2006 base year. The latest planning assumptions used in the transportation model validation and Conformity Analysis is summarized in Table 2-1.

**Table 2-1: Summary of Latest Planning Assumptions for the StanCOG Conformity Analysis**

<b>Assumption</b>	<b>Year and Source of Data (MPO action)</b>	<b>Modeling</b>	<b>Next Scheduled Update</b>
Population	Base Year: 2006 Census  Projections: Trend forecast at the county level are based on historical population data from D.O.F and historical employees from E.D.D.	This data is controlled at city & community level and disaggregated at the TAZ level for use in Cube software in the base year validation. Forecasts are also at the city and community level.	2010-11 data from the Census, Department of Finance, and E.D.D regional and local agencies will be used for the next traffic model validation.
Employment	Base Year: 2006 State Employment Development Department (EDD)  Projections: Trend forecast at the county level are based on historical employees from E.D.D.	This data is controlled at city & community level and disaggregated at the TAZ level for use in Cube software in the base year validation. Forecasts are also at the city and community level.	2010-11 data from the Department of Employment Development (EDD) will be used for the next traffic model validation.
Traffic Counts	2006, HPMS, Cities, Stanislaus County, and Caltrans,	Cube was validated using these traffic counts.	Traffic counts are updated as often as possible.
Vehicle Miles of Travel	The transportation model was restructured, calibrated and validated in 2009. VMT was compared to State VMT estimate in 2006.	Cube is the transportation model used to estimate VMT in Stanislaus County.	VMT is an output of the transportation model; VMT is affected by the TIP/RTP project updates and is included in each new conformity analysis.
Speeds	Survey data were based on posted speeds collected in 2009.  Speed distributions were also updated in EMFAC2007, using methodology approved by ARB and with information from the transportation model.	Cube. The transportation model includes a feedback loop that assures congested speeds are consistent with travel speeds used throughout the traffic modeling process.  EMFAC2007	If new speed data is available, it will be included in the next model validation.
Vehicle Registrations	EMFAC2007 is the most recent model for use in California conformity analyses. Vehicle registration data is included by ARB in the model and cannot be updated by the user.	EMFAC2007	ARB has committed to update the fleet information in EMFAC on a 3-year cycle (see 1/31/06 letter to EPA and FHWA). The next update is scheduled to occur in 2010.
State Implementation Plan Measures	Latest implementation status of commitments in prior SIPs.	Emission reduction credits consistent with the SIPs are post-processed via spreadsheets as documented in Ch. 4.	Updated for every conformity analysis.

## **B. SOCIOECONOMIC DATA**

### POPULATION, EMPLOYMENT AND LAND USE

The conformity regulation requires documentation of base case and projected population, employment, and land use used in the transportation modeling. USDOT/EPA guidance indicates that if the data is more than five years old, written justification for the use of older data must be provided. In addition, documentation is required for how land use development scenarios are consistent with future transportation system alternatives, and the reasonable distribution of employment and residences for each alternative.

#### *Supporting Documentation:*

Population and employment data were developed in 2009 using regression analysis on historical data provided by the Department of Finance (D.O.F.) and the Employment Development Department (E.D.D) for use in the StanCOG Transportation Model. StanCOG updated the countywide 2006 base year data and the countywide projections for Population, Employment and Housing based on conformity milestone years to the year 2035. The land use projections were developed annually to the year 2050. The final milestone year in the conformity analysis is the year 2035. Staff controlled the data at the community and city level for the 3,200 traffic analysis zones in the transportation model.

StanCOG applied historical population and employment data in a trend regression equation at the county level. The methodology provided the countywide forecasts of population and employment for use in the transportation model. The methodology was approved by the Stanislaus County Planning Directors and the Stanislaus Council of Governments' Policy Board in December 2009.

The population and employment forecasts were then disassembled using general plan land use information from the jurisdictions by applying estimates of market absorption rates, employment and housing balance ratios and/or past growth patterns. Population and employment growth was distributed among the County's jurisdictions and controlled to match jurisdictional totals. Population and employment growth were distributed among the County jurisdictions using GIS shape files provided by the US Census to delineate community, city and sometimes zip code boundaries and control totals for each jurisdiction. The demographic and land use information were organized for use in the StanCOG Transportation Model by the following variables: Population, Single Family Households, Multiple Family Households, and Employment, which is represented by retail, service, governments, education, and other. Land use and socioeconomic data at the zonal level are then used for determining trip generation in the first step of the transportation modeling process.

## **C. TRANSPORTATION MODELING**

The San Joaquin Valley Metropolitan Planning Organizations (MPOs) utilize the TP+/Viper or Cube traffic modeling software. The Valley TPA regional traffic models consist of traditional four-step traffic forecasting models. They use land use, socioeconomic, and road network data to estimate facility-specific roadway traffic volumes. Each TPA model covers the appropriate county area, which is then divided into hundreds or thousands of individual traffic analysis zones

(TAZs). In addition the model roadway networks include thousands of nodes and links. Link types include freeway, freeway ramp, other State route, expressway, arterial, collector, and local collector. Current and future-year road networks were developed considering local agency circulation elements of their general plans, traffic impact studies, capital improvement programs, and the State Transportation Improvement Program. The models use equilibrium, a capacity sensitive assignment methodology, and the data from the model for the emission estimates differentiates between peak and off-peak volumes and speeds. In addition, the model is reasonably sensitive to changes in time and other factors affecting travel choices. The results from model validation/calibration were analyzed for reasonableness and compared to historical trends.

Specific transportation modeling requirements in the conformity regulation are summarized below, followed by a description of how the StanCOG transportation modeling methodology meets the requirements.

The StanCOG Travel Demand Model is a conventional travel model used for traffic forecasting. It uses land use and socioeconomic data to generate trips and then distributes them to a road network that uses road capacity, distance and speed to assign traffic volumes generated from 3,200 traffic analysis zones. The model generates and combines trips by travel by purpose including home-based-work, home-based-shop, home-based-other, work-other, other-other, and external travel (travel through the region).

In 2009-10, a peak hour module was added to account for trips in the AM hours (6:30-7:30 am) the PM (4:30-5:30 pm) and the off peak (22 hours). At the same time, the Travel Model was updated with a congestion feedback loop process to account for congested speed and congested time in addition to free flow speed and free flow time.

The model study area covers all of Stanislaus County, and a fraction of Merced and San Joaquin counties. It maintains 72 gateways to account for the internal/external and thru-trip trip components of travel in the modeling region.

### TRAFFIC COUNTS

The conformity regulation requires documentation that a network-based travel model is in use that is validated against observed counts for a base year no more than 10 years before the date of the conformity determination. Document that the model results have been analyzed for reasonableness and compared to historical trends and explain any significant differences between past trends and forecasts (for per capita vehicle-trips, VMT, trip lengths mode shares, time of day, etc.).

#### *Supporting Documentation:*

Travel estimates at specific roadway locations in the StanCOG Transportation Model were validated against counts provided by the cities, Stanislaus county and Caltrans in the 2005-2007 period. Many of the counts were collected from 2006. StanCOG staff and the transportation-consulting firm of Dowling, Inc., of Oakland, California developed the validation and performed the calibration adjustments. Facility types are within acceptable parameters to traffic counts based on FHWA standards; the 2006 model's overall VMT estimate is + 3.6% of the target provided by Caltrans in the Office of Travel Statistics (2006 California Public Road Data).

## SPEEDS

The conformity regulation requires documentation of the use of capacity sensitive assignment methodology and emissions estimates based on a methodology that differentiates between peak and off-peak volumes and speeds, and bases speeds on final assigned volumes. In addition, documentation of the use of zone-to-zone travel impedances to distribute trips in reasonable agreement with the travel times estimated from final assigned traffic volumes. Where transit is a significant factor, document that zone-to-zone travel impedances used to distribute trips are used to model mode split. Finally, document that reasonable methods were used to estimate traffic speeds and delays in a manner sensitive to the estimated volume of travel on each roadway segment represented in the travel model.

### *Supporting Documentation:*

The StanCOG Model includes a speed feedback loop that uses congested travel times as an input into the final distribution step and the assignment step for each period: AM, PM and off-peak. The feedback loop provides the congested travel speeds that in turn are used as input to the air pollution emissions model. In this regard, the travel model and the emissions model are consistent with each other for estimating travel speeds throughout the conformity analysis.

## TRANSIT

The conformity regulation requires documentation of any changes in transit operating policies and assumed ridership levels since the previous conformity determination. Document the use of the latest transit fares and road and bridge tolls.

### *Supporting Documentation:*

Transit service assumptions are included in the Transit File as a direct input into the StanCOG Transportation Model. Proxy variables included in this step include historical ridership trends, current and future transit routes and projected fare increases and percentage of people that use transit in the region based on the Census Transportation Planning Package. Potential transit ridership for each Traffic Analysis Zone (TAZ) is projected and then input into the model as low/medium/high factor for each TAZ. StanCOG is in the process of developing a mode choice component in the model.

## VALIDATION/CALIBRATION

The conformity regulation requires documentation that the model results have been analyzed for reasonableness and compared to historical trends and explain any significant differences between past trends and forecasts (for per capita vehicle-trips, VMT, trip lengths mode shares, time of day, etc.). In addition, documentation of how travel models are reasonably sensitive to changes in time, cost, and other factors affecting travel choices is required. The use of HPMS, or a locally developed count-based program or procedures that have been chosen to reconcile and calibrate the network-based travel model estimates of VMT must be documented.

### *Supporting Documentation:*

Assumptions in the 2011 RTP, the 2011 FTIP and the CMP have been used to perform the 2011 StanCOG Air Quality Conformity Analysis. StanCOG staff have approached these documents



using its newest modeling tools developed in 2008-10 to address institutional and policy goals in the aforementioned planning documents. The model was validated by comparing estimates of select link volumes in the model with base year traffic counts observed in the field. The base year validation meets FHWA criteria for all functional classifications of roadway and VMT including freeways, expressways, highways, ramps, arterials, minor arterials, and collectors. For example, freeway estimates are within 5% of observed counts in the StanCOG model. The base year validation meets criteria for percent error relative to traffic counts on groups of roads (screenlines) throughout each county.

For Serious and above nonattainment areas, transportation conformity guidance, Section 93.122(b)(3) of the conformity rule states:

*Highway Performance Monitoring System (HPMS) estimates of vehicle miles traveled (VMT) shall be considered the primary measure of VMT within the portion of the nonattainment or maintenance area and for the functional classes of roadways included in HPMS, for urban areas which are sampled on a separate urban area basis. For areas with network-based travel models, a factor (or factors) may be developed to reconcile and calibrate the network-based travel model estimates of VMT in the base year of its validation to the HPMS estimates for the same period. These factors may then be applied to model estimates of future VMT. In this factoring process, consideration will be given to differences between HPMS and network-based travel models, such as differences in the facility coverage of the HPMS and the modeling network description. Locally developed count-based programs and other departures from these procedures are permitted subject to the interagency consultation procedures.*

The StanCOG Travel Demand Model was validated to 2006 counts. The 2006 base year VMT estimate is within acceptable parameters (+/- 3.6%) of Highway Performance Monitoring System observed counts, by facility type and overall. As a result additional adjustments were not required prior to the conformity analysis.

### FUTURE NETWORKS

The conformity regulation requires that a listing of regionally significant projects and federally-funded non-regionally significant projects assumed in the regional emissions analysis be provided in the conformity documentation. In addition, all projects that are exempt must also be documented.

§93.106(a)(2)ii and §93.122(a)(1) requires that regionally significant additions or modifications to the existing transportation network that are expected to be open to traffic in each analysis year be documented for both Federally funded and non-federally funded projects (see Appendix B).

§93.122(a)(1) requires that VMT for non-regionally significant Federal projects is accounted for in the regional emissions analysis. It is assumed that all SJV MPOs include these projects in the transportation network (see Appendix B).

§93.126, §93.127, §93.128 require that all projects in the TIP/RTP that are exempt from conformity requirements or exempt from the regional emissions analysis be documented. In addition, the reason for the exemption (Table 2, Table 3, traffic signal synchronization) must also

be documented (see Appendix B). It is important to note that the CTIPs exemption code is provided in response to FHWA direction.

*Supporting Documentation:*

The build highway networks include qualifying projects based on the Draft 2011 Federal Transportation Improvement Program (2011 FTIP) and 2011 Regional Transportation Plan (2011 RTP). Not all of the street and freeway projects included in the TIP/RTP qualify for inclusion in the highway network. Projects that call for study, design, right-of-way acquisition, or non-capacity improvements are not included in the networks. When these projects result in actual facility construction projects, the associated capacity changes are coded into the network as appropriate. Since the networks define capacity in terms of number of through traffic lanes, only construction projects that increase the lane-miles of through traffic are included.

Generally, Valley TPA highway networks include all roadways included in the county or cities classified system. These links typically include all freeways plus expressways, arterials, collectors and local collectors. Highway networks also include regionally significant planned local improvements from Transportation Impact Fee Programs and developer funded improvements required to mitigate the impact of a new development.

Small-scale local street improvements contained in the TIP/RTP are not coded on the highway network. Although not explicitly coded, traffic on collector and local streets is simulated in the models by use of abstract links called “centroid connectors”. These represent local streets and driveways which connect a neighborhood to a regionally-significant roadway. Model estimates of centroid connector travel are reconciled against HPMS estimates of collector and local street travel.

**D. TRAFFIC ESTIMATES**

A summary of the population, employment, and travel characteristics for the StanCOG transportation modeling area for each scenario in the Conformity Analysis is presented in Table 2-2.

**Table 2-2: Traffic Network Comparison for Horizon Years Evaluated in Conformity Analysis**

<b>Horizon Year</b>	<b>Total Population (thousands)</b>	<b>Employment (thousands)</b>	<b>Average Weekday VMT (millions)</b>	<b>Lane Miles</b>
<b>2011</b>	551.5	186.8	12.0	N/A
<b>2012</b>	560.5	189.6	12.1	N/A
<b>2014</b>	578.5	195.1	12.5	N/A
<b>2017</b>	605.6	203.4	13.6	N/A
<b>2020</b>	632.7	211.7	14.2	3,719
<b>2023</b>	659.7	220.1	14.8	N/A
<b>2025</b>	677.7	225.6	15.1	3,791
<b>2035</b>	767.8	253.3	17.0	3,851

## E. VEHICLE REGISTRATIONS

StanCOG does not estimate vehicle registrations, age distributions or fleet mix. Rather, current forecasted estimates for these data are developed by CARB and included in the EMFAC2007 model. See [http://www.arb.ca.gov/msei/onroad/latest\\_version.htm](http://www.arb.ca.gov/msei/onroad/latest_version.htm). EMFAC2007 is the most recent model for use in California conformity analyses. Vehicle registrations, age distribution and fleet mix are developed and included in the model by CARB and cannot be updated by the user.

## F. STATE IMPLEMENTATION PLAN MEASURES

The air quality modeling procedures and associated spreadsheets contained in Chapter 3 Air Quality Modeling assume emission reductions consistent with the applicable air quality plans. The emission reductions assumed for these committed measures reflect the latest implementation status of these measures. Committed control measures in the applicable air quality plans that reduce mobile source emissions and are used in conformity, are summarized below.

### CARBON MONOXIDE

No committed control measures are included in the conformity demonstration.

### OZONE

Committed control measures in the 2007 Ozone Plan that reduce mobile source emissions and are included in the conformity demonstration are shown in Table 2-3.

**Table 2-3: 2007 Ozone Plan Measures Assumed in the Conformity Analysis**

<b>Measure Description</b>	<b>Pollutants</b>
District Existing Indirect Source Mitigation and School Bus Fleets rules	Summer NOx
ARB existing Reflash, Idling, and Moyer	Summer ROG Summer NOx
District Proposed Employee Trip Reduction	Summer ROG Summer NOx

NOTE: While the ARB Proposed passenger and truck measures included in the Draft State Strategy were included in the 2007 Ozone Plan and conformity budgets, they are not included in the conformity analysis. EPA has indicated that these measures cannot be included, since there is no written commitment to the specific control measures contained in the SIP.

PM-10

Committed control measures in the EPA approved 2007 PM-10 Maintenance Plan that reduce mobile source emissions and are included in the conformity demonstration are shown in Table 2-4.

**Table 2-4: 2007 PM-10 Maintenance Plan Measures Assumed in the Conformity Analysis**

Measure Description	Pollutants
ARB existing Reflash, Idling, and Moyer	PM-10 annual exhaust NOx annual exhaust
District Rule 8061	PM-10 paved road dust PM-10 unpaved road dust
District Rule 8021 Controls	PM-10 road construction dust

PM2.5

Committed control measures in the 2008 PM2.5 Plan that reduce mobile source emissions and are included in the conformity demonstration are shown in Table 2-5.

**Table 2-5: 2008 PM2.5 Plan Measures Assumed in the Conformity Analysis**

Measure Description	Pollutants
ARB Adopted State and Local Measures not included in EMFAC 2007	Annual PM2.5 Annual NOx

NOTE: While the ARB 2007 State Strategy included in the Draft State Strategy was included in the 2008 PM2.5 Plan and conformity budgets, it is not included in the conformity analysis. EPA has indicated that these measures cannot be included, since there is no written commitment to the specific control measures contained in the SIP.

The PM-10 diesel exhaust emission reductions are reduced by the ARB size fraction for diesel vehicle exhaust to yield a PM2.5 diesel exhaust emission reduction. The ARB size fraction data can be accessed at <http://www.arb.ca.gov/ei/speciate/speciate.htm> The PMSIZE link (under speciation profiles) opens a spreadsheet that contains size fractions. Row 75 of the spreadsheet specifies that the diesel exhaust fraction of PM-10 that represents PM2.5 or smaller is 0.92. This fraction was used because the approved ARB control measure in the EPA approved 2007 PM-10 Maintenance Plan only affects diesel vehicle exhaust. This is documented in the spreadsheet EMFAC explanation tab. The PM2.5 fraction is calculated by multiplying the PM-10 diesel exhaust fraction by the ARB size fraction 0.92.

## **CHAPTER 3: AIR QUALITY MODELING**

The model used to estimate vehicle exhaust emissions for carbon monoxide, ozone precursors, and particulate matter is EMFAC2007. CARB emission factors for PM-10 have been used to calculate reentrained paved and unpaved road dust, and fugitive dust associated with road construction. For the Conformity Analysis, model inputs not dependent on the TIP or RTP are consistent with the applicable SIP, which include:

- The 2004 Revision to the California State Implementation Plan for Carbon Monoxide was approved by EPA on November 30, 2005 (effective January 30, 2006).
- EPA published a budget adequacy determination for the 2011, 2014, and 2017 conformity budgets contained in the 2007 Ozone Plan on January 22, 2009, effective February 6, 2009.
- The 2007 PM-10 Maintenance Plan, which included revisions to the attainment plan, was approved (with minor technical corrections to the conformity budgets) by EPA on November 12, 2008.

EPA published a budget adequacy determination for the 2012 conformity budgets contained in the 2008 PM2.5 Plan on May 12, 2010, effective May 27, 2010.

The conformity regulation requirements for the selection of the horizon years are summarized in Chapter 1; regional emissions have been estimated for the horizon years summarized in Table 1-5.

### **A. EMFAC2007**

The EMFAC model (short for EMISSION FACTOR) is a computer model that can estimate emission rates for motor vehicles for calendar years from 1970 to 2040 operating in California. Pollutant emissions for hydrocarbons, carbon monoxide, nitrogen oxides, particulate matter, lead, sulfur oxides, and carbon dioxide are output from the model. Emissions are calculated for passenger cars, eight different classes of trucks, motorcycles, urban and school buses and motor homes. EMFAC is used to calculate current and future inventories of motor vehicle emissions at the state, county, air district, air basin, or county within air basin level. EMFAC contains default vehicle activity data that can be used to estimate a motor vehicle emission inventory in tons/day for a specific day, month, or season, and as a function of ambient temperature, relative humidity, vehicle population, mileage accrual, miles of travel and speeds.

Section 93.111 of the conformity regulation requires the use of the latest emission estimation model in the development of conformity determinations. EMFAC2007 is the latest update to the EMFAC model for use by California State and local governments to meet Clean Air Act (CAA, 1990) requirements. On January 18, 2008 EPA announced the availability of this latest version of the California EMFAC model for use in SIP development in California.

Since the transportation conformity regulation (40 CFR 93.110) requires areas to use the latest information for estimating vehicle activity, EPA approved the CARB methodology for updating the default vehicle activity data in EMFAC2002 in April 2003. CARB's methodology, "Recommended Methods for Use of EMFAC2002 to Develop Motor Vehicle Emission Budgets and Assess Conformity," explains how vehicle activity data should be updated. This methodology has not been updated for EMFAC2007, but remains applicable. The methodology explains how each parameter associated with vehicle activity was originally developed in EMFAC, how each parameter is related, and how each can be updated when new data becomes available. These relationships are important when adjusting vehicle trips or VMT (vehicle miles traveled). For example, VMT in EMFAC2007 is directly related to vehicle population and mileage accrual rate. Similarly, start and evaporative vehicle emissions are also related to vehicle population levels. If new VMT data is available, CARB suggests modifying the input vehicle population levels, instead of directly inputting new VMT data, so that start and evaporative emissions are revised appropriately. Updated vehicle activity data can also be input to EMFAC using the WIS interface.

A transportation data template has been prepared to summarize the transportation model output for use in EMFAC 2007. The template includes allocating VMT by speed bin by modeling period, as well as creating a 24-hour VMT percentage by speed bin array for input into EMFAC 2007.

EMFAC was used to estimate exhaust emissions for CO, ozone, PM-10, and PM2.5 conformity demonstrations consistent with the applicable air quality plan. These estimates are further reduced by SIP measures as documented in Chapter 2.

## **B. ADDITIONAL PM-10 ESTIMATES**

PM-10 emissions for reentrained dust from travel on paved and unpaved roads will be calculated separately from roadway construction emissions. It is important to note that with the final approval of the 2007 PM-10 Maintenance Plan, EPA approved a methodology to calculate PM-10 emissions from paved and unpaved roads in future San Joaquin Valley conformity determinations. The Conformity Analysis uses these methodologies and estimates construction-related PM-10 emissions consistent with the 2007 PM-10 Maintenance Plan. The National Ambient Air Quality Standards for PM-10 consists of a 24-hour standard, which is represented by the motor vehicle emissions budgets established in the 2007 PM-10 Maintenance Plan. It is important to note that EPA revoked the annual PM-10 Standard on October 17, 2006. The PM-10 emissions calculated for the conformity analysis represent emissions on an annual average day and are used to satisfy the budget test.

### **CALCULATION OF REENTRAINED DUST FROM PAVED ROAD TRAVEL**

The core methodology for estimating paved road dust emissions is based on the algorithm published in the 5th Edition of AP-42 (U.S. EPA) (<http://www.epa.gov/ttn/chief/ap42/ch13/>). CARB default assumptions for roadway silt loading by roadway class, rainfall correction factor average vehicle weight remain unchanged. Emissions are estimated for five roadway classes including freeways, arterials, collectors, local roads, and rural roads. Countywide VMT information is used for each road class to prepare the emission estimates.

## **CALCULATION OF REENTRAINED DUST FROM UNPAVED ROAD TRAVEL**

The base methodology for estimating unpaved road dust emissions is based on a CARB methodology in which the miles of unpaved road are multiplied by the assumed VMT and an emission factor. In the 2007 PM-10 Maintenance Plan, it is assumed that all non-agricultural unpaved roads within the San Joaquin Valley receive 10 vehicle passes per day. An emission factor of 2.0 lbs PM-10/VMT is used for the unpaved road dust emission estimates. Emissions are estimated for city/county maintained roads.

## **CALCULATION OF PM-10 FROM ROADWAY CONSTRUCTION**

Section 93.122(e) of the Transportation Conformity regulation requires that PM-10 from construction-related fugitive dust be included in the regional PM-10 emissions analysis, if it is identified as a contributor to the nonattainment problem in the PM-10 implementation plan. The emission estimates are based on a CARB methodology in which the miles of new road built are converted to acres disturbed, which is then multiplied by a generic project duration (i.e., 18 months) and an emission rate. Emission factors are unchanged from the previous estimates at 0.11 tons PM-10/acre-month of activity. The emission factor includes the effects of typical control measures, such as watering, which is assumed to reduce emissions by about 50%. Updated activity data (i.e., new lane miles of roadway built) is estimated based on the highway and transit construction projects in the TIP/RTP.

## **PM-10 TRADING MECHANISM**

The PM-10 SIP allows trading from the motor vehicle emissions budget for the PM-10 precursor NOx to the motor vehicle emissions budget for primary PM-10 using a 1.5 to 1 ratio. The trading mechanism will be used only for conformity analyses for analysis years after 2005.

## **C. PM2.5 APPROACH**

1997 Standard - EPA and FHWA have indicated that areas violating both the annual and 24-hour standards for PM2.5 must address both standards in the conformity determination. The San Joaquin Valley currently violates both standards, and the conformity determination includes both analyses.

EPA issued guidance for creating annual on-road mobile source emission inventories for PM2.5 in August 2005 (EPA, 2005b). The guidance indicates that all areas currently designated nonattainment for PM2.5 are violating the annual standard for the pollutant. Therefore, in order to be consistent with the standard, PM2.5 nonattainment areas must develop annual emission inventories for the purpose of developing SIP budgets and demonstrating transportation conformity.

2006 Standard – EPA published 2006 24-hour PM2.5 standard Nonattainment area designations on November 13, 2009 with an effective date of December 14, 2009. Conformity to the 2006 24-hour PM2.5 standard will apply December 14, 2010. The 1997 standards will continue to apply as they were not revoked. It is important to note that the 2006 24-hour PM2.5 nonattainment area boundary for the San Joaquin Valley is exactly the same as the nonattainment area boundary for the 1997 annual standard.

The following PM<sub>2.5</sub> approach addresses both the 1997 standards and the 2006 24-hour standard

EMFAC2007 includes data for temperature, relative humidity, and characteristics for gasoline fuel sold that vary by geographic area, calendar year, and month and season. The annual average represents an average of all the monthly inventories. As a result, EMFAC will be run to estimate direct PM<sub>2.5</sub> and NO<sub>x</sub> from motor vehicles for an annual average day that will provide the information for both the annual and 24-hour PM<sub>2.5</sub> standards.

EPA guidance indicates that State and local agencies need to consider whether VMT varies during the year enough to affect PM<sub>2.5</sub> annual emission estimates. The availability of seasonal or monthly VMT data and the corresponding variability of that data need to be evaluated.

PM<sub>2.5</sub> areas that are currently using network based travel models must continue to use them when calculating annual emission inventories. The guidance indicates that the interagency consultation process should be used to determine the appropriate approach to produce accurate annual inventories for a given nonattainment area. Whichever approach is chosen, that approach should be used consistently throughout the analysis for a given pollutant or precursor. The interagency consultation process should also be used to determine whether significant seasonal variations in the output of network based travel models are expected and whether these variations would have a significant impact on PM<sub>2.5</sub> emission estimates.

The SJV MPOs all use network based travel models. However, the models only estimate average weekday VMT. The SJV MPOs do not have the data or ability to estimate seasonal variation at this time. Data collection and analysis for some studies are in the preliminary phases and cannot be relied upon for other analyses. Some statewide data for the seasonal variation of VMT on freeways does exist. However, traffic patterns on freeways do not necessarily represent the typical traffic pattern for local streets and arterials.

In many cases, traffic counts are sponsored by the MPOs and conducted by local jurisdictions. While some local jurisdictions may collect weekend or seasonal data, typical urban traffic counts occur on weekdays (Tuesday through Thursday). Data collection must be more consistent in order to begin estimation of daily or seasonal variation.

The SJV MPOs believe that the average annual day calculated from the current traffic models and EMFAC2007 represent the most accurate data available. The MPOs will continue to discuss and research options that look at how VMT varies by month and season according to the local traffic models.

It is important to note that the guidance indicates that EPA expects the most thorough analysis for developing annual inventories will occur during the development of the SIP, taking into account the needs and capabilities of air quality modeling tools and the limitations of available data. Prior to the development of the SIP, State and local air quality and transportation agencies may decide to use simplified methods for regional conformity analyses.

It is important to note that the San Joaquin Valley 2008 PM<sub>2.5</sub> Plan has been developed and submitted to EPA. The annual inventory methodology contained in the plan and used to establish emissions budgets is consistent with the methodology used herein. The regional emissions analyses in PM<sub>2.5</sub> nonattainment areas must consider directly emitted PM<sub>2.5</sub> motor vehicle



emissions from tailpipe, brake wear, and tire wear. In California, areas will use EMFAC2007. As indicated under the Conformity Test Requirements, re-entrained road dust and construction-related fugitive dust from highway or transit projects is not included at this time. In addition, NO<sub>x</sub> emissions are included; however, VOC, SO<sub>x</sub>, and ammonia emissions are not.

1997 Standard – The 2008 PM<sub>2.5</sub> Plan contains motor vehicle emission budgets for PM<sub>2.5</sub> and NO<sub>x</sub> established based on average annual daily emissions. The motor vehicle emissions budget for PM<sub>2.5</sub> includes directly emitted PM<sub>2.5</sub> motor vehicle emissions from tailpipe, brake wear and tire wear. VOC, SO<sub>x</sub>, ammonia, and dust (from paved roads, unpaved roads, and road construction) were found to be insignificant and not included in the motor vehicle emission budgets for conformity purposes.

2006 Standard – In accordance with Transportation Conformity Rule PM<sub>2.5</sub> and PM<sub>10</sub> Amendments published on March 24, 2010 (effective April 23, 2010) for 2006 PM<sub>2.5</sub> NAAQS Nonattainment areas, if a 2006 PM<sub>2.5</sub> area has adequate or approved SIP budgets that address the 1997 standards, it must use the budget test to determine conformity for both of the NAAQS at the same time.

#### **D. SUMMARY OF PROCEDURES FOR REGIONAL EMISSIONS ESTIMATES**

Step-by-step air quality modeling procedures, including instructions, references and controls, for the Conformity Analysis were provided for Interagency Consultation and reviewed at an Interagency Consultation Workshop; no comments were received and concurrence was received from EPA, CARB, and the Air District. In addition, documentation of the conformity analysis is provided in Appendix C, including:

- 2011 adjust\_vmt Spreadsheet
- 2011 Conformity EMFAC Spreadsheet
- 2011 Conformity Paved Road Spreadsheet
- 2011 Conformity Unpaved Road Dust Spreadsheet
- 2011 Conformity Construction Spreadsheet
- 2011 Conformity Trading Spreadsheet
- 2011 Conformity Totals Spreadsheet

## **CHAPTER 4: TRANSPORTATION CONTROL MEASURES**

This chapter provides an update of the current status of transportation control measures identified in applicable implementation plans. Requirements of the Transportation Conformity regulation relating to transportation control measures (TCMs) are presented first, followed by a review of the applicable air quality implementation plans and TCM findings for the TIP/RTP.

### **A. TRANSPORTATION CONFORMITY REGULATION REQUIREMENTS FOR TCMS**

The Transportation Conformity regulation requires that the TIP/RTP “must provide for the timely implementation of TCMs in the applicable implementation plan.” The Federal definition for the term “transportation control measure” is provided in 40 CFR 93.101:

“any measure that is specifically identified and committed to in the applicable implementation plan that is either one of the types listed in Section 108 of the CAA [Clean Air Act], or any other measure for the purpose of reducing emissions or concentrations of air pollutants from transportation sources by reducing vehicle use or changing traffic flow or congestion conditions. Notwithstanding the first sentence of this definition, vehicle technology based, fuel-based, and maintenance-based measures which control the emissions from vehicles under fixed traffic conditions are not TCMs for the purposes of this subpart.”

In the Transportation Conformity regulation, the definition provided for the term “applicable implementation plan” is:

“Applicable implementation plan is defined in section 302(q) of the CAA and means the portion (or portions) of the implementation plan, or most recent revision thereof, which has been approved under section 110, or promulgated under section 110(c), or promulgated or approved pursuant to regulations promulgated under section 301(d) and which implements the relevant requirements of the CAA.”

Section 108(f)(1) of the Clean Air Act as amended in 1990 lists the following transportation control measures and technology-based measures:

- (i) programs for improved public transit;
- (ii) restriction of certain roads or lanes to, or construction of such roads or lanes for use by, passenger buses or high occupancy vehicles;
- (iii) employer-based transportation management plans, including incentives;
- (iv) trip-reduction ordinances;
- (v) traffic flow improvement programs that achieve emission reductions;
- (vi) fringe and transportation corridor parking facilities serving multiple occupancy vehicle programs or transit service;

- (vii) programs to limit or restrict vehicle use in downtown areas or other areas of emission concentration particularly during periods of peak use;
- (viii) programs for the provision of all forms of high-occupancy, shared-ride services;
- (ix) programs to limit portions of road surfaces or certain sections of the metropolitan area to the use of non-motorized vehicles or pedestrian use, both as to time and place;
- (x) programs for secure bicycle storage facilities and other facilities, including bicycle lanes, for the convenience and protection of bicyclists, in both public and private areas;
- (xi) programs to control extended idling of vehicles;
- (xii) programs to reduce motor vehicle emissions, consistent with title II, which are caused by extreme cold start conditions;
- (xiii) employer-sponsored programs to permit flexible work schedules;
- (xiv) programs and ordinances to facilitate non-automobile travel, provision and utilization of mass transit, and to generally reduce the need for single occupant vehicle travel, as part of transportation planning and development efforts of a locality, including programs and ordinances applicable to new shopping centers, special events, and other centers of vehicle activity;
- (xv) programs for new construction and major reconstructions of paths, tracks or areas solely for the use by pedestrian or other non-motorized means of transportation when economically feasible and in the public interest. For purposes of this clause, the Administrator shall also consult with the Secretary of the Interior; and
- (xvi) program to encourage the voluntary removal from use and the marketplace of pre-1980 model year light duty vehicles and pre-1980 model light duty trucks.

### **TCM REQUIREMENTS FOR A TRANSPORTATION PLAN**

The EPA regulations in 40 CFR 93.113(b) indicate that transportation control measure requirements for transportation plans are satisfied if two criteria are met:

“(1) The transportation plan, in describing the envisioned future transportation system, provides for the timely completion or implementation of all TCMs in the applicable implementation plan which are eligible for funding under Title 23 U.S.C. or the Federal Transit Laws, consistent with schedules included in the applicable implementation plan.

(2) Nothing in the transportation plan interferes with the implementation of any TCM in the applicable implementation plan.”

### **TCM REQUIREMENTS FOR A TRANSPORTATION IMPROVEMENT PROGRAM**

Similarly, in 40 CFR Section 93.113(c), EPA specifies three TCM criteria applicable to a transportation improvement program:

“(1) An examination of the specific steps and funding source(s) needed to fully implement each TCM indicates that TCMs which are eligible for funding under title 23 U.S.C. or the Federal Transit Laws are on or ahead of the schedule established in the applicable implementation plan, or, if such TCMs are behind the schedule established in the applicable implementation plan, the MPO and DOT have determined that past obstacles to

implementation of the TCMs have been identified and have been or are being overcome, and that all State and local agencies with influence over approvals or funding for TCMs are giving maximum priority to approval or funding of TCMs over other projects within their control, including projects in locations outside the nonattainment or maintenance area;

(2) If TCMs in the applicable implementation plan have previously been programmed for Federal funding but the funds have not been obligated and the TCMs are behind the schedule in the implementation plan, then the TIP cannot be found to conform:

- if the funds intended for those TCMs are reallocated to projects in the TIP other than TCMs, or
- if there are no other TCMs in the TIP, if the funds are reallocated to projects in the TIP other than projects which are eligible for Federal funding intended for air quality improvement projects, e.g., the Congestion Mitigation and Air Quality Improvement Program;

(3) Nothing in the TIP may interfere with the implementation of any TCM in the applicable implementation plan.”

## **B. APPLICABLE AIR QUALITY IMPLEMENTATION PLANS**

Only transportation control measures from applicable implementation plans for the San Joaquin Valley region are required to be updated for this analysis. For the Conformity Analysis, the applicable implementation plans, according to the definition provided at the start of this chapter, are summarized below.

### **APPLICABLE IMPLEMENTATION PLAN FOR CARBON MONOXIDE**

The 2004 Revision to the California State Implementation Plan for Carbon Monoxide was approved by EPA on November 30, 2005 (effective January 30, 2006). However, the Plan does not include TCMs for the San Joaquin Valley.

### **APPLICABLE IMPLEMENTATION PLAN FOR OZONE**

The only applicable ozone plan is the *1994 Ozone Attainment Demonstration Plan* and the *Revised 1996 Rate of Progress Plan*.

The transportation control measures contained in the *1994 Ozone Attainment Demonstration* are not clearly delineated. Both transportation control measures and mobile source measures are discussed under the heading of transportation control measures. The Attainment Demonstration specifically includes Rule 9001 – Commute Based Trip Reduction; however, this rule was never approved by EPA as part of the SIP. In addition, the Revised 1996 Rate of Progress Plan specifically identifies TCMs committed for implementation from 1990 through 1996. The commitments are listed within the following TCM categories:

- TCM1 – Traffic Flow Improvements
- TCM2 – Public Transit

- TCM3 – Rideshare Programs (Rule 9001)
- TCM4 – Bicycle Programs
- TCM5 – Alternative Fuels Program

Most of the TCMs in the plans were implemented in the short term, and have been fully implemented. As a result, any resulting creditable emission reduction benefits have been incorporated into the traffic forecasts for the region. However, the TIP/RTP provides continued funding for transportation projects that support TCM programs (e.g., traffic flow improvements, public transit, rideshare programs, and bicycle programs). In addition, voluntary implementation of Rule 9001 (Employee Commute Options) is ongoing even though the Rule was not approved by EPA and cannot be implemented as a mandatory program under SB437.

### **APPLICABLE IMPLEMENTATION PLAN FOR PM-10**

The 2007 PM-10 Maintenance Plan was approved by EPA on November 12, 2008. No new local agency control measures were included in the Plan.

The Amended 2003 PM-10 Plan was approved by EPA on April 28, 2004 (effective June 25, 2004). A local government control measure assessment was completed for this plan. The analysis focused on transportation-related fugitive dust emissions, which are not TCMs by definition. The local government commitments are included in the *Regional Transportation Planning Agency Commitments for Implementation Document, April 2003*.

However, the *Amended 2002 and 2005 Ozone Rate of Progress Plan* contains commitments that reduce ozone related emissions; these measures are documented in the *Regional Transportation Planning Agency Commitments for Implementation Document, April 2002*. These commitments are included by reference in the Amended 2003 PM-10 Plan to provide emission reductions for precursor gases and help to address the secondary particulate problem. Since these commitments are included in the Plan by reference, the commitments were approved by EPA as TCMs. Accordingly, they will be tracked for timely implementation through 2010.

### **C. IDENTIFICATION OF 2002 RACM THAT REQUIRE TIMELY IMPLEMENTATION DOCUMENTATION**

As part of the 2004 Conformity Determination, FHWA requested that each SIP (Reasonably Available Control Measure - RACM) commitment containing Federal transportation funding and a transportation project and schedule be addressed more specifically. FHWA verbally requested documentation that the funds were obligated and the project was implemented as committed to in the SIP.

The RTPA Commitment Documents, Volumes One and Two, dated April 2002 (Ozone RACM) were reviewed, using a “Summary of Commitments” table. Commitments that contain specific Federal funding/transportation projects/schedules were identified for further documentation. In some cases, local jurisdictions used the same Federal funding/transportation projects/schedules for various measures; these were identified as combined with (“comb w/”) reference as appropriate. A not applicable (“NA”) was noted where federally-funded project is vehicle technology based, fuel based, and maintenance based measures (e.g., LEV program, retrofit programs, clean fuels - CNG buses, etc.).

In addition, the RTPA Commitment Document, Volume Three, dated April 2003 (PM-10 BACM) was reviewed, using the Summary of Commitments table. Commitments that contain specific Congestion Mitigation and Air Quality (CMAQ) funding for the purchase and/or operation of street sweeping equipment have been identified. Only one commitment (Fresno - City of Reedley) was identified.

The Project TID Table was developed to provide implementation documentation necessary for the measures identified. Detailed information is summarized in the first five columns, including the commitment number, agency, description, funding and schedule (if applicable).

For each project listed, the TIP in which the project was programmed, as well as the project ID and description have been provided. In addition, the current implementation status of the project has been included (e.g., complete, under construction, etc). MPO staff determined this information in consultation with the appropriate local jurisdiction. Any projects not implemented according to schedule or project changes are explained in the project status column. These explanations are consistent with the guidance and regulations provided in the Transportation Conformity regulation.

Supplemental documentation was provided to FHWA in August and September 2004 in response to requests for information on timely implementation of TCMs in the San Joaquin Valley. The supplemental documentation included the approach, summary of interagency consultation correspondence, and three tables completed by each of the eight MPOs. The Supplemental Documentation was subsequently approved by FHWA as part of the 2004 Conformity Determination.

The Project TID table that was prepared at the request of FHWA for the 2004 Conformity Analysis has been updated in each subsequent conformity analysis (e.g., 8-hour, PM2.5, 2007 and 2009 TIP). This documentation has been updated as part of this Conformity Analysis. A summary of this information is provided in Appendix D.

In March 2005, the SJV MPOs began interagency consultation with FHWA and EPA to address outstanding RACM/TCM issues. In general, criteria were developed to identify commitments that require timely implementation documentation. The criteria were applied to the 2002 RACM Commitments approved by reference as part of the Amended 2003 PM-10 Plan. In April 2006, EPA transmitted final tables that identified the approved RACM commitments that require timely implementation documentation for the Conformity Analysis. Subsequently, an approach to provide timely implementation documentation was developed in consultation with FHWA.

A new 2002 RACM TID Table was prepared in 2006 to address the more general RACM commitments that require additional timely implementation documentation per EPA. A brief summary of the commitment, including finite end dates if applicable, is included for each measure. The MPOs provided a status update regarding implementation in consultation with their member jurisdictions. If a specific project has been implemented, it is included in the Project TID Table under "Additional Projects Identified". This documentation was included in the Conformity Analysis for the 2007 TIP and 2004 RTP (as amended) that was approved by FHWA in October 2006. The 2002 RACM TID Table has been updated part of this Conformity Analysis. A summary of this information is provided in Appendix D.

## **D. TCM FINDINGS FOR THE TIP AND REGIONAL TRANSPORTATION PLAN**

Based on a review of the transportation control measures contained in the applicable air quality plans, as documented in the two tables contained in Appendix D, the required TCM conformity findings are made below:

The TIP/RTP provide for the timely completion or implementation of the TCMs in the applicable air quality plans. In addition, nothing in the TIP or RTP interferes with the implementation of any TCM in the applicable implementation plan, and priority is given to TCMs.

## **E. RTP CONTROL MEASURE ANALYSIS IN SUPPORT OF 2003 PM-10 PLAN**

In May 2003, the San Joaquin Valley MPO Executive Directors committed to conduct feasibility analyses as part of each new RTP in support of the 2003 PM-10 Plan. This commitment was retained in the 2007 PM-10 Maintenance Plan. In accordance with this commitment, StanCOG undertook a process to identify and evaluate potential control measures that could be included in the 2011 RTP. The analysis of additional measures included verification of the feasibility of the measures in the PM-10 Plan BACM analysis, as well as an analysis of new PM-10 commitments from other PM-10 nonattainment areas.

A summary of the process to identify potential long-range control measures analysis and results to be evaluated as part of the RTP development was transmitted to the Interagency Consultation (IAC) partners for review. FHWA and EPA concurred with the summary of the long-range control measure approach in September 2009.

The Local Government Control Measures considered in the PM-10 Plan BACM analysis that were considered for inclusion in the 2011 RTP included:

- Paving or Stabilizing Unpaved Roads and Alleys
- Curbing, Paving, or Stabilizing Shoulders on Paved Roads
- Frequent Routine Sweeping or Cleaning of Paved Roads (i.e., funding allocation for the purchase of PM-10 efficient street sweepers for member jurisdictions).

It is important to note that the first three measures considered in the PM-10 Plan BACM analysis (i.e., access points, street cleaning requirements, and erosion clean up) are not applicable for inclusion in the RTP.

With the adoption of each new RTP, the MPOs will consider the feasibility of these measures, as well as identify any other new PM-10 measures that would be relevant to the San Joaquin Valley. StanCOG also considered PM-10 commitments from other PM-10 nonattainment areas that had been developed since the previous RTP was approved. Federal websites were reviewed for any PM-10 plans that have been adopted since 2007. New PM-10 plans were developed for Imperial

County and Owens Valley (California), Maricopa County and Miami (Arizona), and the Municipality of Guaynabo (Puerto Rico).

Only the Maricopa County PM-10 plan contained any new measures for possible inclusion in the 2011 RTP. In December 2007, the Maricopa Association of Governments (MAG) developed the "Five Percent Plan for PM-10 for the Maricopa County Nonattainment Area," which contained commitments to reduce PM-10 emissions. The MAG PM-10 Plan contains one new commitment applicable to the San Joaquin Valley, which indicates that the Arizona Department of Transportation (ADOT) would commit to repaving or overlaying paved roads with rubberized asphalt that reduces PM-10 emissions by reducing vehicle tire wear. Overlaying freeways with rubberized asphalt is part of ADOT's "Quiet Pavement" program to mitigate highway noise. Rubberized asphalt also affects PM-10 emissions, as PM-10 emissions rates from tire wear on rubberized asphalt are 30 to 50 percent lower than on Portland Cement Concrete. Therefore, the ADOT program continues with multiple purposes, which are to reduce PM-10 emissions and to mitigate noise. Therefore, as part of the 2011 RTP, StanCOG will also consider a commitment to "Repave or overlay paved roads with rubberized asphalt".

Based on consultation with CARB and the Air District, StanCOG considered priority funding allocations in the 2011 RTPs for PM-10 and NOx emission reduction projects in the post-attainment year timeframe that go beyond the emission reduction commitments made for the attainment year 2010 for the following four measures:

- (1) Paving or Stabilizing Unpaved Roads and Alleys
- (2) Curbing, Paving, or Stabilizing Shoulders on Paved Roads
- (3) Frequent Routine Sweeping or Cleaning of Paved Roads (i.e., funding allocation for the purchase of PM-10 efficient street sweepers for member jurisdictions); and
- (4) Repave or Overlay Paved Roads with Rubberized Asphalt

StanCOG and its member jurisdictions consider both short- and long-term PM-10 emission reductions to be a priority. Every two to three years, StanCOG conducts a Congestion Mitigation and Air Quality (CMAQ) "Call for Projects" that includes funding for PM-10 projects. These additional projects are included in the FTIP once that process is concluded. Reliable long-term funding estimates for the PM-10 portion of the "Call for Projects" process are not available and therefore, not included in the RTP. Currently, Caltrans incorporates rubberized asphalt as general policy to meet recycled content requirements on high volume state highway facilities. In 2003, Caltrans established a goal of using at least 15 percent rubberized asphalt concrete compared to all flexible pavement by weight; Caltrans has exceeded this goal each year. In 2005, AB 338 was passed and requires Caltrans to gradually phase in the use of crumb rubber, which is used to make rubberized-asphalt concrete, on state highway construction and repair projects, to the extent feasible. StanCOG will continue to work with member jurisdictions and evaluate the ability to proceed with PM-10 projects as part of the FTIP and RTP.



## **CHAPTER 5: INTERAGENCY CONSULTATION**

The requirements for consultation procedures are listed in the Transportation Conformity Regulations under section 93.105. Consultation is necessary to ensure communication and coordination among air and transportation agencies at the local, State and Federal levels on issues that would affect the conformity analysis such as the underlying assumptions and methodologies used to prepare the analysis. Section 93.105 of the conformity regulation notes that there is a requirement to develop a conformity SIP that includes procedures for interagency consultation, resolution of conflicts, and public consultation as described in paragraphs (a) through (e). Section 93.105(a)(2) states that prior to EPA approval of the conformity SIP, "MPOs and State departments of transportation must provide reasonable opportunity for consultation with State air agencies, local air quality and transportation agencies, DOT and EPA, including consultation on the issues described in paragraph (c)(1) of this section, before making conformity determinations." The Air District adopted Rule 9120 Transportation Conformity on January 19, 1995 in response to requirements in Section 176(c)(4)(c) of the Clean Air Act as amended in 1990. Since EPA has not approved Rule 9120 (the conformity SIP), the conformity regulation requires compliance with 40 CFR 93.105 (a)(2) and (e) and 23 CFR 450.

Section 93.112 of the conformity regulation requires documentation of the interagency and public consultation requirements according to Section 93.105. A summary of the interagency consultation and public consultation conducted to comply with these requirements is provided below. Appendix E includes the public meeting process documentation. The responses to comments received as part of the public comment process are included in Appendix F.

### **A. INTERAGENCY CONSULTATION**

Consultation is generally conducted through the San Joaquin Valley Interagency Consultation Group (combination of previous Model Coordinating Committee and Programming Coordinating Group). The San Joaquin Valley Interagency Consultation (IAC) Group has been established by the Valley Transportation Planning Agency's Director's Association to provide a coordinated approach to valley transportation planning and programming (Transportation Improvement Program, Regional Transportation Plan, and Amendments), transportation conformity, climate change, and air quality (State Implementation Plan and Rules). The purpose of the group is to ensure Valley wide coordination, communication and compliance with Federal and California Transportation Planning and Clean Air Act requirements. Each of the eight Valley MPOs and the Air District are represented. In addition, the Federal Highway Administration, Federal Transit Administration, the Environmental Protection Agency, the California Air Resources Board and Caltrans (Headquarters, District 6, and District 10) are all represented. The IAC Group meets approximately quarterly.

The interagency consultation process for the 2011 TIP, RTP, CEQA document, and corresponding Conformity Analysis began on the May 28, 2009 IAC conference call with a

discussion of the timeline and approach. CEQA status reports were discussed, as well as the requirements and outline of approach to address AB 32 and SB 375. In September 2009, it was reported that the Director recommended approach to address AB 32 / SB 375 was distributed for IAC and then presented to Policy Council in June; no questions or comments were received). In December 2009, it was reported that the PM Control Measure task and CMAQ tasks were completed. The former involved, identifying potential long-term PM-10 Control Measures that must be evaluated as part of the RTP. A summary was provided for IAC prior to application by the MPOs; no substantive comments were received. The latter involved a review of the CMAQ policy and cost-effectiveness threshold. No updates to the policy were recommended and the existing threshold was maintained. A summary was provided for IAC prior to application by the MPOs; concurrence was received from the Air District, EPA, and FHWA.

In March 2010, it was reported that the Draft Transportation Model Summary & Latest Planning Assumptions were transmitted for IAC and concurrence was received from FHWA & EPA. In addition, the Draft Conformity Analysis Years were transmitted for IAC and concurrence was received from FHWA & EPA. The Draft Conformity Procedures were also transmitted for IAC and concurrence from EPA, CARB & Air District was received.

The SJV MPOs committed to a more coordinated approach and improved documentation valley-wide for the development of the 2011 TIP/RTP in response to meetings with Caltrans and FHWA. Conducting workshops to review the status of document development, including best practices and discussion of issues that need to be addressed was part of that commitment. The first workshop was conducted in August 2009. Topics generally included: schedule, CEQA document development, RTP Performance Evaluation, RTP Revenue & Cost Analysis, and Congestion Management Process (CMP) Updates. A second workshop was conducted in February 2010. At this workshop, roundtable discussions were conducted with Caltrans and FHWA to review the individual MPO Draft TIP and RTP project lists. Transportation conformity was reviewed, including latest planning assumptions, procedures, and analysis years. Individual MPO public outreach efforts were also discussed.

The Draft 2011 TIP, RTP, CEQA document, and corresponding Conformity Analysis were released on April 30, 2010 for a 45-day public comment period, followed by Board adoption in July 2010. Federal approval of the 2011 TIP and Conformity Analysis is anticipated by December 14, 2010.

StanCOG engages various agencies in the development of their plans and specifically in the development of the FTIP and corresponding conformity analysis, by distributing notifications of preparation and inviting their comments. These agencies include state, local, tribal agencies responsible for planned growth, economic development, environmental protection, airport operations, freight movement, land use management, natural resources, conservation and historic preservation. The contact list for state and federal resource agencies is maintained by the California DOT. StanCOG adds local organizations and contacts to this list and will update it as necessary. A list of these agencies is available upon request.

## **B. PUBLIC CONSULTATION**

In general, agencies making conformity determinations shall establish a proactive public involvement process that provides opportunity for public review and comment on a conformity determination for TIPs/RTPs. In addition, all public comments must be addressed in writing.

All MPOs in the San Joaquin Valley have standard public involvement procedures. In general, the TIP/RTP and corresponding conformity analysis are the subject of a public notice and 30 day review period prior to adoption. However, the comment period for this conformity analysis was 45 days concurrent with the public review of the Draft 2011 TIP and RTP, and associated CEQA documents. A public meeting is also conducted prior to adoption and all public comments are responded to in writing. The Appendices contain corresponding documentation supporting the public involvement procedures.

## **CHAPTER 6: TIP AND RTP CONFORMITY**

The principal requirements of the transportation conformity regulation for TIP/RTP assessments are: (1) the TIP and RTP must pass an emissions budget test with a budget that has been found to be adequate by EPA for transportation conformity purposes, or an interim emission test; (2) the latest planning assumptions and emission models must be employed; (3) the TIP and RTP must provide for the timely implementation of transportation control measures (TCMs) specified in the applicable air quality implementation plans; and (4) consultation. The final determination of conformity for the TIP/RTP is the responsibility of the Federal Highway Administration and the Federal Transit Administration.

The previous chapters and the appendices present the documentation for all of the requirements listed above for conformity determinations except for the conformity test results. Prior chapters have also addressed the updated documentation required under the transportation conformity regulation for the latest planning assumptions and the implementation of transportation control measures specified in the applicable air quality implementation plans.

This chapter presents the results of the conformity tests, satisfying the remaining requirement of the transportation conformity regulation. Separate tests were conducted for carbon monoxide (CO), 8-hour ozone (ROG and NO<sub>x</sub>), PM-10 and PM<sub>2.5</sub>. The applicable conformity tests were reviewed in Chapter 1. For each test, the required emissions estimates were developed using the transportation and emission modeling approaches required under the transportation conformity regulation and summarized in Chapters 2 and 3. The results are summarized below, followed by a more detailed discussion of the findings for each pollutant. Table 6-1 presents results for CO, ozone (ROG/NO<sub>x</sub>), PM-10 (PM-10/NO<sub>x</sub>), and PM<sub>2.5</sub> (PM<sub>2.5</sub>/NO<sub>x</sub>) respectively, in tons per day for each of the horizon years tested.

For carbon monoxide, the applicable conformity test is the emissions budget test, using the budgets established in the 2004 Revision to the California State Implementation Plan for Carbon Monoxide. The carbon monoxide budgets were approved by EPA for conformity purposes, effective January 30, 2006. The modeling results indicated that the on-road vehicle CO emissions predicted for the “Build” scenario for 2017 are less than the 2010 emissions budgets and 2018, 2025, and 2035 are less than the 2018 emissions budget. The TIP/RTP therefore satisfy the conformity emissions test for carbon monoxide.

For ozone, the applicable conformity test is the emissions budget test, using the 2007 Ozone Plan budgets established for ROG and NO<sub>x</sub> for an average summer (ozone) season day. EPA published a budget adequacy determination for the 2011, 2014, and 2017 conformity budgets in the Federal Register on January 22, 2009, effective February 6, 2009. The modeling results for all analysis years indicate that the on-road vehicle ROG and NO<sub>x</sub> emissions predicted for each of the “Build” scenarios are less than the emissions budgets. The TIP/RTP therefore satisfy the conformity emissions test for volatile organic compounds and nitrogen oxides.

For PM-10, the applicable conformity test is the emissions budget test, using the 2007 PM-10 Maintenance Plan budgets for PM-10 and NOx. This Plan was approved (with minor technical corrections to the conformity budgets) by EPA on November 12, 2008. The modeling results for all analysis years indicate that the PM-10 emissions predicted for the “Build” scenarios are less than the emissions budget for 2020. The TIP/RTP therefore satisfy the conformity emissions tests for PM-10.

1997 Standards: For PM2.5, the applicable conformity test is the emission budget test, using budgets established in the 2008 PM2.5 Plan. EPA published a budget adequacy determination for the 2012 conformity budget contained in the 2008 PM2.5 Plan May 12, 2010, effective May 27, 2010. The modeling results for all analysis years indicate that the on-road vehicle PM2.5 and NOx emissions predicted for the “Build” scenarios are less than the emissions budget. The TIP/RTP therefore satisfy the conformity emissions test for PM2.5 and nitrogen oxides.

2006 Standard: In accordance with Transportation Conformity Rule PM2.5 and PM10 Amendments published on March 24, 2010 (effective April 23, 2010) for 2006 PM2.5 NAAQS Nonattainment areas, if a 2006 PM2.5 area has adequate or approved SIP budgets that address the 1997 standards, it must use the budget test. For PM2.5, the applicable conformity test is the emission budget test, using budgets established in the 2008 PM2.5 Plan. EPA published a budget adequacy determination for the 2012 conformity budget contained in the 2008 PM2.5 Plan May 12, 2010, effective May 27, 2010. The modeling results for all analysis years indicate that the on-road vehicle PM2.5 and NOx emissions predicted for the “Build” scenarios are less than the emissions budget. The TIP/RTP therefore satisfy the conformity emissions test for PM2.5 and nitrogen oxides.

As all requirements of the Transportation Conformity regulation have been satisfied, a finding of conformity for the Draft 2011 Federal Transportation Improvement Program and the 2011 Regional Transportation Plan is supported.

**Table 6-1:  
Conformity Results Summary**

Pollutant	Scenario	Emissions Total	DID YOU PASS?
Carbon Monoxide		CO (tons/day)	CO
	2010 Budget	130	
	2017	45	YES
	2018 Budget	130	
	2018	43	YES
	2025	30	YES
	2035	25	YES

Ozone		ROG (tons/day)	NOx (tons/day)	ROG	NOx
	2011 Budget	9.0	22.3		
	2011	8.8	21.9	YES	YES
	2014 Budget	7.5	17.2		
	2014	7.2	16.6	YES	YES
	2017 Budget	6.5	13.4		
	2017	6.3	13.0	YES	YES
	2023	5.0	8.5	YES	YES
	2025	4.6	7.6	YES	YES
	2035	3.7	6.3	YES	YES

PM-10		PM-10 (tons/day)	NOx (tons/day)	PM-10	NOx
	Adjusted 2020 Budget	6.9	10.5		
	2020	6.9	10.5	YES	YES
	Adjusted 2020 Budget	7.2	10.1		
	2025	7.2	7.8	YES	YES
	Adjusted 2020 Budget	7.9	9.0		
2035	7.9	6.4	YES	YES	

1997 PM2.5 24 Hour & Annual Standards and 2006 24-Hour Standard		PM2.5 (tons/day)	NOx (tons/day)	PM2.5	NOx
	2012 Budget	0.9	20.8		
	2012	0.8	20.0	YES	YES
	2014	0.7	16.8	YES	YES
	2017	0.6	13.1	YES	YES
	2025	0.6	7.6	YES	YES
2035	0.6	6.2	YES	YES	

## REFERENCES

CAA. 1990. *Clean Air Act*, as amended November 15, 1990. (42 U. S. C. Section 7401et seq.) November 15, 1990.

EPA. 1993. 40 CFR Parts 51 and 93. *Criteria and Procedures for Determining Conformity to State or Federal Implementation Plans of Transportation Plans, Programs and Projects Funded or Approved Under Title 23 U.S.C. or the Federal Transit Act*. U.S. Environmental Protection Agency. Federal Register, November 24, 1993, Vol. 58, No. 225, p. 62188.

EPA. 2004a. 40 CFR Part 93. *Transportation Conformity Rule Amendments for the New 8-hour Ozone and PM<sub>2.5</sub> National Ambient Air Quality Standards and Miscellaneous Revisions for Existing Areas; Transportation Conformity Rule Amendments – Response to Court Decision and Additional Rule Changes*. U.S. Environmental Protection Agency. Federal Register, July 1, 2004, Vol. 69, No. 126, p. 40004.

EPA. 2004b. *Companion Guidance for the July 1, 2004, Final Transportation Conformity Rule: Conformity Implementation in Multi-jurisdictional Nonattainment and Maintenance Areas for Existing and New Air Quality Standards*. U.S. Environmental Protection Agency. July 21, 2004.

EPA. 2005a. *Transportation Conformity Rule Amendments for the New PM<sub>2.5</sub> National Ambient Air Quality Standards: PM<sub>2.5</sub> Precursors; Final Rule*. U.S. Environmental Protection Agency. Federal Register, May 6, 2005, Vol. 70, No. 87, p. 24280.

EPA. 2005b. *Guidance for Creating Annual On-Road Mobile Source Emission Inventories for PM<sub>2.5</sub> Nonattainment Areas for Use in SIPs and Conformity*. U.S. Environmental Protection Agency. EPA420-B-05-008. August 2005

EPA, 2008. 40 CFR Parts 51 and 93. *Transportation Conformity Rule Amendments To Implement Provisions Contained in the 2005 Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users (SAFETEA-LU); Final Rule*. Federal Register, January 24, 2008, Vol. 73, No. 16, p. 4420.

EPA, 2010a. 40 CFR Part 93. *Transportation Conformity Rule PM<sub>2.5</sub> and PM<sub>10</sub> Amendments; Final Rule*. Federal Register, March 24, 2010, Vol. 75, No. 56, p. 14260.

EPA, 2010b. *Transportation Conformity Regulations EPA-420-B-10-006*. March.

USDOT. 2001. *Use of Latest Planning Assumptions in Conformity Determinations*. Memorandum from U.S. Department of Transportation. January 18, 2001.

USDOT. 2001. Federal Highway Administration. Planning Assistance and Standards. 23 CFR 450. October 16.

**APPENDIX A**  
**CONFORMITY CHECKLIST**



# CONFORMITY ANALYSIS DOCUMENTATION

## FHWA Checklist for MPO TIPs/RTPs

June 27, 2005

40 CFR	Criteria	Page	Comments
§93.102	Document the applicable pollutants and precursors for which EPA designates the area as nonattainment or maintenance. Describe the nonattainment or maintenance area and its boundaries.	Ch. 1 Page 9	
§93.104 (b, c)	Document the date that the MPO officially adopted, accepted or approved the TIP/RTP and made a conformity determination. Include a copy of the MPO resolution. Include the date of the last prior conformity finding.	E.S. Page 1	
§93.104 (e)	If the conformity determination is being made to meet the timelines included in this section, document when the new motor vehicle emissions budget was approved or found adequate.	N/A	
§93.106 (a)(2)ii	Describe the regionally significant additions or modifications to the existing transportation network that are expected to be open to traffic in each analysis year. Document that the design concept and scope of projects allows adequate model representation to determine intersections with regionally significant facilities, route options, travel times, transit ridership and land use.	Ch. 2 Page 20, App. B	
§93.108	Document that the TIP/RTP is financially constrained (23 CFR 450).	E.S. Page 1	
§93.109 (a, b)	Document that the TIP/RTP complies with any applicable conformity requirements of air quality implementation plans (SIPs) and court orders.	Ch. 1, 2, 3, 4, 5, 6	
§93.109 (c-k)	Provide either a table or text description that details, for each pollutant and precursor, whether the interim emissions tests and/or the budget test apply for conformity. Indicate which emissions budgets have been found adequate by EPA, and which budgets are currently applicable for what analysis years.	Ch. 1 Page 9	
§93.110 (a, b)	Document the use of latest planning assumptions (source and year) at the "time the conformity analysis begins," including current and future population, employment, travel and congestion. Document the use of the most recent available vehicle registration data. Document the date upon which the conformity analysis was begun.	Ch. 2 Page 15	
USDOT/EP A guidance	Document the use of planning assumptions less than five years old. If unable, include written justification for the use of older data. (1/18/02)	Ch. 2 Page 17	
§93.110 (c,d,e,f)	Document any changes in transit operating policies and assumed ridership levels since the previous conformity determination. Document the use of the	Ch. 2 Page 19	

40 CFR	Criteria	Page	Comments
	latest transit fares and road and bridge tolls. Document the use of the latest information on the effectiveness of TCMs and other SIP measures that have been implemented. Document the key assumptions and show that they were agreed to through Interagency and public consultation.		
§93.111	Document the use of the latest emissions model approved by EPA.	Ch. 3 Page 24	
§93.112	Document fulfillment of the interagency and public consultation requirements outlined in a specific implementation plan according to §51.390 or, if a SIP revision has not been completed, according to §93.105 and 23 CFR 450. Include documentation of consultation on conformity tests and methodologies as well as responses to written comments.	Ch. 5 Page 36	
§93.113	Document timely implementation of all TCMs in approved SIPs. Document that implementation is consistent with schedules in the applicable SIP and document whether anything interferes with timely implementation. Document any delayed TCMs in the applicable SIP and describe the measures being taken to overcome obstacles to implementation.	Ch. 4 Page 32, App. E	
§93.114	Document that the conformity analyses performed for the TIP is consistent with the analysis performed for the Plan, in accordance with 23 CFR 450.324(f)(2).	Analysis addresses both documents	
§93.118 (a, c, e) <sup>i</sup>	For areas with SIP budgets: Document that emissions from the transportation network for each applicable pollutant and precursor, including projects in any associated donut area that are in the Statewide TIP and regionally significant non-Federal projects, are consistent with any adequate or approved motor vehicle emissions budget for all pollutants and precursors in applicable SIPs.	Ch. 6 Page 41	
§93.118 (b)	Document for which years consistency with motor vehicle emissions budgets must be shown.	Ch. 1 Page 13	
§93.118 (d)	Document the use of the appropriate analysis years in the regional emissions analysis for areas with SIP budgets, and the analysis results for these years. Document any interpolation performed to meet tests for years in which specific analysis is not required.	Ch. 6 Page 41	
§93.119 <sup>i</sup>	For areas without applicable SIP budgets: Document that emissions from the transportation network for each applicable pollutant and precursor, including projects in any associated donut area that are in the Statewide TIP and regionally significant non-Federal projects, are consistent with the requirements of the "Action/Baseline", "Action/1990" and/or "Action/2002" interim emissions tests as applicable.	N/A	
§93.119 (g)	Document the use of the appropriate analysis years in the regional emissions analysis for areas without applicable SIP budgets.	N/A	
§93.119 (h,i)	Document how the baseline and action scenarios are defined for each analysis year.	N/A	
§93.122 (a)(1)	Document that all regionally significant federal and non-Federal projects in the	Ch. 2 Page 20,	

40 CFR	Criteria	Page	Comments
	nonattainment/maintenance area are explicitly modeled in the regional emissions analysis. For each project, identify by which analysis it will be open to traffic. Document that VMT for non-regionally significant Federal projects is accounted for in the regional emissions analysis	App B	
§93.122 (a)(2, 3)	Document that only emission reduction credits from TCMs on schedule have been included, or that partial credit has been taken for partially implemented TCMs. Document that the regional emissions analysis only includes emissions credit for projects, programs, or activities that require regulatory action if: the regulatory action has been adopted; the project, program, activity or a written commitment is included in the SIP; EPA has approved an opt-in to the program, EPA has promulgated the program, or the Clean Air Act requires the program (indicate applicable date). Discuss the implementation status of these programs and the associated emissions credit for each analysis year.	Ch. 2 Page 22	
§93.122 (a)(4,5,6)	For nonregulatory measures that are not included in the STIP, include written commitments from appropriate agencies. Document that assumptions for measures outside the transportation system (e.g. fuels measures) are the same for baseline and action scenarios. Document that factors such as ambient temperature are consistent with those used in the SIP unless modified through interagency consultation.	N/A	
§93.122 (b)(1)(i) <sup>ii</sup>	Document that a network-based travel model is in use that is validated against observed counts for a base year no more than 10 years before the date of the conformity determination. Document that the model results have been analyzed for reasonableness and compared to historical trends and explain any significant differences between past trends and forecasts (for per capita vehicle-trips, VMT, trip lengths mode shares, time of day, etc.).	Ch. 2 Page 17, 19	
§93.122 (b)(1)(ii) <sup>2</sup>	Document the land use, population, employment, and other network-based travel model assumptions.	Ch. 2 Page 17	
§93.122 (b)(1)(iii) <sup>2</sup>	Document how land use development scenarios are consistent with future transportation system alternatives, and the reasonable distribution of employment and residences for each alternative.	Ch. 2 Page 17	
§93.122 (b)(1)(iv) <sup>2</sup>	Document use of capacity sensitive assignment methodology and emissions estimates based on a methodology that differentiates between peak and off-peak volumes and speeds, and bases speeds on final assigned volumes.	Ch. 2 Page 19	
§93.122 (b)(1)(v) <sup>2</sup>	Document the use of zone-to-zone travel impedances to distribute trips in reasonable agreement with the travel times estimated from final assigned traffic volumes. Where transit is a significant factor, document that zone-to-zone travel impedances used to distribute trips are used to model mode split.	Ch. 2 Page 19	
§93.122 (b)(1)(vi) <sup>2</sup>	Document how travel models are reasonably sensitive to changes in time, cost, and other factors affecting travel choices.	Ch. 2 Page 19	

40 CFR	Criteria	Page	Comments
§93.122 (b)(2) <sup>2</sup>	Document that reasonable methods were used to estimate traffic speeds and delays in a manner sensitive to the estimated volume of travel on each roadway segment represented in the travel model.	Ch. 2 Page 19	
§93.122 (b)(3) <sup>2</sup>	Document the use of HPMS, or a locally developed count-based program or procedures that have been chosen through the consultation process, to reconcile and calibrate the network-based travel model estimates of VMT.	Ch. 2 Page 20	
§93.122 (d)	In areas not subject to §93.122(b), document the continued use of modeling techniques or the use of appropriate alternative techniques to estimate vehicle miles traveled	N/A	
§93.122 (e, f)	Document, in areas where a SIP identifies construction-related PM10 or PM2.5 as significant pollutants, the inclusion of PM10 and/or PM2.5 construction emissions in the conformity analysis.	Ch. 3 Page 25, 26	
§93.122 (g)	If appropriate, document that the conformity determination relies on a previous regional emissions analysis and is consistent with that analysis.	N/A	
§93.126, §93.127, §93.128	Document all projects in the TIP/RTP that are exempt from conformity requirements or exempt from the regional emissions analysis. Indicate the reason for the exemption (Table 2, Table 3, traffic signal synchronization) and that the interagency consultation process found these projects to have no potentially adverse emissions impacts.	Ch. 2 Page 20, App B	

<sup>i</sup> Note that some areas are required to complete both interim emissions tests.

<sup>ii</sup> 40 CFR 93.122(b) refers only to serious, severe and extreme ozone areas and serious CO areas above 200,000 population

Disclaimers

This checklist is intended solely as an informational guideline to be used in reviewing Transportation Plans and Transportation Improvement Programs for adequacy of their conformity documentation. It is in no way intended to replace or supersede the Transportation Conformity regulations of 40 CFR Parts 51 and 93, the Statewide and Metropolitan Planning Regulations of 23 CFR Part 450 or any other EPA, FHWA or FTA guidance pertaining to transportation conformity or statewide and metropolitan planning. This checklist is not intended for use in documenting transportation conformity for individual transportation projects in nonattainment or maintenance areas. 40 CFR Parts 51 and 93 contain additional criteria for project-level conformity determinations. **Document #46711**

**APPENDIX B**

**TRANSPORTATION PROJECT LISTING**

AGENCY	PROJECT ID	CTIPs PROJECT ID	Description	Total Cost	Exemption Code
Countywide	CW01		Planning and Technical Studies for Rail service	\$5,000,000	4.05
Stanislaus County	SC04		Seismic Bridge Replacement	\$10,746,500	1.19
Stanislaus County	SC05		Install Traffic Signal/Intersection Improvements	\$62,597,700	5.02
Stanislaus County	SC13		Seismic Bridge Retrofit	\$1,639,100	1.19
Stanislaus County	SC14		Seismic Bridge Replacement	\$15,070,600	1.19
Stanislaus County	SC15		Seismic Bridge Retrofit - Mandatory	\$5,829,100	1.19
Stanislaus County	SC16		Seismic Bridge Retrofit	\$1,056,800	1.19
Stanislaus County	SC17		Seismic Bridge Replacement	\$26,269,200	1.19
Stanislaus County	SC18		Seismic Bridge Replacement; 4 lane bridge with pedestrian access	\$35,666,400	1.19
Stanislaus County	SC27		Replace Bridge (Critical)	\$2,627,000	1.19
Stanislaus County	SC62	21400000269	Roadway Rehabilitation	\$2,300,000	1.10
Stanislaus County	SC66		Rebuild and Replaces Transit Buses	\$13,417,800	2.03
Stanislaus County	SC67	21400000415	Capital Purchases (Buses, Electronic Fareboxes, Camera Systems, Bus Stop Facilities, etc.)	\$8,404,100	2.1
Stanislaus County	SC68		Install and Implement Technology Systems to Improve Transit Operations	\$741,100	2.01
Stanislaus County	SC86		Operating Costs	\$15,560,000	2.01
Ceres, City of	C01		Install Traffic Signals	\$11,341,400	5.07
Ceres, City of	C02	21400000258	Reconstruct Major Streets (Annual Basis)	\$20,979,000	1.10
Ceres, City of	C03		Reconstruct various Alleys (Annual Basis)	\$522,400	1.10
Ceres, City of	C29	21400000227	Capital Purchases and Installation (Busses and Bus Stop Improvements including, Shelters, Lighting, Trash Recepticals, etc.)	\$2,199,600	2.07
Ceres, City of	C31		Bus Turn-outs	\$345,100	5.06
Ceres, City of	C32		Transit Plan - Study for future routes in newly annexed areas, new schools & transit center	\$47,800	4.05
Ceres, City of	C35		Operating Costs	\$5,050,000	2.01
Modesto, City of	M157		Various Transit Construct Projects	\$30,519,500	2.06/2.07
Modesto, City of	M158	21400000396	Capital Purchases (Busses, Shop Trucks and Support Equipment, Bus Stop Facilities, etc.)	\$165,415,000	2.04/2.05
Modesto, City of	M160	21400000278	Rehabilitation and Maintenance - Equipment, Vehicles, Bus Stops, etc.	\$95,276,400	2.03
Modesto, City of	M162	21400000285	Federally Mandated Training and Education	\$744,200	4.05
Modesto, City of	M167		Transit Enhancements	\$1,860,300	2.01
Modesto, City of	M168	21400000281	Upgrade to Fareboxes, AVL systems, Computer Systems and other Technology Improvements	\$11,161,800	2.01
Modesto, City of	M170		Lease Transit Administrative Facility	\$2,790,500	2.04
Modesto, City of	M171	21400000278	Operating Costs	\$60,320,600	2.01
Turlock, City of	T58		Various Transit Construct Projects	\$6,567,400	2.06/2.07
Turlock, City of	T59	21400000210	Capital Purchases (Busses, Bus Stop and Station Improvements, Support Equipment, etc.)	\$19,221,600	2.04/2.05
Turlock, City of	T73		Federally Mandated Training and Education	\$279,100	4.05
Turlock, City of	T74	21400000211	Maintenance on Vehicles and Facilities	\$35,347,000	2.03
Turlock, City of	T78		Transit Enhancements	\$744,200	2.01
Turlock, City of	T79		Upgrade to Fareboxes, AVL systems, Computer Systems and other Technology Improvements	\$744,200	2.01
Turlock, City of	T81	21400000223	Operating Costs	\$8,130,200	2.01
Modesto, City of	M172		Terminal Program NEPA	\$382,500	4.01
Modesto, City of	M173		Utility Master Plan (Sign Plan/Elec./Util. Study)	\$206,000	4.01
Modesto, City of	M174		Rehab/Expand NW Term. Apron (Const)	\$1,236,000	2.07
Modesto, City of	M175		Terminal Expansion (Design)	\$1,725,500	4.01
Modesto, City of	M176		Enhance Airport Storm Drain System (Design)	\$446,800	4.01
Modesto, City of	M177		Terminal Expansion (Const. Phase-1)	\$8,626,800	2.07
Modesto, City of	M178		Enhance Airport Storm Drain System (const. Phase-1)	\$1,150,300	2.07
Modesto, City of	M179		Terminal Expansion (const. Phase-2)	\$8,885,600	2.07
Modesto, City of	M180		Enhance Airport Storm Drain System (const. Phase-2)	\$1,184,800	2.07
Modesto, City of	M181		Construct Maintenance Building (Design)	\$579,700	4.01
Modesto, City of	M182		Construct ARFF Building (Design)	\$579,700	4.01
Modesto, City of	M183		Rehab Runway (Airfield Pavement Maintenance, Design)	\$231,900	4.01
Oakdale, City of	O14		Fencing and Security Cameras	\$546,400	4.01
Oakdale, City of	O15		Runway/Taxi Maintenance and Upgrades	\$546,400	4.01
Turlock, City of	T81		Airfield: Slurry and Restripe Runways	\$82,400	4.01
Turlock, City of	T82		Navigational Aids: Install AWOS	\$154,500	4.01
Turlock, City of	T83		Install Obstruction lights on utility poles	\$1,100	4.01
Turlock, City of	T84		Apron and Taxiway rehabilitation and drainage improvements	\$1,648,000	4.01
Turlock, City of	T85		Improve access road	\$185,400	1.03

AGENCY	PROJECT ID	CTIPs PROJECT ID	Description	Total Cost	Exemption Code
Turlock, City of	T86		Construct 20 new hangars	\$643,800	2.07
Turlock, City of	T87		Construct additional vehicular parking	\$77,300	2.07
Turlock, City of	T88		Install perimeter fencing and gates	\$442,900	4.01
Turlock, City of	T89		Relocate runway 12-30 & build new entry/exit connector taxiways	\$3,186,400	4.01
Turlock, City of	T90		Develop Pavement Maintenance Plan	\$11,300	4.01
Turlock, City of	T91		Install MIRL on Runway 12-30	\$135,100	4.01
Turlock, City of	T92		Install 2 PAPIs	\$84,500	4.01
Turlock, City of	T93		Install 2 REILs	\$84,500	4.01
Turlock, City of	T94		Install MITL on formal runway and new taxiways	\$40,600	4.01
Turlock, City of	T95		Install airfield signage	\$135,100	4.01
Turlock, City of	T96		Install 12,000-gallon fuel tank	\$202,600	4.01
Turlock, City of	T97		Construct pollution abatement facility	\$202,600	4.01
Turlock, City of	T98		Construct 20 new hangars	\$703,500	2.07
Turlock, City of	T99		Extend fire protection system	\$405,200	4.01
Turlock, City of	T100		Airfield electrical service infrastructure	\$168,900	4.01
Turlock, City of	T101		Additional drainage improvements	\$1,409,200	4.01
Turlock, City of	T102		Extend runway 12-30	\$692,200	4.01
Turlock, City of	T103		Extend entry/exit connector taxiways	\$519,100	4.01
Turlock, City of	T104		Relocate PAPIs	\$16,700	4.01
Turlock, City of	T105		Relocate REILs	\$16,700	4.01
Turlock, City of	T106		Extend MITL	\$49,900	4.01
Turlock, City of	T107		Extend MIRL	\$33,300	4.01
Turlock, City of	T108		Install 12,000-gallon fuel tank	\$249,200	4.01
Turlock, City of	T109		Construct 20 new hangars	\$865,200	2.07
Turlock, City of	T110		Construct new terminal/administration building facility	\$519,100	2.07
Turlock, City of	T111		Construct maintenance/storage building	\$103,900	2.07
Stanislaus County	SC63		Add Class I bike path in conjunction with Claribel roadway widening	\$1,890,900	3.02
Stanislaus County	SC64		Add Class II bike lanes	\$281,400	3.02
Ceres, City of	C19		Hatch Rd Bike/Ped Project - Phase III	\$257,500	3.02
Ceres, City of	C20		Construct Bike/Ped Facility (3 phases)	\$265,300	3.02
Ceres, City of	C21		Mitchell Rd Bike/Ped Project - Phase I	\$281,400	3.02
Ceres, City of	C22		Mitchell Rd Bike/Ped Project - Phase II	\$298,600	3.02
Ceres, City of	C23		Mitchell Rd Bike/Ped Project - Phase III	\$316,700	3.02
Ceres, City of	C24		Mitchell Rd Bike/Ped Project - Phase IV	\$326,200	3.02
Ceres, City of	C25		Hatch Rd TID Bike/Ped Project - Phase IV	\$401,200	3.02
Ceres, City of	C26		Misc. Bike/Pedestrian Facility Projects	\$346,100	3.02
Ceres, City of	C27		Mitchell Rd Bike/Ped Project - Phase V	\$8,028,800	3.02
Hughson, City of	H01		Various Intersection Improvements	\$5,926,500	5.01
Hughson, City of	H13		Roadway Rehabilitation	\$165,000	1.10
Hughson, City of	H14		Construct Class I, Class II, Class III Bikeway Improvements (Per Master Plan)	\$164,000	3.02
Hughson, City of	H15		Construct Class I Bike Path	\$675,400	3.02
Hughson, City of	H16	3140000392	Curb, Gutter and Sidewalk, Pedestrian Improvements	\$1,507,100	3.02
Hughson, City of	H17		Sidewalk In-Fill and Streetscape Improvements (ADA)	\$2,243,200	3.02
Modesto, City of	M05	2140000259	Roadway Rehabilitation	\$24,648,600	1.10
Modesto, City of	M18	2140000398	Various Intersection Improvements	\$79,890,300	5.01
Modesto, City of	M85		Bicycle/Pedestrian Improvements at Railroad crossing	\$141,400	3.02
Modesto, City of	M87		Bicycle Improvements - Signage/striping	\$2,465,900	3.02
Modesto, City of	M112		Bicycle Lane Widening	\$613,700	3.02
Modesto, City of	M126		Construction Improvements - Class I Trail along MID Lateral 5 & 6	\$27,684,700	3.02
Modesto, City of	M127		Trail Improvements - Class I Bikeway	\$27,684,700	3.02
Modesto, City of	M155		Trail Improvements	\$48,141,200	3.02
Modesto, City of	M156		Trail Improvements	\$51,350,700	3.02
Newman, City of	N01		Reconstruct Roadways	\$581,400	1.10
Newman, City of	N02		Install Traffic Signals	\$709,100	5.02
Newman, City of	N03		Install 4 Lane Arterial Roadway Improvements	\$5,453,900	1.10
Newman, City of	N04	1140000077	Construct Class I Bike Lane	\$1,019,600	3.02
Oakdale, City of	O01	1140000075	Install Traffic Signals and Various Intersection Improvements	\$1,072,200	5.02
Oakdale, City of	O12	2140000261	Roadway Rehabilitation	\$555,000	1.10

AGENCY	PROJECT ID	CTIPs PROJECT ID	Description	Total Cost	Exemption Code
Oakdale, City of	O13		Construct Class I Bike Lane	\$437,100	3.02
Oakdale, City of	O14		Construct Class I Bike Lane	\$506,500	3.02
Patterson, City of	P02		Install Traffic Signals and Various Intersection Improvements	\$14,668,100	5.02
Patterson, City of	P05		Roadway Rehabilitation	\$495,000	1.10
Riverbank, City of	R01		Install Traffic Signals and Various Intersection Improvements	\$15,210,900	5.02
Riverbank, City of	R08		Construct right-hand turn lane on SB First St Approach	\$1,925,700	5.01
Riverbank, City of	R09		Reconstruct Roadway and Extend Curb, Gutter and Sidewalk	\$94,552,300	5.01
Riverbank, City of	R15		Pedestrian Bridge over Stanislaus River	\$7,313,100	3.02
Riverbank, City of	R16	21400000407	Construct Class I Bike/Ped Trail	\$1,178,100	3.02
Riverbank, City of	R17	21400000407	Construct Class I Bike/Ped Trail	\$1,178,100	3.02
Turlock, City of	T28		Install Traffic Signals and Various Intersection Improvements	\$4,105,100	5.02
Turlock, City of	T35	21400000265	Roadway Rehabilitation	\$1,875,000	1.10
Turlock, City of	T46		Construct Class I Bike Paths	\$3,625,700	3.02
Turlock, City of	T49		Construct Bicycle Parking Area	\$258,800	3.02
Turlock, City of	T51		Construct Class II Bike Lanes	\$2,267,700	3.02
Waterford, City of	W01	21400000164	Curb, Gutter, Sidewalk; and Bike/ Pedestrian Improvements	\$1,591,400	3.02
Waterford, City of	W02		Install Traffic Signals and Various Intersection Improvements	\$3,664,700	5.02
Waterford, City of	W03		Curb, Gutter and Sidewalk; and Bike/Pedestrian Improvements	\$506,800	3.02
Waterford, City of	W04		Roadway Rehabilitation	\$210,000	1.10
Waterford, City of	W05		Curb, Gutter and Sidewalk; Bike/Pedestrian and Roadside Rest Improvements	\$1,304,800	3.02
Waterford, City of	W06		Construct new pedestrian bridge	\$2,076,400	3.02
Waterford, City of	W07		Install Class I Bike Path - Phase I	\$2,076,400	3.02
StanCOG	ST07		Transportation Enhancement Activities	\$4,448,000	4.09
StanCOG	ST08		Planning and Monitoring Activities	\$2,636,000	4.01
StanCOG	ST09	21400000255	Regional Rideshare and Vanpool Program	\$1,000,000	3.01



Jurisdiction/ Agency	CTIPs Project ID	RTP/TIP Project ID	Description	Location	Project Limits	Total Cost	2011	2012	2014	2017	2020	2023	2025	2035
StanCOG		ST01	Phases 2 - 4: SR-132 Connectivity Project	SR-132	SR-132 Connectivity to SR-99	\$434,120,500								x
StanCOG		ST02	Widen 6 to 8 lanes	SR-99	Mitchell Rd to Hatch Rd	\$263,877,200								x
StanCOG		ST03	Widen 6 to 8 lanes	SR-99	Hatch Rd to Tuolumne Rd	\$144,706,900								x
StanCOG		ST04	Widen 6 to 8 lanes	SR-99	Tuolumne Rd to Kansas Ave	\$170,243,400								x
StanCOG		ST05	Widen 6 to 8 lanes	SR-99	Kansas Ave to Carpenter Rd	\$102,146,000								x
StanCOG		ST06	Widen 6 to 8 lanes	SR-99	Carpenter Rd to San Joaquin County Line	\$124,277,700								x
Stanislaus County		SC01	Interchange Replacement	SR-99	SR-99 & Kiernan Ave (SR-219)	\$66,150,500				x				
Stanislaus County		SC02	Interchange Replacement	SR-99	SR-99 & Hammett Rd	\$95,524,200				x				
Stanislaus County		SC03	Construct 2 Lane Expressway	North County Corridor	SR-99 to SR-120/108	\$553,693,600					x			
Stanislaus County		SC09	Widen to 3 lanes	Geer-Albers Rd	Claribel Rd to Milnes Rd	\$4,111,900						x		
Stanislaus County		SC10	Widen to 3 lanes	Hatch Rd	Faith Home Rd to Clinton Rd	\$2,605,900	x							
Stanislaus County		SC11	Widen to 5 lanes	McHenry Ave	Ladd Rd to Hogue Rd	\$4,349,700	x							
Stanislaus County		SC12	Seismic Bridge Replacement - 3-lane Bridge	Crows Landing Rd	San Joaquin River Bridge	\$17,139,300			x					
Stanislaus County		SC18	Seismic Bridge Replacement; 4 lane bridge with pedestrian access	Seventh St	Seventh St @ Tuolumne River Bridge	\$35,666,400				x				
Stanislaus County		SC25	Widen to 5 lanes	Claribel Rd	McHenry Ave to Oakdale Rd	\$15,875,400			x					
Stanislaus County		SC26	Widen to 4-lane Expressway	Kiernan Ave (SR 219)	Phase II: Dale Rd to McHenry Ave	\$46,987,300		x						
Stanislaus County		SC41	Widen to 3 lanes	Carpenter Rd	Whitmore Ave to Keyes Rd	\$5,534,500								
Stanislaus County		SC42	Widen to 3 lanes	Carpenter Rd	Keyes Rd to Monte Vista Ave	\$3,783,900					x			
Stanislaus County		SC43	Widen to 3 lanes	Carpenter Rd	Monte Vista Ave to W. Main St	\$3,737,500					x			
Stanislaus County		SC44	Widen to 3 lanes	Crows Landing Rd	Keyes Rd to Monte Vista Ave	\$2,459,800				x				
Stanislaus County		SC45	Widen to 3 lanes	Crows Landing Rd	Monte Vista Ave to W. Main St	\$2,459,800				x				
Stanislaus County		SC46	Widen to 3 lanes	Crows Landing Rd	W. Main St to Harding Rd	\$2,533,600				x				
Stanislaus County		SC47	Widen to 3 lanes	Crows Landing Rd	Harding Rd to Carpenter Rd	\$3,091,100					x			
Stanislaus County		SC48	Widen to 3 lanes	Crows Landing Rd	Carpenter Rd to River Rd/ Marshall Rd	\$1,425,800						x		
Stanislaus County		SC49	Widen to 3 lanes	Crows Landing Rd	River Rd/Marshall Rd to SR-33	\$15,112,300							x	
Stanislaus County		SC50	Widen to 3 lanes	Geer-Albers Rd	Taylor Rd to Santa Fe Ave	\$4,550,600				x				
Stanislaus County		SC51	Widen to 3 lanes	Geer-Albers Rd	Santa Fe Ave to Hatch Rd	\$3,927,000				x				
Stanislaus County		SC52	Widen to 3 lanes	Geer-Albers Rd	Hatch Rd to SR-132	\$3,628,600					x			
Stanislaus County		SC53	Widen to 3 lanes	Geer-Albers Rd	SR-132 to Milnes Rd	\$10,696,400								x
Stanislaus County		SC54	Widen to 5 lanes	McHenry Ave	Hogue Rd to San Joaquin County Line	\$8,891,600			x					
Stanislaus County		SC55	Widen to 3 lanes	Santa Fe Ave	Keyes Rd to Geer Rd	\$4,405,700						x		
Stanislaus County		SC56	Widen to 3 lanes	Santa Fe Ave	Geer to Hughson City Limit	\$3,116,000							x	
Stanislaus County		SC57	Widen to 3 lanes	Santa Fe Ave	Hatch to Tuolumne River	\$2,809,900								x
Stanislaus County		SC58	Widen to 3 lanes	W. Main St	San Joaquin River to Carpenter Rd	\$5,398,600					x			
Stanislaus County		SC59	Widen to 3 lanes	W. Main St	Carpenter Rd to Crows Landing Rd	\$3,443,700				x				
Stanislaus County		SC60	Widen to 3 lanes	W. Main St	Crows Landing Rd to Mitchell Rd	\$5,288,500				x				
Stanislaus County		SC61	Widen to 3 lanes	W. Main St	Mitchell Rd to Washington Rd	\$3,783,900					x			
Ceres, City of		C10	Construct New Interchange, Phase I	SR-99	Mitchell Rd/Service Rd	\$23,881,100				x				
Ceres, City of		C11	Construct New Interchange, Phase II	SR-99	Mitchell Rd/Service Rd	\$121,812,600					x			
Ceres, City of		C12	Widen from 2 to 4 lanes	Central Ave	Hatch Rd to Grayson Rd	\$11,145,400							x	
Ceres, City of		C13	Widen from 2 to 4 lanes	Grayson Rd	Ustick Rd to Central Ave	\$2,752,000								x
Ceres, City of		C14	Widen to 4 lanes	Mitchell Rd	River Rd to Service Rd	\$10,705,500							x	
Ceres, City of		C15	Widen to 6 lanes, Phase I	Mitchell Rd	Service Rd to Grayson Rd	\$693,300							x	
Ceres, City of		C16	Widen from 2 to 4 lanes	Morgan Rd	7th St to Grayson Rd	\$1,361,200					x			
Ceres, City of		C17	Widen from 2 to 4-lane expressway, Phase I	Service Rd	Central Ave to Mitchell Rd	\$6,659,600							x	
Ceres, City of		C18	Widen from 2 to 4 lanes	Whitmore Ave	Ustick Rd to Faith Home Rd	\$3,400,800					x			
Hughson, City of		H02	Construct new 2-lane Minor Collector	Locust St	Dominic Ave to Euclid Ave	\$1,107,400						x		
Hughson, City of		H03	Widen bridge over Irrigation Canal to 3-lanes	Tully Rd	Tully Rd at Irrigation Canal Bridge	\$802,400							x	
Hughson, City of		H07	Improve to 2-lane Major Collector	7th St	Whitmore Ave to Santa Fe Ave	\$1,344,000					x			
Hughson, City of		H08	Improve to 2-lane Constrained Major Collector	Fox Rd	Fox Glen Dr to Geer Rd	\$1,815,200						x		
Hughson, City of		H10	Improvements to 2-lane Arterial	Tully Rd	Santa Fe Ave to Whitmore Ave	\$1,125,600			x					
Hughson, City of		H11	Construct 2-lane Major Collector	Euclid Ave	Hatch Rd to Whitmore Ave	\$1,957,200					x			
Hughson, City of		H12	Construct new 2-lane street extension	Mountain View Rd	Hatch Rd to Santa Fe Ave	\$950,100				x				
Modesto, City of		M01	Reconstruct to 8-lane Interchange	SR-99	SR-99 & Pelandale Interchange	\$69,092,800			x					

Jurisdiction/ Agency	CTIPs Project ID	RTP/TIP Project ID	Description	Location	Project Limits	Total Cost	2011	2012	2014	2017	2020	2023	2025	2035
Modesto, City of		M02	Reconstruct to 8-lane Interchange	SR-99	SR-99 & Standiford Interchange	\$40,117,700							x	
Modesto, City of		M03	Construct 4-lane Freeway	SR-132	SR-99 to West of Dakota/Nebraska	\$62,290,600					x			
Modesto, City of		M10	Widen Roadway to 2-lane collector and Rehabilitation	Rosemore Ave	Kansas Ave to Blue Gum Ave	\$1,669,400			x					
Modesto, City of		M11	Widen from 2 to 4 lanes	Morton Blvd	Tuolumne Blvd to Yosemite Blvd (SR-132)	\$4,844,600				x				
Modesto, City of		M12	Widen from 2 to 4 lanes	Blue Gum Ave	Poult Rd to Rosemore Ave	\$4,179,200				x				
Modesto, City of		M13	Widen from 2 to 6 lanes	Claratina Ave	Coffee Rd to Oakdale Rd	\$7,508,300				x				
Modesto, City of		M14	Widen from 4 to 6 lanes	Oakdale Rd	Sylvan Ave to Floyd Ave	\$8,012,600				x				
Modesto, City of		M15	Widen from 2 to 4 lanes	Dale Rd	Kiernan Ave to Ladd Rd	\$11,553,900							x	
Modesto, City of		M16	Widen from 4 to 6 lanes	E. Briggsmore Ave	Claus Rd to GP Boundary	\$8,664,600				x				
Modesto, City of		M17	Widen from 2 to 6 lanes	Dale Rd	Pelandale Ave to Standiford Ave	\$9,786,500				x				
Modesto, City of		M19	Widen from 2 to 6 lanes	Dale Rd	Pelandale Ave to Kiernan Ave	\$10,975,800				x				
Modesto, City of		M20	Widen from 4 to 6 lanes	Oakdale Rd	Sylvan Ave to Claratina Ave	\$11,964,500				x				
Modesto, City of		M21	Widen from 4 to 6 lanes	Oakdale Rd	Floyd Ave to Briggsmore Ave	\$12,113,500				x				
Modesto, City of		M22	Widen from 2 to 4 lanes	Sylvan Ave	Roselle Ave to Claus Rd	\$12,678,000				x				
Modesto, City of		M23	Construct 4-lane Minor Arterial	New Road between Finney and Dakota	Beckwith Rd to Murphy Rd	\$18,477,900					x			
Modesto, City of		M24	Extend as 6-lane Arterial	Pelandale/Claratina Expressway	Oakdale Rd to Roselle Ave	\$16,023,800				x				
Modesto, City of		M25	Widen from 2 to 6-lane Expressway	Pelandale/Claratina Expressway	McHenry Ave to Coffee Rd	\$17,910,800				x				
Modesto, City of		M26	Widen from 4 to 6 lanes	Standiford Ave	Dale Rd to Prescott Rd	\$19,316,500				x				
Modesto, City of		M28	Widen from 2 to 4 lanes	Paradise Rd	Carpenter Rd to Sutter Ave	\$9,618,400				x				
Modesto, City of		M29	Widen from 2 to 4 lanes	Roselle Ave	Floyd Ave to Claribel Rd	\$29,660,300				x				
Modesto, City of		M30	Widen from 2 to 4 lanes	Beckwith Rd	SR 99 to GP Boundary	\$30,173,700							x	
Modesto, City of		M31	Widen from 4 to 6 lanes	Briggsmore Ave	Prescott Rd to Oakdale Rd	\$47,001,800				x				
Modesto, City of		M36	Widen to 4 lanes	Woodland Ave	Carpenter Rd to Kearney Ave	\$17,074,300					x			
Modesto, City of		M37	Widen from 2 to 4 lanes	Floyd Ave	Oakdale Rd to 1,000 feet west of Oakdale Rd	\$24,916,300					x			
Modesto, City of		M38	Widen from 4 to 6 lanes	Crows Landing Rd	SR-99 to 7th St	\$9,243,200							x	
Modesto, City of		M39	Widen from 4 to 6 lanes	Tully Rd	Pelandale Ave to GP Boundary	\$13,887,800							x	
Modesto, City of		M40	Widen to 6 lane expressway	Carpenter Rd	Hatch Rd to Paradise Rd	\$16,776,300							x	
Modesto, City of		M41	Widen from 4 to 6 lanes	McHenry Ave	Standiford Ave to GP Boundary	\$16,785,900							x	
Modesto, City of		M42	Widen from 2 to 6 lane expressway	Claus Rd	Briggsmore Ave to Sylvan Ave	\$20,764,300							x	
Modesto, City of		M43	Widen from 4 to 6 lanes	Mitchell Rd	Yosemite Blvd (SR-132) to Modesto GP Boundary	\$21,929,300							x	
Modesto, City of		M44	Widen from 2 to 6-lane expressway	Claus Rd	Sylvan Ave to Claribel Rd	\$23,560,300							x	
Modesto, City of		M45	Widen from 4 to 6 lanes	Crows Landing Rd	Whitmore Ave to SR-99	\$31,212,900							x	
Modesto, City of		M46	Widen from 2 to 4 lanes	Scenic Dr	Oakdale Rd to Claus Rd	\$18,632,600							x	
Oakdale, City of		O02	Construct New 4-lane Roadway	Warnerville Rd	Yosemite Ave to Kaufman Rd	\$4,371,000		x						
Oakdale, City of		O03	Widen Roadway to 4-lanes	Kaufman Rd	Greger St to Patterson Rd	\$2,813,800			x					
Oakdale, City of		O05	Construct New 2-lane Roadway	D St	Rodeo to Stearns Rd	\$2,892,200			x					
Oakdale, City of		O06	Widen Roadways to 4-lanes	Sierra Rd	5th St to Stearns Rd	\$3,298,300					x			
Oakdale, City of		O07	Widen Roadway to 5-lanes	F St	Maag Ave to Stearns Rd	\$2,824,000				x				
Oakdale, City of		O08	Construct New 2-lane Roadway	Orsi Rd	Sierra Rd to F St	\$2,326,100				x				
Oakdale, City of		O10	Widen Roadway to 4-lanes	Stearns Rd	A St to F St	\$1,284,500			x					
Oakdale, City of		O11	Widen Roadway to 4-lanes	Stearns Rd	F St to Sierra Rd	\$2,020,100				x				
Patterson, City of		P01	Widen to 4-lanes; Realign and Reconstruct Roadway	Sperry Ave	Ward Ave to SR-33	\$7,164,400				x				
Patterson, City of		P03	Construct new 3-lane Roadway Segment	Sperry Ave	S. 1st St to Locust Ave	\$5,970,300				x				
Patterson, City of		P04	Reconstruct Sperry Ave Interchange. Widen Sperry Ave (Rogers Rd to I-5)	I-5	I-5 & Sperry Rd	\$13,842,400					x			
Turlock, City of		T01	Reconstruct Interchange	SR-99	SR-99 & Fulkerth Rd	\$13,842,400					x			
Turlock, City of		T02	Widen from 2 to 5-lane Arterial	Fulkerth Rd	Dianne to SR-99	\$336,400					x			
Turlock, City of		T03	Widen existing 2-5 lanes to 6-lane Arterial	W. Main St	Tegner Rd to Walnut Rd	\$1,811,100					x			
Turlock, City of		T04	Widen from 2-lane to 4-lane Arterial	W. Main St	Washington Rd to Tegner Rd	\$2,443,900					x			
Turlock, City of		T05	Widen from 2-lane to 4-lane Arterial	Fulkerth Rd	Tegner Rd to Dianne Dr	\$634,200					x			
Turlock, City of		T06	Install Median; Add one (1) lane	Monte Vista Ave	Olive Ave to Berkeley Ave	\$1,439,700					x			
Turlock, City of		T07	Widen from 2-lane to 4-lane Arterial	Fulkerth Rd	Washington Rd to Tegner Rd	\$3,736,900					x			
Turlock, City of		T08	Widen from 2-lane to 4-lane Arterial	Washington Rd	Linwood Ave to Fulkerth Rd	\$2,378,200							x	

Jurisdiction/ Agency	CTIPs Project ID	RTP/TIP Project ID	Description	Location	Project Limits	Total Cost	2011	2012	2014	2017	2020	2023	2025	2035
Turlock, City of		T09	Construct new 2-lane Industrial Collector	Tegner Rd	Linwood Ave to W. Main St	\$474,800					x			
Turlock, City of		T10	Construct new 2-lane Collector	W. Canal Dr	SR-99 to Tegner Rd	\$2,256,900				x				
Turlock, City of		T11	Widen from 2-lane to 4-lane Arterial	N. Olive Ave	Tuolumne Rd to Tornell Rd	\$827,800					x			
Turlock, City of		T12	Widen from 2-lane to 4-lane Arterial	N. Olive Ave	Canal Dr to Wayside Rd	\$931,600					x			
Turlock, City of		T13	Widen from 2-lane to 4-lane Arterial	N. Olive Ave	Wayside Dr to North Ave	\$970,400					x			
Turlock, City of		T14	Widen from 2-lane to 3-lane Collector	W. Linwood Ave	Walnut Rd to Lander Ave	\$672,800					x			
Turlock, City of		T15	Widen from 2-lane to 3-lane Collector	W. Linwood Ave	Walnut Rd to Washington Rd	\$4,597,500							x	
Turlock, City of		T16	Construct new 2-lane Collector	W. Canal Dr	Washington Rd to Kilroy Rd	\$2,740,100					x			
Turlock, City of		T17	Widen from 2-lane to 4-lane Arterial	East Ave	Golden State Blvd to Daubenberger Rd	\$6,511,100								x
Turlock, City of		T18	Complete 6-lane Boulevard	Golden State Blvd	Taylor Rd to Monte Vista Ave	\$3,617,100					x			
Turlock, City of		T19	Complete 6-lane Boulevard	Golden State Blvd	Monte Vista Ave to Fulkerth Rd	\$3,135,300					x			
Turlock, City of		T20	Construct new Collector	N. Kilroy Ave	W. Main St to W. Canal Dr	\$812,000							x	
Turlock, City of		T21	Complete 2-lane Industrial Collector	Tegner Rd	Monte Vista Ave to Fulkerth Rd	\$736,800				x				
Turlock, City of		T22	Construct new 2-lane Industrial Collector	Tegner Rd	Fulkerth Rd to north of Pedretti Park	\$1,088,100					x			
Turlock, City of		T23	Widen from 2-lane to 4-lane Collector	Taylor Rd	Tegner Rd to Golden State Blvd	\$552,400					x			
Turlock, City of		T24	Construct new Industrial Collector	S. Kilroy Ave	Spengler Way to W. Linwood Ave	\$1,020,600							x	
Turlock, City of		T25	Widen from 2-lane to 4-lane Arterial	Taylor Rd	Golden State Blvd to SR-99	\$152,500							x	
Turlock, City of		T26	Widen from 5-lane to 6-lane Arterial	W. Main St	Walnut Rd to SR-99	\$19,256,500							x	
Turlock, City of		T27	Construct new 2-lane Industrial Collector	Tegner Rd	W. Main St to Fulkerth Rd	\$3,055,100					x			
Turlock, City of		T29	Construct New Interchange	SR-99	Lander Ave (SR-165) to S. City Limits	\$39,103,200								x
Turlock, City of		T30	Construct New Interchange	SR-99	W. Main St	\$20,861,200							x	
Turlock, City of		T31	Reconstruct existing Interchange	SR-99	Taylor Rd	\$8,407,100							x	
Turlock, City of		T32	Construct New Overpass	SR-99	Tuolumne Rd	\$10,592,200					x			
Turlock, City of		T33	Construct 4-lane Expressway	Washington Rd	Fulkerth Rd to Monte Vista Ave	\$2,921,900							x	
Turlock, City of		T34	Widen Intersection from 2 to 4 lanes	Golden State Blvd	Golden State Blvd & Taylor Rd	\$2,939,900							x	

**APPENDIX C**

**CONFORMITY ANALYSIS DOCUMENTATION**

### Stanislaus COG 2011 Conformity

Variable	Source	Analysis Year								
		2011	2012	2014	2017	2020	2023	2025	2035	
EDP	EMFAC 2007	371,970	378,117	390,719	410,417	431,111	454,936	471,548	561,047	
EVMT	EMFAC 2007	12,085,012	12,289,217	12,796,523	13,613,519	14,338,863	15,135,808	15,658,155	18,620,034	
MVMT	TPA Model	12,040,783	12,065,540	12,513,170	13,581,703	14,214,936	14,761,720	15,096,875	16,961,103	<=Enter Modeled Daily VMT Here
N	Calculated	370,609	371,235	382,067	409,458	427,385	443,692	454,645	511,061	<= Read New Vehicle Population Here

**N = New Population**  
**EDP = EMFAC Default Population**  
**MVMT = Modeled VMT**  
**EVMT = EMFAC Default VMT**

**EMFAC Emissions (tons/day)**

**STANISLAUS**

Pollutant	Source	Description	2017			2025			2035			
Carbon Monoxide	EMFAC 2007 (Winter Run)	CO Total Exhaust (All Vehicles Total)			45.35			29.99		25.29		
		<b>Conformity Total</b>			45			30		25		
<hr/>												
Ozone	EMFAC 2007 (Summer Run)	ROG Total Exhaust (All Vehicles Total)	2011	2014	2017	2023	2025	2035				
		District Existing Local Reductions	Indirect Source Mitigation and School Bus Fleet rules	0.00	0.00	0.00	0.00	0.00	0.00			
		ARB Existing Local Reductions	Reflash, Idling, and Moyer	0.01	0.01	0.01	0.00	0.00	0.00			
		District New/Proposed Local Reductions	Employee Trip Reduction	0.09	0.09	0.09	0.09	0.09	0.09			
		ARB New/Proposed State Reductions	Passenger and Truck Measures included in the Draft State Strategy	0.00	0.00	0.00	0.00	0.00	0.00			
		<b>Conformity Total</b>		8.76	7.21	6.29	4.95	4.64	3.66			
Ozone	EMFAC 2007 (Summer Run)	NOx Total Exhaust (All Vehicles Total)	23.69	18.14	14.48	9.76	8.94	7.57				
		District Existing Local Reductions	Indirect Source Mitigation and School Bus Fleet rules	0.23	0.14	0.21	0.18	0.18	0.18			
		ARB Existing Local Reductions	Reflash, Idling, and Moyer	1.52	1.35	1.20	1.09	1.09	1.09			
		District New/Proposed Local Reductions	Employee Trip Reduction	0.03	0.03	0.04	0.04	0.04	0.04			
		ARB New/Proposed State Reductions	Passenger and Truck Measures included in the Draft State Strategy	0.00	0.00	0.00	0.00	0.00	0.00			
		<b>Conformity Total</b>		21.91	16.62	13.03	8.45	7.63	6.26			
<hr/>												
PM-10	EMFAC 2007 (Annual Run)	PM-10 Total (All Vehicles Total) * includes tire & brake wear				2020	2025	2035				
		ARB	Existing Reflash, Idling, and Moyer (HDI, PFR, Moyer, AB1493, Reflash)				0.01	0.01	0.01			
		<b>Conformity Total</b>				0.88	0.85	0.90				
PM-10	EMFAC 2007 (Annual Run)	NOx Total Exhaust (All Vehicles Total)				11.63	8.92	7.52				
		ARB	Existing Reflash, Idling, and Moyer (HDI, PFR, Moyer, AB1493, Reflash)				1.09	1.09	1.09			
		<b>Conformity Total</b>				10.54	7.83	6.43				
<hr/>												
PM2.5	EMFAC 2007 (Annual Run)	PM2.5 Total Exhaust (All Vehicles Total) * includes tire & brake wear	2012	2014	2017	2025	2035					
		ARB	Adopted State and Local Measures not included in EMFAC 2007	0.01	0.01	0.01	0.01	0.01				
		ARB	2007 State Strategy	0.00	0.00	0.00	0.00	0.00				
		<b>Conformity Total</b>		0.80	0.70	0.60	0.60	0.60				
PM2.5	EMFAC 2007 (Annual Run)	NOx Total Exhaust (All Vehicles Total)	21.55	18.13	14.47	8.92	7.52					
		ARB	Adopted State and Local Measure not included in EMFAC 2007	1.54	1.37	1.37	1.37	1.37				
		ARB	2007 State Strategy	0.00	0.00	0.00	0.00	0.00				
		<b>Conformity Total</b>		20.00	16.80	13.10	7.60	6.20				

**Paved Road Dust Emissions (tons/day)**

**STANISLAUS 2020**

	VTM Daily	VTM (million/year)	Base Emissions (PM10 tpy)	Rain Adj. Emissions (PM10 tpy)	Rain Adj. Emissions (PM10 tons/day)	District Rule 8061/ISR Control Rates	Control-Adjusted Emissions
Enter Freeway VMT ==>	Freeway	6,054,275	2,210	633.986	612.711	1.679	1.553
Enter Arterial VMT ==>	Arterial	3,663,327	1,337	551.910	533.389	1.461	1.049
Enter Collector VMT ==>	Collector	3,570,419	1,303	537.913	519.861	1.424	0.845
Enter Total of Urban and Rural Local VMT Here =>	Urban	590,445	216	374.865	362.285	0.993	0.671
	Rural	336,470	123	608.097	587.690	1.610	1.465
	<b>926,915</b>						
<b>Totals</b>	<b>14,214,936</b>	<b>5,188</b>	<b>2706.771</b>	<b>2615.936</b>	<b>7.167</b>		<b>5.583</b>

**STANISLAUS 2025**

	VTM Daily	VTM (million/year)	Base Emissions (PM10 tpy)	Rain Adj. Emissions (PM10 tpy)	Rain Adj. Emissions (PM10 tons/day)	District Rule 8061/ISR Control Rates	Control-Adjusted Emissions
Enter Freeway VMT ==>	Freeway	6,657,136	2,430	697.116	673.722	1.846	1.707
Enter Arterial VMT ==>	Arterial	3,803,533	1,388	573.033	553.803	1.517	1.089
Enter Collector VMT ==>	Collector	3,657,573	1,335	551.043	532.551	1.459	0.865
Enter Total of Urban and Rural Local VMT Here =>	Urban	623,389	228	395.781	382.499	1.048	0.708
	Rural	355,244	130	642.026	620.481	1.700	1.547
	<b>978,633</b>						
<b>Totals</b>	<b>15,096,875</b>	<b>5,510</b>	<b>2859.000</b>	<b>2763.056</b>	<b>7.570</b>		<b>5.917</b>

**STANISLAUS 2035**

	VTM Daily	VTM (million/year)	Base Emissions (PM10 tpy)	Rain Adj. Emissions (PM10 tpy)	Rain Adj. Emissions (PM10 tons/day)	District Rule 8061/ISR Control Rates	Control-Adjusted Emissions
Enter Freeway VMT ==>	Freeway	7,578,831	2,766	793.634	767.001	2.101	1.944
Enter Arterial VMT ==>	Arterial	4,033,519	1,472	607.682	587.290	1.609	1.155
Enter Collector VMT ==>	Collector	4,257,270	1,554	641.392	619.868	1.698	1.007
Enter Total of Urban and Rural Local VMT Here =>	Urban	695,275	254	441.420	426.607	1.169	0.790
	Rural	396,208	145	716.061	692.031	1.896	1.725
	<b>1,091,483</b>						
<b>Totals</b>	<b>16,961,103</b>	<b>6,191</b>	<b>3200.189</b>	<b>3092.796</b>	<b>8.473</b>		<b>6.622</b>

DO NOT CHANGE ANY ITEMS BELOW THIS LINE

**STANISLAUS**

HPMS Local Urban/Rural Percent  
From 1998 Assembly of Statistical Reports - Caltrans  
63.7% Urban  
36.3% Rural  
100.0% Total

Road Type	Base EF (lb PM10/ VMT)
Freeway	0.000573793
Arterial	0.000825524
Collector	0.000825524
Local	0.003478828
Rural	0.009902924

**STANISLAUS**

	January	February	March	April	May	June	July	August	September	October	November	December	Total/Average
Rain Days	9.0	8.0	7.7	4.7	2.0	1.0	0	0	1.0	2.3	5.7	7.3	48.7
Total Days	31	28	31	30	31	30	31	31	30	31	30	31	365
Rain Reduction Factor	0.93	0.93	0.94	0.96	0.98	0.99	1.00	1.00	0.99	0.98	0.95	0.94	0.97

**Unpaved Road Dust Emissions (tons/day)**

**STANISLAUS 2020**

	Miles	Vehicle Passes per Day	VMT (1000/year)	Base Emissions (PM10 tpy)	Rain Adj. Emissions (PM10 tpy)	Rain Adj. Emissions (PM10 tons/day)	District Rule 8061/ISR Control Rates	Control-Adjusted Emissions
City/County	47.02	10	171.6	171.623	148.585	0.407	0.333	0.272

**STANISLAUS 2025**

	Miles	Vehicle Passes per Day	VMT (1000/year)	Base Emissions (PM10 tpy)	Rain Adj. Emissions (PM10 tpy)	Rain Adj. Emissions (PM10 tons/day)	District Rule 8061/ISR Control Rates	Control-Adjusted Emissions
City/County	47.02	10	171.6	171.623	148.585	0.407	0.333	0.272

**STANISLAUS 2035**

	Miles	Vehicle Passes per Day	VMT (1000/year)	Base Emissions (PM10 tpy)	Rain Adj. Emissions (PM10 tpy)	Rain Adj. Emissions (PM10 tons/day)	District Rule 8061/ISR Control Rates	Control-Adjusted Emissions
City/County	47.02	10	171.6	171.623	148.585	0.407	0.333	0.272

**DO NOT CHANGE ANY ITEMS BELOW THIS LINE**

<b>STANISLAUS</b>													
	January	February	March	April	May	June	July	August	September	October	November	December	Total/Average
Rain Days	9.0	8.00	7.7	4.7	2.0	1.0	0	0	1.0	2.3	5.7	7.3	48.7
Total Days	31	28.00	31	30	31	30	31	31	30	31	30	31	365
Rain Reduction Factor	0.71	0.71	0.75	0.84	0.94	0.97	1.00	1.00	0.97	0.92	0.81	0.76	0.87



### Road Construction Dust

#### STANISLAUS

Description	2020		2025		2035	
	Year	Lane Miles	Year	Lane Miles	Year	Lane Miles
	Baseline	2005	3513	2020	3719	2025
Horizon	2020	3,719	2025	3,791	2035	3,851
Difference	15	206	5	72	10	60
Lane Miles per Year		14		14		6
Acres Disturbed		53		56		23
Acre-Months		959		1005		419
Emissions (tons/year)		105.472		110.592		46.080
Annual Average Day Emissions (tons)		0.289		0.303		0.126
District Rule 8021 Control Rates		0.290		0.290		0.290
<b>Total Emissions (tons per day)</b>		<b>0.205</b>		<b>0.215</b>		<b>0.090</b>

**PM10 Emission Trading Worksheet**

**STANISLAUS CONFORMITY ESTIMATES (tons/day)**

	2020		2025		2035	
	PM10	NOx	PM10	NOx	PM10	NOx
Total On-Road Exhaust	0.870	10.540	0.840	7.830	0.890	6.430
Paved Road Dust	5.583		5.917		6.622	
Unpaved Road Dust	0.272		0.272		0.272	
Road Construction Dust	0.205		0.215		0.090	
<b>Total</b>	<b>6.930</b>	<b>10.540</b>	<b>7.244</b>	<b>7.830</b>	<b>7.873</b>	<b>6.430</b>

**Difference (2020 Budget - 2020)**

	PM10	NOx
2020 Budgets	6.7	10.8
2020	6.9	10.5
<b>Difference</b>	<b>-0.2</b>	<b>0.3</b>
* 1.5 (Adjustment to NOx Budget)	0.3	

**NOTE: IF PM10 DIFFERENCE IS NEGATIVE, IMPLEMENT TRADING BELOW; IF NOT, INSERT RESULTS DIRECTLY INTO TOTALS SHEET**

**Difference (2020 Budget - 2025)**

	PM10	NOx
2020 Budgets	6.7	10.8
2025	7.2	7.8
<b>Difference</b>	<b>-0.5</b>	<b>3.0</b>
* 1.5 (Adjustment to NOx Budget)	0.8	

**NOTE: IF PM10 DIFFERENCE IS NEGATIVE, IMPLEMENT TRADING BELOW; IF NOT, INSERT RESULTS DIRECTLY INTO TOTALS SHEET**

**Difference (2020 Budget - 2035)**

	PM10	NOx
2020 Budgets	6.7	10.8
2035	7.9	6.4
<b>Difference</b>	<b>-1.2</b>	<b>4.4</b>
* 1.5 (Adjustment to NOx Budget)	1.8	

**NOTE: IF PM10 DIFFERENCE IS NEGATIVE, IMPLEMENT TRADING BELOW; IF NOT, INSERT RESULTS DIRECTLY INTO TOTALS SHEET**

**1:1.5 PM10 to NOx Trading**

	PM10	NOx
2020 Budget	6.7	10.8

<b>Adjusted 2020 Budget</b>	<b>6.9</b>	<b>10.5</b>
2020 Conformity Total	6.9	10.5
<b>Difference</b>	<b>0.0</b>	<b>0.0</b>

**NOTE: FINAL DIFFERENCE MUST BE POSITIVE**

<b>Adjusted 2020 Budget</b>	<b>7.2</b>	<b>10.1</b>
2025 Conformity Total	7.2	7.8
<b>Difference</b>	<b>0.0</b>	<b>2.3</b>

**NOTE: FINAL DIFFERENCE MUST BE POSITIVE**

<b>Adjusted 2020 Budget</b>	<b>7.9</b>	<b>9.0</b>
2035 Conformity Total	7.9	6.4
<b>Difference</b>	<b>0.0</b>	<b>2.6</b>

**NOTE: FINAL DIFFERENCE MUST BE POSITIVE**

**2011 Conformity Results Summary -- STANISLAUS**

Pollutant	Scenario	Emissions Total		DID YOU PASS?	
		CO (tons/day)		CO	
Carbon Monoxide	2010 Budget	130			
	2017	45		YES	
	2018 Budget	130			
	2018	43		YES	
	2025	30		YES	
	2035	25		YES	

	Scenario	ROG (tons/day)	NOx (tons/day)	ROG	NOx
		2011 Budget	9.0	22.3	
Ozone	2011	8.8	21.9	YES	YES
	2014 Budget	7.5	17.2		
	2014	7.2	16.6	YES	YES
	2017 Budget	6.5	13.4		
	2017	6.3	13.0	YES	YES
	2023	5.0	8.5	YES	YES
	2025	4.6	7.6	YES	YES
	2035	3.7	6.3	YES	YES

	Scenario	PM-10 (tons/day)	NOx (tons/day)	PM-10	NOx
		Adjusted 2020 Budget	6.9	10.5	
PM-10	2020	6.9	10.5	YES	YES
	Adjusted 2020 Budget	7.2	10.1		
	2025	7.2	7.8	YES	YES
	Adjusted 2020 Budget	7.9	9.0		
	2035	7.9	6.4	YES	YES

1997 PM2.5 24 Hour & Annual Standards and 2006 24-Hour Standard	Scenario	PM2.5 (tons/day)	NOx (tons/day)	PM2.5	NOx
		2012 Budget	0.9	20.8	
2012	0.8	20.0	YES	YES	
2014	0.7	16.8	YES	YES	
2017	0.6	13.1	YES	YES	
2025	0.6	7.6	YES	YES	
2035	0.6	6.2	YES	YES	

**APPENDIX D**

**TIMELY IMPLEMENTATION DOCUMENTATION FOR  
TRANSPORTATION CONTROL MEASURES**

Stanislaus Council of Governments  
Timely Implementation Documentation

RACM Commitment	Agency	Commitment Description	Commitment Schedule	Commitment Funding	TIP	TIP Project ID	Project Description	Implementation Status	2011 Conformity Update
								(as of 10/08)	(as of 3/10)
ST 1.4	Ceres	Implement fixed route bus service	FY 2002/2003	CMAQ	2002	1140000089	Purchase new CNG Minibus	Complete	Complete
ST 9.2/9.3/9.11/15.1	Hughson	Install pedestrian facilities along the north side of Whitmore Avenue from Charles Avenue to 6th Street	2003	CMAQ	2002	2140000029	Whitmore Avenue--Install pedestrian facilities along north side from Charles Ave to 6th St	Complete	Complete
		Install pedestrian and bike facilities on Charles Street from Hughson Avenue to north of Fox Road	2004	TEA	2000	1001STA183C	bike/ped. Facilities on Charles St. from Hughson Ave. to north of Fox Road	Complete	Complete
ST 1.7	Modesto	Free Transit During Special Events	not specified	FTA, Local and fares	2000	2140000053	Try Transit Week, Modesto's International Festival and annual Thanksgiving dinner	Complete	Complete
ST 5.1	Modesto	Expansion of ATMS Northeast, ATMS Northwest and Phase III of CCT	2002, 2003, 2002	\$490,428/\$805,000/\$1,290,940 CMAQ					
					2000	None	Expand ATMS Northeast	Complete	Complete
					2002	2140000039	Expand ATMS Northwest	Complete	Complete
					2002	1140000067	Phase III of CCTV	Complete	Complete
ST 1.4	Oakdale	Restructure transit to a fixed route service	2003	CMAQ	2002	1140000073	Purchase 2 natural gas trolleys	Complete	Complete
ST 5.3	Oakdale	roundabout at Gilbert avenue and G Street	2004	\$154,928 CMAQ	2004	2140000058	Gilbert Ave/"G" St Round-about	Complete	Complete
ST 9.2/9.3/9.5/15.1	Oakdale	two bicycle/pedestrian trail projects and one bike rack	2005	\$192,000/\$10,000 CMAQ					
					2002	2140000055	Bicycle/pedestrian trail (PG & E)	Complete	Complete
					2002	1140000100	Bicycle/pedestrian trail (Valley View)	Environmental information from Caltrans received. E76 for preliminary engineering has been received. Projected construction start date is summer/fall of 2009.	Project continues in the Caltrans planning process. Project construction estimated to start in the 2010/11 fiscal year.
ST 9.2/9.3/9.5/15.1	Oakdale				2002	1140000097	Bike Racks	Complete	Complete
ST 10.2	ROTA ( Riverbank Oakdale Transit Authority)	Bike Racks on Buses	ongoing	CMAQ	2000	1140000073	add bike racks to buses	Complete	Complete
ST 5.3	Patterson	Reduce Traffic Congestion at Major Intersections	ongoing	CMAQ	2000	1140000101	Install traffic signals at 1. Ward @ Eagle and 2. Hwy 33 and M Street	1. Project Completed. 2. City of Patterson is working with the Caltrans to resolve ROW and Design issues. Project is in the PE stage, construction date will be determined as soon as ROW issues are resolved. Project Design was submitted to Caltrans for design exception in June 2006. We have not received any comments from them to date. A traffic study (to establish new speed limit) was also requested. The Traffic Study will determine how much ROW needs to be purchased. Traffic study has been completed. 90% of Preliminary Engineering Phase (Design) phase is complete. Currently working with railroad on ROW issues. Projected construction start date Summer 2009.	Outstanding issues have been resolved. Expected start of construction will be July 2010.

Stanislaus Council of Governments  
Timely Implementation Documentation

RACM Commitment	Agency	Commitment Description	Commitment Schedule	Commitment Funding	TIP	TIP Project ID	Project Description	Implementation Status	2011 Conformity Update
								(as of 10/08)	(as of 3/10)
ST 1.4/1.5	Riverbank	Restructure transit to include a fixed route service	2003	CMAQ	2002	11400000073	Purchase 2 natural gas trolleys	Complete	Complete
ST 9.3	Riverbank	Infill project to provide sidewalks	2004	\$192,253 CMAQ	2002	21400000199	Downtown sidewalk infill project	Complete	Complete
ST 5.2/5.3/5.4/5.13	Turlock	Signal project at intersection of Hawkeye and Del	2003	CMAQ	2002	11400000102	E Hawkeye & Dels Lane -- install signal with interconnection and coordination with existing signals	Complete	Complete
ST 9.2/9.3/9.5/15.1	Turlock	Bike/ped trail on Canal Drive	2005	CMAQ	2002	11400000103 - 11400000104	Canal drive, Quincy to daubenburger -- extend class 1 bicycle path	Complete	Complete
ST 9.2/9.3	Waterford	Welch bike path extension from Amy Lane to Bentley Street	2003	\$136,336 CMAQ	2004	11400000106	Welch St, Amy to Bentley - construct bicycle path	Complete	Complete
ST 5.3/5.4	County	Reduce Traffic Congestion at Major Intersections; Site-specific TCMs	2004	PFF; STP; STIP	2000		1. Albert Road Widening and improvements; 2. install five (5) traffic signals at:  (a) Carpenter Rd @ Robertson;  (b) Crows Landing @ Butte Ave; (c) Finch Rd @ Mariposa; (d) Keyes Rd @ Geer; and,  (e) Stoddard Rd @ Kiernan Ave	Complete  2(a) Carpenter Rd @ Robertson - All the ROW have been acquired. Project out to bid. RFA to be submitted as soon as 2009 Interim FTIP is approved. Planned construction to start FY 2008/09 (Est. Spring 2009).  2(b) Project completed 2(c) Project Completed 2(d) Project Completed  2(e) Stoddard/Kiernan project is merged with SR 219 expressway project (TIP# 11400000023). This portion of the project is Phase 1b of the SR219 project. The Cooperative agreement is completed and a new Project Manager is in place to complete the project. Additional funds are being programmed through the STIP Augmentation to support construction. Design phase completed. Additional funds have been programmed. Project under construction. Planned completion by fall 2010.	Complete  Bids have been opened. Construction estimated to begin in July 2010.  Complete Complete Complete  Project under construction. Planned completion by the Fall of 2010.
ST 8.1	County	Employee Ride Program	on-going	CMAQ	2002 + Amendment	21400000087	Transit Fare Subsidy Program	Complete	Complete
ST 9.3/9.11	County	River Road bicycle project, Shackleford area sidewalk project, and Glenn/Luster/Maud sidewalk project	2004	CMAQ					
					2002	21400000088	River Rd Bike Lane from Ninth St to Mitchell Rd	On May 7, 2008 EPA concurred on TCM substitution for this project. The substitute project (Grayson Road Bike Lane) was completed in August 2005. No further updates are required.	No further updates are required.
					2002	11400000110	Construct sidewalks and curb ramps	Complete	Complete
					2002	21400000083	School Sidewalk Program	Complete	Complete
<b>Additional Projects Identified</b>									

Stanislaus Council of Governments  
Timely Implementation Documentation

RACM Commitment	Agency	Commitment Description	Commitment Schedule	Commitment Funding	TIP	TIP Project ID	Project Description	Implementation Status	2011 Conformity Update
								(as of 10/08)	(as of 3/10)
ST 3.1	StanCOG	Commute Connection	2002/2003	CMAQ	2002	1140000015	Provide regional rideshare services through FY2002/03	Complete	Complete
ST5.2	Ceres	Coordinate Traffic Signal Systems		CMAQ	2004	2140000204	Update traffic signal coordination program within the existing system	Complete	Complete
ST5.4	Ceres	Site-Specific Transportation Control Measures		RSTP	2004	2140000258	Evaluate intersections widen the south approach of the Central Avenue / Hatch Road intersection. (a) Road intersection. (b) widen Service Road / Mitchell Road intersection (c) (c) Widen Whitmore Overpass	(a)Project Completed in September 2005. (b)Project Completed in May 2005 (c) ROW purchass completed. Mobile home park relocation completed. Project under construction. Projected completion date is 2010.	Project under construction. Completion expected in the Fall 2010.
ST1.1	Modesto	Regional Express Bus Program		CMAQ	2004	2140000234	Purchase of buses to operate regional express bus service	Complete	Complete
				CMAQ	2007	2140000396		Complete	Complete
ST5.2	Modesto	Coordinate Traffic Signal Systems		CMAQ	2002	1140000066	Downtown Traffic Signal Coordination	Complete	Complete
				CMAQ	2004/2007	2140000238	Traffic Signal coordination outside the Downtown Core	January update incorrectly states "Project under construction". Should have read "Project consultant selection process underway". As of 10/2008, consultant has been selected and due to project complexities, is converting new plans from Syncure to BiTran Systems Quick Net to solve compatibility issues.	Project is complete and operational
	Modesto	Coordinate Traffic Signal Systems	2006/2007	CMAQ	2004	2140000238	Outside Downtown Traffic Signal Coordination.	As of 10/2008, consultant has been selected and due to project complexities, is converting new plans from Syncure to BiTran Systems Quick Net to solve compatibility issues.	Project is complete and operational
ST5.3	Modesto	Reduce Traffic Congestion at Major Intersections		CMAQ	2002	1140000062	Construction of right turns at Scenic Ave & Bodem Ave.	Complete	Complete
				CMAQ/Local	2004	EA 956525	Right Turn Lanes Briggsmore Overpass Orangeburg at Sisk (a) (b)	Consultant negotiations completed, and consultant hired. Design phase 90% complete. Construction funding was approved 9/15/2008. Estimated completion date is summer 2009.	Complete
				CMAQ/Local	2004	EA 956531	Construction of left turn lanes Briggsmore at McHenry	Complete	Complete
				CMAQ/Local	2004	EA 4A0644	Install Traffic Signal detector loops	Complete	Complete
				CMAQ/Local	2007/07	2140000206	Install Roundabout at Sharon and Maid Mariane	Complete	Complete
ST5.4	Modesto	Site-Specific Transportation Control Measures		Local Funds(CFD)	N/A	N/A	Geometric or traffic control improvements at specific congested intersections Ave (a) Briggsmore (b) Pelandale Ave (c) Floyd Ave	(a) Project Completed Project Completed (b) I completed, Phase II under Construction. Estimated completion date spring 2009. (c)	Complete
				CMAQ/Local	2004	EA 656420	Traffic signal modification at 10th and G Streets, 11th and G Streets, 12th and G Streets, 14th and G Streets, and 17th and G Streets	Complete	Complete
ST15.2	Modesto	Pedestrian and Bicycle Overpasses Where Safety Dictates		CFD(Community facilities District) and Modesto City Schools	N/A	N/A	Pedestrian overpass on Sylvan Avenue at Millbrook Avenue	Complete	Complete
ST5.13	Modesto	Fewer stop signs		CMAQ	2004	2140000204	Encia Ave Roundabout- Install Roundabout w/signing & striping La Loma at Buena Vista & Conejo @ Encia	Complete	Complete
	Modesto	Fewer stop signs		CMAQ	2004	2140000235	Roundabout at Sylvan/Roselle	Complete	Complete

Stanislaus Council of Governments  
Timely Implementation Documentation

RACM Commitment	Agency	Commitment Description	Commitment Schedule	Commitment Funding	TIP	TIP Project ID	Project Description	Implementation Status	2011 Conformity Update
								(as of 10/08)	(as of 3/10)
ST5.2	Patterson	Coordinate Traffic Signal Systems		CMAQ	2004	21400000243	Ward Avenue/Las Palmas Ave Traffic Signals	Complete	Complete
ST17.15	Riverbank	Encourage the Purchase and use of alternative, cleaner vehicles.		CMAQ	2002	11400000078	Purchase CNG Vehicles	Complete	Complete
ST 17.15	Riverbank	Encourage the Purchase and use of alternative, cleaner vehicles	2002/2003	CMAQ	2002	01STA200	Purchase CNG Vehicles	Complete	Complete
			2002	FTA Section 5307 funds	N/A	N/A	Purchase CNG Vehicles	Complete	Complete
			2003/2004	CMAQ	2002	01STA201	Purchase CNG Vehicles	Complete	Complete
			2004/2005	FTA Section 5307 funds	N/A	N/A	Purchase CNG Vehicles	Complete	Complete
<b>New Projects Identified</b>									
ST5.3	Ceres	Reduce Traffic Congestion at Major Intersections	2007	CMAQ	2004/2007	21400000224	Traffic Signal Coordination	Complete	Complete
ST 9.2/9.3/9.5/15.1/10.2	Oakdale/Riverbank	Bike racks on buses			2002	21400000336	Bike racks	Complete	Complete
ST9.2	Patterson	Encouragement of Pedestrian Travel	2007	CMAQ/Local	2004/07	21400000349	Class I and II Bike Lane and pedestrian facilities	RFA submitted to Caltrans. Project started summer 2008. Project 75% completed. Estimated completion date is March 2009.	Project complete
ST17.15	Riverbank	Encourage the purchase and use of alternative cleaner vehicles	2006	CMAQ/Local	2004/07	21400000245	Purchase CNG VAC Truck	Complete	Complete
ST1.4	Turlock	Mass Transit Alternatives	2008	FTA Section 5307 funds	2007	21400000373	Purchase new bus	Delivery delayed until October 2008. Will be put into service January 2009.	Project complete and in operation
ST10.2	Turlock	Bike Racks on Buses	2008	FTA Section 5307 funds	2007	21400000373	Bike Racks	Complete	Complete
ST 17.15	Turlock	Encourage the purchase and use of alternative cleaner vehicles	2007	CMAQ/Local	2007	21400000247	Purchase CNG Vehicles	Complete	Complete



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RACM Commitment	Agency	Commitment Description	Commitment Schedule	Commitment Funding	TIP	TIP Project ID	Project Description	Implementation Status	2011 Conformity Update
								(as of 10/08)	(as of 3/10)
ST 1.4	Ceres	Implement fixed route bus service	FY 2002/2003	CMAQ	2002	1140000089	Purchase new CNG Minibus	Complete	Complete
ST 9.2/9.3/9.11/15.1	Hughson	Install pedestrian facilities along the north side of Whitmore Avenue from Charles Avenue to 6th Street	2003	CMAQ	2002	2140000029	Whitmore Avenue--Install pedestrian facilities along north side from Charles Ave to 6th St	Complete	Complete
		Install pedestrian and bike facilities on Charles Street from Hughson Avenue to north of Fox Road	2004	TEA	2000	1001STA183C	bike/ped. Facilities on Charles St. from Hughson Ave. to north of Fox Road	Complete	Complete
ST 1.7	Modesto	Free Transit During Special Events	not specified	FTA, Local and fares	2000	2140000053	Try Transit Week, Modesto's International Festival and annual Thanksgiving dinner	Complete	Complete
ST 5.1	Modesto	Expansion of ATMS Northeast, ATMS Northwest and Phase III of CCT	2002, 2003, 2002	\$490,428/\$805,000/\$1,290,940 CMAQ					
					2000	None	Expand ATMS Northeast	Complete	Complete
					2002	2140000039	Expand ATMS Northwest	Complete	Complete
					2002	1140000067	Phase III of CCTV	Complete	Complete
ST 1.4	Oakdale	Restructure transit to a fixed route service	2003	CMAQ	2002	1140000073	Purchase 2 natural gas trolleys	Complete	Complete
ST 5.3	Oakdale	roundabout at Gilbert avenue and G Street	2004	\$154,928 CMAQ	2004	2140000058	Gilbert Ave/"G" St Round-about	Complete	Complete
ST 9.2/9.3/9.5/15.1	Oakdale	two bicycle/pedestrian trail projects and one bike rack	2005	\$192,000/\$10,000 CMAQ					
					2002	2140000055	Bicycle/pedestrian trail (PG & E)	Complete	Complete
					2002	1140000100	Bicycle/pedestrian trail (Valley View)	Environmental information from Caltrans received. E76 for preliminary engineering has been received. Projected construction start date is summer/fall of 2009.	Project continues in the Caltrans planning process. Project construction estimated to start in the 2010/11 fiscal year.
ST 9.2/9.3/9.5/15.1	Oakdale				2002	1140000097	Bike Racks	Complete	Complete
ST 10.2	ROTA ( Riverbank Oakdale Transit Authority)	Bike Racks on Buses	ongoing	CMAQ	2000	1140000073	add bike racks to buses	Complete	Complete
ST 5.3	Patterson	Reduce Traffic Congestion at Major Intersections	ongoing	CMAQ	2000	1140000101	Install traffic signals at 1. Ward @ Eagle and 2. Hwy 33 and M Street	1. Project Completed. 2. City of Patterson is working with the Caltrans to resolve ROW and Design issues. Project is in the PE stage, construction date will be determined as soon as ROW issues are resolved. Project Design was submitted to Caltrans for design exception in June 2006. We have not received any comments from them to date. A traffic study (to establish new speed limit) was also requested. The Traffic Study will determine how much ROW needs to be purchased. Traffic study has been completed. 90% of Preliminary Engineering Phase (Design) phase is complete. Currently working with railroad on ROW issues. Projected construction start date Summer 2009.	Outstanding issues have been resolved. Expected start of construction will be July 2010.

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ST 1.4/1.5	Riverbank	Restructure transit to include a fixed route service	2003	CMAQ	2002	11400000073	Purchase 2 natural gas trolleys	Complete	Complete
ST 9.3	Riverbank	Infill project to provide sidewalks	2004	\$192,253 CMAQ	2002	21400000199	Downtown sidewalk infill project	Complete	Complete
ST 5.2/5.3/5.4/5.13	Turlock	Signal project at intersection of Hawkeye and Del	2003	CMAQ	2002	11400000102	E Hawkeye & Dels Lane -- install signal with interconnection and coordination with existing signals	Complete	Complete
ST 9.2/9.3/9.5/15.1	Turlock	Bike/ped trail on Canal Drive	2005	CMAQ	2002	11400000103 - 11400000104	Canal drive, Quincy to daubenburger -- extend class 1 bicycle path	Complete	Complete
ST 9.2/9.3	Waterford	Welch bike path extension from Amy Lane to Bentley Street	2003	\$136,336 CMAQ	2004	11400000106	Welch St, Amy to Bentley - construct bicycle path	Complete	Complete
ST 5.3/5.4	County	Reduce Traffic Congestion at Major Intersections; Site-specific TCMs	2004	PFF; STP; STIP	2000		1. Albert Road Widening and improvements; 2. install five (5) traffic signals at:  (a) Carpenter Rd @ Robertson;  (b) Crows Landing @ Butte Ave; (c) Finch Rd @ Mariposa; (d) Keyes Rd @ Geer; and,  (e) Stoddard Rd @ Kiernan Ave	Complete  2(a) Carpenter Rd @ Robertson - All the ROW have been acquired. Project out to bid. RFA to be submitted as soon as 2009 Interim FTIP is approved. Planned construction to start FY 2008/09 (Est. Spring 2009).  2(b) Project completed 2(c) Project Completed 2(d) Project Completed  2(e) Stoddard/Kiernan project is merged with SR 219 expressway project (TIP# 11400000023). This portion of the project is Phase 1b of the SR219 project. The Cooperative agreement is completed and a new Project Manager is in place to complete the project. Additional funds are being programmed through the STIP Augmentation to support construction. Design phase completed. Additional funds have been programmed. Project under construction. Planned completion by fall 2010.	Complete  Bids have been opened. Construction estimated to begin in July 2010.  Complete Complete Complete  Project under construction. Planned completion by the Fall of 2010.
ST 8.1	County	Employee Ride Program	on-going	CMAQ	2002 + Amendment	21400000087	Transit Fare Subsidy Program	Complete	Complete
ST 9.3/9.11	County	River Road bicycle project, Shackleford area sidewalk project, and Glenn/Luster/Maud sidewalk project	2004	CMAQ					
					2002	21400000088	River Rd Bike Lane from Ninth St to Mitchell Rd	On May 7, 2008 EPA concurred on TCM substitution for this project. The substitute project (Grayson Road Bike Lane) was completed in August 2005. No further updates are required.	No further updates are required.
					2002	11400000110	Construct sidewalks and curb ramps	Complete	Complete
					2002	21400000083	School Sidewalk Program	Complete	Complete
<b>Additional Projects Identified</b>									

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ST 3.1	StanCOG	Commute Connection	2002/2003	CMAQ	2002	1140000015	Provide regional rideshare services through FY2002/03	Complete	Complete
ST5.2	Ceres	Coordinate Traffic Signal Systems		CMAQ	2004	2140000204	Update traffic signal coordination program within the existing system	Complete	Complete
ST5.4	Ceres	Site-Specific Transportation Control Measures		RSTP	2004	2140000258	Evaluate intersections widen the south approach of the Central Avenue / Hatch Road intersection. (a) Road intersection. (b) widen Service Road / Mitchell Road intersection (c) (c) Widen Whitmore Overpass	(a)Project Completed in September 2005. (b)Project Completed in May 2005 (c) ROW purchass completed. Mobile home park relocation completed. Project under construction. Projected completion date is 2010.	Project under construction. Completion expected in the Fall 2010.
ST1.1	Modesto	Regional Express Bus Program		CMAQ	2004	2140000234	Purchase of buses to operate regional express bus service	Complete	Complete
				CMAQ	2007	2140000396		Complete	Complete
ST5.2	Modesto	Coordinate Traffic Signal Systems		CMAQ	2002	1140000066	Downtown Traffic Signal Coordination	Complete	Complete
				CMAQ	2004/2007	2140000238	Traffic Signal coordination outside the Downtown Core	January update incorrectly states "Project under construction". Should have read "Project consultant selection process underway". As of 10/2008, consultant has been selected and due to project complexities, is converting new plans from Syncure to BiTran Systems Quick Net to solve compatibility issues.	Project is complete and operational
	Modesto	Coordinate Traffic Signal Systems	2006/2007	CMAQ	2004	2140000238	Outside Downtown Traffic Signal Coordination.	As of 10/2008, consultant has been selected and due to project complexities, is converting new plans from Syncure to BiTran Systems Quick Net to solve compatibility issues.	Project is complete and operational
ST5.3	Modesto	Reduce Traffic Congestion at Major Intersections		CMAQ	2002	1140000062	Construction of right turns at Scenic Ave & Bodem Ave.	Complete	Complete
				CMAQ/Local	2004	EA 956525	Right Turn Lanes Briggsmore Overpass Orangeburg at Sisk (a) (b)	Consultant negotiations completed, and consultant hired. Design phase 90% complete. Construction funding was approved 9/15/2008. Estimated completion date is summer 2009.	Complete
				CMAQ/Local	2004	EA 956531	Construction of left turn lanes Briggsmore at McHenry	Complete	Complete
				CMAQ/Local	2004	EA 4A0644	Install Traffic Signal detector loops	Complete	Complete
				CMAQ/Local	2007/07	2140000206	Install Roundabout at Sharon and Maid Mariane	Complete	Complete
ST5.4	Modesto	Site-Specific Transportation Control Measures		Local Funds(CFD)	N/A	N/A	Geometric or traffic control improvements at specific congested intersections Ave (a) Briggsmore (b) Pelandale Ave (c) Floyd Ave	(a) Project Completed Project Completed (b) I completed, Phase II under Construction. Estimated completion date spring 2009. (c)	Complete
				CMAQ/Local	2004	EA 656420	Traffic signal modification at 10th and G Streets, 11th and G Streets, 12th and G Streets, 14th and G Streets, and 17th and G Streets	Complete	Complete
ST15.2	Modesto	Pedestrian and Bicycle Overpasses Where Safety Dictates		CFD(Community facilities District) and Modesto City Schools	N/A	N/A	Pedestrian overpass on Sylvan Avenue at Millbrook Avenue	Complete	Complete
ST5.13	Modesto	Fewer stop signs		CMAQ	2004	2140000204	Encia Ave Roundabout- Install Roundabout w/signing & striping La Loma at Buena Vista & Conejo @ Encia	Complete	Complete
	Modesto	Fewer stop signs		CMAQ	2004	2140000235	Roundabout at Sylvan/Roselle	Complete	Complete

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ST5.2	Patterson	Coordinate Traffic Signal Systems		CMAQ	2004	21400000243	Ward Avenue/Las Palmas Ave Traffic Signals	Complete	Complete
ST17.15	Riverbank	Encourage the Purchase and use of alternative, cleaner vehicles.		CMAQ	2002	11400000078	Purchase CNG Vehicles	Complete	Complete
ST 17.15	Riverbank	Encourage the Purchase and use of alternative, cleaner vehicles	2002/2003	CMAQ	2002	01STA200	Purchase CNG Vehicles	Complete	Complete
			2002	FTA Section 5307 funds	N/A	N/A	Purchase CNG Vehicles	Complete	Complete
			2003/2004	CMAQ	2002	01STA201	Purchase CNG Vehicles	Complete	Complete
			2004/2005	FTA Section 5307 funds	N/A	N/A	Purchase CNG Vehicles	Complete	Complete
<b>New Projects Identified</b>									
ST5.3	Ceres	Reduce Traffic Congestion at Major Intersections	2007	CMAQ	2004/2007	21400000224	Traffic Signal Coordination	Complete	Complete
ST 9.2/9.3/9.5/15.1/10.2	Oakdale/Riverbank	Bike racks on buses			2002	21400000336	Bike racks	Complete	Complete
ST9.2	Patterson	Encouragement of Pedestrian Travel	2007	CMAQ/Local	2004/07	21400000349	Class I and II Bike Lane and pedestrian facilities	RFA submitted to Caltrans. Project started summer 2008. Project 75% completed. Estimated completion date is March 2009.	Project complete
ST17.15	Riverbank	Encourage the purchase and use of alternative cleaner vehicles	2006	CMAQ/Local	2004/07	21400000245	Purchase CNG VAC Truck	Complete	Complete
ST1.4	Turlock	Mass Transit Alternatives	2008	FTA Section 5307 funds	2007	21400000373	Purchase new bus	Delivery delayed until October 2008. Will be put into service January 2009.	Project complete and in operation
ST10.2	Turlock	Bike Racks on Buses	2008	FTA Section 5307 funds	2007	21400000373	Bike Racks	Complete	Complete
ST 17.15	Turlock	Encourage the purchase and use of alternative cleaner vehicles	2007	CMAQ/Local	2007	21400000247	Purchase CNG Vehicles	Complete	Complete

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				<b>(as of 10/08)</b>	<b>(as of 3/10)</b>
ST3.1	StanCOG	Commute Solutions	Provide regional rideshare services through FY2002/03	Project and commitment Completed. See Project TID Table.	Commitment Completed
ST5.3	Ceres	Reduce Traffic Congestion at Major Intersections	Evaluate 3 critical intersections per year to determine if delays exceed allowable limits (if...then)	Evaluated 20 intersections between 2003 and 2005 to see if the intersections still meet city's General Plan Level of service requirements of D for the major roads. Subsequently, changed timing at 14 intersections, implemented split phase timing at 3 locations and removing 2 locations from the coordination program. Also see ST5.4. The City of Ceres has completed two additional signal coordination projects and has added signals at one intersection, previously controlled by stop signs, to relieve congestion.	On-going, evaluations continue, no new synchronization plans identified as needed as of this date
ST5.9	Ceres	Bus Pullouts in Curbs for Passenger Loading	Provide bus pull-outs in curbs or parking lanes beginning FY2002/2003 and continue through FY2010/2011	Bus pull-outs have been constructed along the south side of Service Road at the Central Valley High School. Bus pullout installed on the north side of Hatch Road, east of Herndon Road April 2008. The City of Ceres continues to implement this program through its plan check and permitting process.	Ceres has incorporated bus pullouts into their plan check and permitting process to ensure these projects continue.
ST1.1	Modesto	Regional Express Bus Program	Purchase of buses to operate regional express bus service	See Project TID Table. The latest bus ordered has been received (12/06) and placed into service. Five buses have been received since last update. Projected to receive seven more buses by 2nd quarter 2009.	Modesto has 7 new busses that were delivered in December 2009.
ST1.5	Modesto	Expansion of Public Transportation Systems	Monitor needs on heavily used routes and newly develop areas and implement as appropriate	Based on current service levels and ridership monitoring, no service expansions expected in 2007. Route expansions are expected to occur within the next 3-5 years. No service expansions necessary (implemented) since last update.	No service expansions/implementations necessary since last update
ST5.2	Modesto	Coordinate Traffic Signal Systems	Implement and enhance synchronized traffic signal systems	See Project TID Table. Modesto continues to implement the signal coordination program. Data collection complete. Consultant is converting new plans from Syncure to BiTran Systems Quick Net to solve compatibility issues. Once conversion is complete, consultant will implement signal coordination program.	Signal coordination program has been completed. Final report is being completed.
ST5.3	Modesto	Reduce Traffic Congestion at Major Intersections	Implement a wide range of traffic control techniques designed to facilitate smooth, safe travel through intersections	See Project TID Table. Modesto continues to review and improve traffic flow at congested intersections through the use of design modifications, addition of turn lanes, signalization and roundabout installation to replace stop sign controlled intersections. Traffic signal installed on Sisk Road at Vintage Faire Mall. A second traffic signal on Sisk Road has been approved with estimated installation date of spring 2009.	Projects are complete and operational
ST5.4	Modesto	Site-Specific Transportation Control Measures	Geometric or traffic control improvements at specific congested intersections or at other substandard locations	Congested street segments have been improved. See Project TID Table. Installation of traffic signal approved for intersection of Tully Road and Stoddard Avenue adjacent to Modesto Junior College to improve traffic flow and student safety. Modesto continues to review and improve traffic flow at congested intersections through the use of design modifications, addition of turn lanes, signalization and roundabout installation to replace stop sign controlled intersections.	Project is complete and operational

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				<b>(as of 10/08)</b>	<b>(as of 3/10)</b>
ST5.13	Modesto	Fewer stop signs	Remove stop signs and implement alternative intersection control devices	See Project TID Table. Installation of traffic signals approved for intersections of Sylvan Avenue and Claus Road, and Floyd Avenue and Lincoln Oak Drive. Completion date estimated to be spring 2009. Modesto continues to review and improve traffic flow at congested intersections through the use of design modifications, addition of turn lanes, signalization and roundabout installation to replace stop sign controlled intersections.	Projects are complete and operational
ST9.5	Modesto	Encouragement of Bicycle Travel	Bike to work day and family cycling festival	Modesto participated in 2008 Bike to Work Day and the Family Cycling Festival	Modesto has and will continue to participate in the "Bike to Work" events and Family Cycling Festivals.
ST10.2	Modesto	Bike Racks on Buses	Add bicycle racks to new buses	All new urban buses have Bike Racks on them. Two new buses are on order and they will have bike racks on them. Racks will be installed as new buses are purchased.	Racks will be installed as new buses are purchased.
ST15.2	Modesto	Pedestrian and Bicycle Overpasses Where Safety Dictates	Implementation as development occurs	See Project TID Table. The Sylvan/Millbrock pedestrian/bicycle overcrossing was completed in 2008. Further overcrossings will be added as development occurs.	Further overcrossings will be added as development occurs.
ST10.2	Oakdale	Bike Racks on Buses	The Riverbank-Oakdale Transit Authority currently is adding bicycle racks to buses and hopes to continue doing so as long funding remains available.	See Project TID Table. All currently serviceable buses have bike racks on them and all the new buses will be purchased with the bike racks. No expansion of the bus fleet is anticipated at this time. Program will continue as needed	Racks will be installed as new buses are purchased.
ST1.5	Patterson	Expansion of Public Transportation Systems	The City of Patterson continually monitors their Dial-A-Ride service to determine the transit needs within the city.	City of Patterson have an MOU with the Stanislaus County to operate Patterson Dial-a-Ride. Stanislaus County monitor the need for additional public transportation through the number of ride denials and the number of calls being received from Patterson residents. City of Patterson plan to expand public transportation as a need is shown and ridership would be adequate to meet the requirements of the Transportation Development Act farebox requirements. The City of Patterson is currently planning a new transit hub for all major transit vehicles in the Patterson area. The location has been selected and the hub should be operational by the end of 2009.	Construction is underway and expected to be completed by July 2010.
ST5.2	Patterson	Coordinate Traffic Signal Systems	City of Patterson will evaluate signals as they are installed to measure their performance with the adjacent signals.	See Project TID Table. Ward Avenue/Las Palmas Avenue traffic signal coordination completed. The City of Patterson will continue to coordinate traffic signal throughout the city.	Patterson will continue to evaluate and coordinate traffic signals throughout the City.
ST5.13	Patterson	Fewer stop signs	This is on going process and city of Patterson is constantly evaluating the intersections for potential implementation of roundabouts	City has continued to monitor need for additional traffic signals	Patterson continues to evaluate the need for traffic signals and/or roundabouts. No new improvements have been identified at this time.

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ST9.2	Patterson	Encouragement of Pedestrian Travel	City of Patterson will continue to encourage the pedestrian travel	The Miscellaneous Sidewalk Repairs Project has been completed. The City anticipates further curb & gutter improvements to occur during the new FY 07/08. Traffic safety improvements and rumble dots have been installed in the Walnut Square subdivision. New improvements have been incorporated under the Traffic safety improvements program and will move further as soon as Caltrans issues the "Notice to Proceed". Patterson has one bicycle/pedestrian project currently under construction (see Project TID Table). Construction started for the Las Palmas pedestrian/bikeway; completion expected in 2009. City will continue to monitor development for further pedestrian/bikeway projects.	Las Palmas pedestrian/bikeway was completed.
ST5.1	Riverbank	Develop Intelligent Transportation Systems	City of Riverbank currently operates two message signs to divert traffic and will continue to use as needed.	The City of Riverbank continues to operate two changeable message signs to divert traffic for major events and traffic operations.	The City of Riverbank continues to operate two changeable message signs to divert traffic for major events and traffic operations.
ST5.9	Riverbank	Bus Pullouts in Curbs for Passenger Loading	City of riverbank will implement this measure as needed as development occurs and transit expands	The bus pullouts has installed on the Oakdale Road. In addition, the transit system uses the crossroads commercial development parking lot as a bus pullout for the commercial center. No additional implementation is warranted at this time.	New bus pullouts installed as warranted.
ST10.2	Riverbank	Bike Racks on Buses	The Riverbank-Oakdale Transit Authority currently is adding bicycle racks to buses and hopes to continue doing so as long funding remains available.	All of the buses have bike racks on them. Bike racks will be ordered for all the new buses. See Project TID Table.	Bike racks will be ordered for all the new buses.
ST17.15	Riverbank	Encourage the purchase and use of alternative, cleaner vehicles	The city of riverbank will continue to purchase cleaner vehicles as funding remains available.	See Project TID Table. The city of Riverbank will continue to purchase cleaner vehicles as funding remains available.	The city of Riverbank will continue to purchase cleaner vehicles as funding remains available.
ST1.4	Turlock	Mass Transit Alternatives	Implement a fixed route bus service, Establish routes and procure a CNG minibus.	The City of Turlock has expanded its fixed routes from two routes to four fixed routes and has increased the number of completed runs per route per day from 12 to 17. The City of Turlock has also increased its fixed route bus fleet from 12 passenger buses to 30 passenger buses. The City of Turlock has completed the purchase of the Minibus and continues to monitor the need for expanded fixed and demand route transit service through the Transit Needs Assessment Process. See Project TID Table. The City of Turlock has decreased headway times from 45 to 35 minutes, thereby increasing efficiency.	The City of Turlock continues to utilize 4 fixed routes and has increased runs per day to 18. The City of Turlock continues to monitor the need for expanded services. No new route at this time.

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				<b>(as of 10/08)</b>	<b>(as of 3/10)</b>
ST10.2	Turlock	Bike Racks on Buses	Bike Rakes on Buses	All currently serviceable buses have bike racks on them and all the new buses will be purchased with the bike racks. See Project TID Table.	Bike racks will be ordered for all the new buses.
ST17.15	Turlock	Encourage the purchase and use of alternative, cleaner vehicles	Purchase of Compressed Natural Gas Vehicles (CNG)	The City has purchased a number of different types of CNG vehicles. The City of Turlock continues to replace gas burning vehicles with CNG Vehicles. See Project TID Table.	The City of Turlock continues to replace gas burning vehicles with CNG vehicles. Turlock recently purchased 2 additional coaches - expected delivery in July 2010.
ST1.5	Stanislaus County	Expansion of Public Transportation Systems	Expand and enhance existing public transit services. Monitor needs for increased frequencies on heavily used routes; implement as appropriate; implement service as appropriate for newly developed areas.	In August 2007, on a demonstration basis, the County plans to start a hybrid non-emergency medical, student and commuter service to Modesto to Merced and to medical facilities in Madera and Fresno. No service expansions are planned for 2008. Will continue to monitor needs for increased services.	Services have been expanded to provide morning and afternoon service to the City of Merced.
ST1.7	Stanislaus County	Free transit during special events		The County continues to offer free transit coupons for "Try Transit Week" in October.	The County has expanded the free transit program to include work commutes for City of Modesto and certain Stanislaus County employees.
ST5.9	Stanislaus County	Bus Pullouts in Curbs for Passenger Loading	Provide Bus Pullouts in curbs, or queue jumper lanes for passenger loading in future developments.	As per the Stanislaus County General Plan, the County will continue to require bus pullouts, shelter, and/or park-and-ride lots on all new developments where appropriate. County Public Works will continue to monitor all new developments to ensure compliance. County has not identified a need at this time.	As per the Stanislaus County General Plan, the County will continue to require bus pullouts, shelter, and/or park-and-ride lots on all new developments where appropriate. County Public Works will continue to monitor all new developments to ensure compliance. County has not identified any additional needs at this time.
ST5.16	Stanislaus County	Adaptive traffic signals and signal timing	Future traffic signal projects will be evaluated to determine if adaptive traffic signals and signal timing can be implemented in a safe and cost-effective manner.	Signals Constructed since 2002, as well as all our signals, are as adaptive as technology allows. All of the signals are actuated, the timing is traffic driven during the non-peak hours. During the peak hour the signal inmost likely to operate using the maximum time allotted per phase, which has been determined from the traffic study.	Signals constructed since 2002, as well as all our signals, are as adaptive as technology allows. All of the signals are actuated, the timing is traffic driven during the non-peak hours. During the peak hours, the signal is most likely to operate using the maximum time allotted per phase which has been determined from the traffic study.
ST10.2	Stanislaus County	Bike Racks on Buses	Bicycle racks would be placed on a to-be-determined number of buses to increase bicycle travel.	All County fixed route transit buses have bike racks. Bike racks will be installed on all new bus purchases.	Bike racks have been expanded from 2 to 3 racks per bus.



**APPENDIX E**

**PUBLIC MEETING PROCESS DOCUMENTATION**

**NOTICE OF PUBLIC HEARING ON THE  
DRAFT 2011 FEDERAL TRANSPORTATION IMPROVEMENT PROGRAM,  
THE DRAFT 2011 REGIONAL TRANSPORTATION PLAN,  
THE DRAFT ENVIRONMENTAL IMPACT REPORT AND  
CORRESPONDING DRAFT CONFORMITY ANALYSIS**

NOTICE IS HEREBY GIVEN that STANISLAUS COUNCIL OF GOVERNMENTS (STANCOG) will hold a public hearing on MAY 19, 2010 at STANCOG BOARD ROOM, 1111 I STREET SUITE 308, MODESTO CA., 95354, regarding the Draft 2011 Federal Transportation Improvement Program (2011 FTIP), the Draft 2011 Regional Transportation Plan (2011 RTP), the Draft Environmental Impact Report (EIR) and corresponding Draft Air Quality Conformity Analysis for the 2011 FTIP and 2011 RTP. The purpose of this combined public hearing is to receive public comments on these documents.

- The 2011 FTIP is a near-term listing of capital improvement and operational expenditures utilizing federal and state monies for transportation projects in STANISLAUS COUNTY during the next four years.
- The 2011 RTP is a long-term strategy to meet STANISLAUS COUNTY transportation needs out to the year 2035.
- The Program EIR provides an analysis of potential environmental impacts related to the implementation of the RTP as required by the California Environmental Quality Act.
- The Conformity Analysis contains the documentation to support a finding that the 2011 FTIP and 2011 RTP meet the air quality conformity requirements for carbon monoxide, ozone and particulate matter.

Individuals with disabilities may call the STANCOG Main Office Telephone Number at (209)-525-4600,(with 3-working-day advance notice) to request auxiliary aids necessary to participate in the public hearing. Translation services are available (with 3-working-day advance notice) to participants speaking any language with available professional translation services.

A concurrent 45-day public review and comment period will commence on April 30, 2010 and conclude on June 14, 2010. The draft documents are available for review at the STANCOG office, located at 1111 I STREET, SUITE 308, MODESTO, CA 95354 and on the STANCOG website at [WWW.STANCOG.ORG](http://WWW.STANCOG.ORG).

Public comments are welcomed at the hearing, or may be submitted in writing by 5 p.m. on June 14, 2010 to CARLOS P. YAMZON at the address below.

After considering the comments, the documents will be considered for adoption, by resolution, by the STANCOG POLICY BOARD at a regularly scheduled meeting to be held on JULY 21, 2010 AT 6:00 P.M.. The documents will then be submitted to state and federal agencies for approval.

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**BEFORE THE  
STANISLAUS COUNCIL OF GOVERNMENTS  
RESOLUTION NO. [ ]**

In the Matter of: )  
 )  
**2011 RTP, 2011 FTIP** )  
**CORRESPONDING AIR QUALITY** )  
**CONFORMITY ANALYSIS** )

**RESOLUTION ADOPTING THE  
STANCOG 2011 RTP,  
2011 FTIP AND  
CORRESPONDING CONFORMITY  
ANALYSIS**

WHEREAS, the Stanislaus Council of Governments is a Regional Transportation Planning Agency and a Metropolitan Planning Organization, pursuant to State and Federal designation; and

WHEREAS, federal planning regulations require Metropolitan Planning Organizations to prepare and adopt a long range Regional Transportation Plan (RTP) for their region; and

WHEREAS, federal planning regulations require that Metropolitan Planning Organizations prepare and adopt a Federal Transportation Improvement Program (FTIP) for their region; and

WHEREAS, Section 65080 of the California Government Code requires each regional transportation planning agency to prepare a regional transportation plan and update it for submission to the governing Policy Board for adoption; and

WHEREAS, a 2011 Regional Transportation Plan has been prepared in full compliance with federal guidance; and

WHEREAS, a 2011 Regional Transportation Plan has been prepared in accordance with state guidelines adopted by the California Transportation Commission; and

WHEREAS, federal planning regulations require that Metropolitan Planning Organizations prepare and adopt a short range Federal Transportation Improvement Program (FTIP) for their region; and

WHEREAS, the 2011 Federal Transportation Improvement Program (2011 FTIP) has been prepared to comply with Federal and State requirements for local projects and through a cooperative process between the Federal Highway Administration (FHWA), the Federal Transit Administration (FTA), the State Department of Transportation (Caltrans), principal elected officials of general purpose local governments and their staffs, and public owner operators of mass transportation services acting through the Stanislaus Council of Governments forum and general public involvement; and

WHEREAS, the 2011 FTIP program listing is consistent with: 1) the 2011 Regional Transportation Plan; 2) the 2010 State Transportation Improvement Program; and 3) the Corresponding Conformity Analysis; and

WHEREAS, the 2011 FTIP contains the MPO's certification of the transportation planning process assuring that all federal requirements have been fulfilled; and

WHEREAS, the 2001 FTIP meets all applicable transportation planning requirements per 23 CFR Part 450.

WHEREAS, projects submitted in the 2011 FTIP must be financially constrained and the financial plan affirms that funding is available; and

WHEREAS, the 2011 RTP and 2011 FTIP includes a new Conformity Analysis; and

WHEREAS, the MPO must demonstrate conformity per 40 CFR Part 93 for the RTP and FTIP; and

WHEREAS, the 2011 RTP and 2011 FTIP do not interfere with the timely implementation of the Transportation Control Measures; and

WHEREAS, the 2011 RTP and 2011 FTIP conforms to the applicable SIPs; and

WHEREAS, the documents have been widely circulated and reviewed by Stanislaus Council of Governments advisory committees representing the technical and management staffs of the member agencies; representatives of other governmental agencies, including State and Federal; representatives of special interest groups; representatives of the private business sector; and residents of Stanislaus County consistent with public participation process adopted by Stanislaus Council of Governments; and

WHEREAS, a public hearing was conducted on May 19, 2010 to hear and consider comments on the 2011 RTP, 2011 FTIP, and Corresponding Conformity Analysis; and

NOW, THEREFORE, BE IT RESOLVED, that Stanislaus Council of Governments adopts the 2011 RTP, 2011 FTIP, and Corresponding Conformity Analysis.

BE IT FURTHER RESOLVED, that the Stanislaus Council of Governments finds that the 2011 RTP and 2011 FTIP are in conformity with the requirements of the Federal Clean Air Act Amendments and applicable State Implementation Plans for air quality.

THE FOREGOING RESOLUTION was passed and adopted by the Stanislaus Council of Governments this 21st day of July 2010.

AYES:

NOES:

ABSTAIN:

ABSENT:

ATTEST:

Signed: \_\_\_\_\_  
Chairman

I hereby certify that the foregoing is a true copy of a resolution of the Stanislaus Council of Governments duly adopted at a regular meeting thereof held on the 21st day of July 2010.

Signed:

\_\_\_\_\_  
Executive Director

## **APPENDIX F**

### **RESPONSE TO PUBLIC COMMENTS**

NOTE: No public comments were received with respect to the Draft Conformity Analysis for the 2011 Federal Transportation Improvement Program and 2011 Regional Transportation Plan. However, in consultation with EPA, the document has been updated to reflect EPA publication of a budget adequacy determination for the 2010 conformity budget contained in the 2008 PM2.5 Plan May 12, 2010, effective May 27, 2010.

In addition, minor modifications have been made to reflect the final EPA rule reclassifying the San Joaquin Valley 8-hour Ozone Nonattainment Area from Serious to Extreme effective June 4, 2010.