

**FINAL CONFORMITY ANALYSIS  
for the  
2006 FEDERAL TRANSPORTATION IMPROVEMENT  
PROGRAM (TIP) and  
2004 REGIONAL TRANSPORTATION PLAN (RTP).**

**July 20, 2006**

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**U.S. DEPARTMENT OF TRANSPORTATION**

FEDERAL HIGHWAY ADMINISTRATION

CALIFORNIA DIVISION

650 Capitol Mall, Suite 4-100

Sacramento, CA. 95814

October 2, 2006

IN REPLY REFER TO  
HDA-CA  
Document # 49625

Mr. Ronald E. Brummett  
Executive Director  
Kern Council of Governments  
1401 19<sup>th</sup> Street, Suite 300  
Bakersfield, CA 93301

Dear Mr. Brummett:

**SUBJECT:** Conformity Determination for KCOG's 2007 Federal Transportation Improvement Program and 2004 Regional Transportation Plan, as amended

The Federal Highway Administration (FHWA) and the Federal Transit Administration (FTA) have completed our review of the conformity determination for the Kern Council of Governments' (KCOG) 2007 Federal Transportation Improvement Program (FTIP) and 2004 Regional Transportation Plan (RTP) as amended. A joint FTA/FHWA air quality conformity determination for the FTIP is required by the Environmental Protection Agency's (EPA) *Transportation Conformity Rule*, 40 CFR Parts 51 and 93, and the FHWA/FTA *Metropolitan Planning Rule*, 23 CFR 450.

The KCOG adopted the 2007 FTIP and made the corresponding conformity determination on July 20, 2006. The conformity documentation submitted to FHWA/FTA by KCOG indicates that all air quality conformity requirements have been met. Based on our review, we find that the KCOG 2007 FTIP and 2004 RTP as amended conform to the applicable state implementation plan in accordance with the provisions of 40 CFR Parts 51 and 93, which include meeting the requirements of the statewide and metropolitan planning rules found in 23 CFR Part 450. Additionally, the other seven metropolitan planning organizations (MPO) in the San Joaquin Valley Nonattainment Area have also provided the FHWA and the FTA with their positive conformity determinations for the PM 2.5 standard, a requirement for any MPO in a nonattainment area with other MPOs to make a conformity determination until sub area emissions budgets for that pollutant have been found adequate by the EPA.

In accordance with the July 15, 2004, *Memorandum of Understanding (MOU) between the Federal Highway Administration, California Division and the Federal Transit Administration, Region IX*, the FTA has concurred with this conformity determination. This approval was made after consultation with the EPA, Region 9 office, pursuant to the *Transportation Conformity Rule*.



In accordance with the above MOU, the FHWA's single signature constitutes FHWA and FTA's joint air quality conformity determination for KCOG's 2007 FTIP and 2004 RTP as amended. If you have any questions pertaining to this conformity determination, please contact Steve Luxenberg with the FHWA at (916) 498-5066.

Sincerely,

*/s/ K. Sue Kiser*

For  
Gene K. Fong  
Division Administrator

cc: (e-mail)

Karina O'Connor, EPA

Paul Page, FTA

Dennis Wade, CARB

Tom Jordan, San Joaquin Valley APCD

Don Hunsaker, San Joaquin Valley APCD

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KCOG TIP Binder

sluxenberg/ac

BEFORE THE KERN COUNCIL OF GOVERNMENTS  
STATE OF CALIFORNIA, COUNTY OF KERN

Resolution No. 06-21  
In the matter of:

2006 FEDERAL TRANSPORTATION IMPROVEMENT PROGRAM AND AIR QUALITY CONFORMITY  
ANALYSIS

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WHEREAS, the Kern Council of Governments (Kern COG) is a Regional Transportation Planning Agency (RTPA) and a Metropolitan Planning Organization (MPO), 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 Metropolitan Planning Organizations to prepare and adopt a short range Federal Transportation Improvement Program (FTIP) for their region; and

WHEREAS, the 2006 Federal Transportation Improvement Program (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 Kern Council of Governments forum and general public involvement; and

WHEREAS, the FTIP program listing is consistent with: 1) the Destination 2030 Regional Transportation Plan (2004 RTP); 2) the State Transportation Improvement Program; and 3) the Air Quality Conformity Analysis; and

WHEREAS, the 2006 FTIP contains the MPO's certification of the transportation planning process assuring that all federal requirements have been fulfilled; and

WHEREAS, projects submitted in the 2006 FTIP must be financially constrained and the financial plan affirms that funding is available; and

WHEREAS, the 2006 FTIP does not interfere with the timely implementation of the Transportation Control Measures; and

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

WHEREAS, in accordance with EPA Companion Guidance for the Conformity Rule for multi-jurisdictional areas, Kern Council of Governments has developed their portion of the PM 2.5 regional emissions analysis separately and provided the entire PM 2.5 nonattainment area conformity demonstration; and

WHEREAS, the PM2.5 nonattainment area conformity demonstration is contingent upon adoption by all MPOs in the PM2.5 nonattainment area; and

WHEREAS, the Kern Council of Governments has also developed a regional emissions analysis for Carbon Monoxide (CO), Ozone, and PM10 for Kern County; and

WHEREAS, the documents have been widely circulated and reviewed by Kern Council of Governments advisory committee 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 private business sector; and residents of Kern County; and

WHEREAS, a public hearing was conducted on June 15, 2006 to hear and consider comments on the 2006 FTIP and associated Air Quality Conformity Analysis and the remainder of the MPOs in the PM2.5 nonattainment area have conducted public hearings as well; and

WHEREAS, the Kern Council of Governments Policy Board has reviewed the Air Quality Conformity Analysis and made a finding that the Federally approved Destination 2030 Regional Transportation Plan (2004 RTP), and the 2006 Federal Transportation Improvement Program are in conformance with the applicable transportation conformity rules for the applicable air quality standards.

NOW, THEREFORE, BE IT RESOLVED THAT:

Kern Council of Governments adopts the 2006 Federal Transportation Improvement Program and associated Air Quality Conformity Analysis.

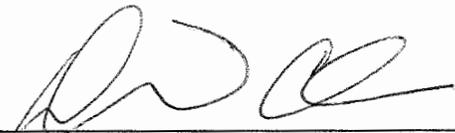
AUTHORIZED AND SIGNED THIS 20TH DAY OF JULY 2006.

AYES: Tarver, Couch, Lessenevitch, Morgan, Prout, Linder, Smith, Wegman, McQuiston, Rubio, Birnbaum, Silver

NOES: None

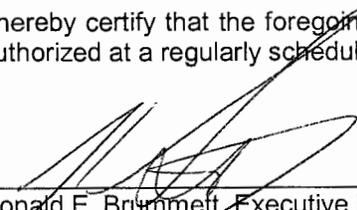
ABSTAIN: None

ABSENT: Ramirez, Bell, Melendez

  
\_\_\_\_\_  
David Couch, Chair  
Kern Council of Governments

ATTEST:

I hereby certify that the foregoing is a true copy of a resolution of the Kern Council of Governments duly authorized at a regularly scheduled meeting held on the 20th day of July 2006.

  
\_\_\_\_\_  
Ronald E. Brummett, Executive Director  
Kern Council of Governments

Date: 7/20/06

## **Kern Council of Governments Board of Directors**

The Kern Council of Governments is the regional planning agency as well as the technical and informational resource, and rideshare administrator for the area's 11 incorporated cities and the County of Kern. Following Board direction, staff coordinates between local, state, and federal agencies to avoid overlap or duplication of programs. This intergovernmental coordination enables staff to work with many public agencies to ensure that planning and implementation of programs proceed in a coordinated manner.

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**Vice Chairman:** Cheryl Wegman  
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## **EXECUTIVE SUMMARY**

This report presents the Conformity Analysis for the 2006 FEDERAL TRANSPORTATION IMPROVEMENT PROGRAM (2006 TIP) and the 2004 REGIONAL TRANSPORTATION PLAN (2004 RTP). The 2004 RTP is sometimes referred to as the Destination 2030 RTP. For the purposes of this document the 2030 RTP and the 2004 RTP are one in the same. The Kern Council of Governments is the designated Metropolitan Planning Organization (MPO) in Kern County, California, and is responsible for regional transportation planning.

The Clean Air Act and federal transportation conformity rule requires that each new regional transportation plan (RTP) and transportation improvement program (TIP) must be demonstrated to conform before the RTP/TIP is approved by the MPO or accepted by DOT. This analysis demonstrates that the criteria specified in the federal transportation conformity rule for a conformity determination are satisfied by the TIP and RTP. A finding of conformity for the 2006 TIP and 2004 RTP is therefore supported. The Conformity Analysis for the 2006 TIP and 2004 RTP were approved by the Kern Council of Governments Policy Board on July 20, 2006. FHWA/FTA last issued a finding of conformity for the 2004 TIP/RTP, including amendments, on March 30, 2006.

The 2006 TIP and 2004 RTP, been financially constrained in accordance with the requirements of 93.108 and consistent with the Department of Transportation metropolitan planning regulations (23 CFR Part 450). A discussion of financial constraint and funding sources is included in the TIP and RTP documents.

Summarized below are the applicable federal criteria or requirements for conformity determinations, the conformity tests applied, the results of the conformity assessment of the TIP and RTP, and an overview of the organization of this report.

## **CONFORMITY REQUIREMENTS**

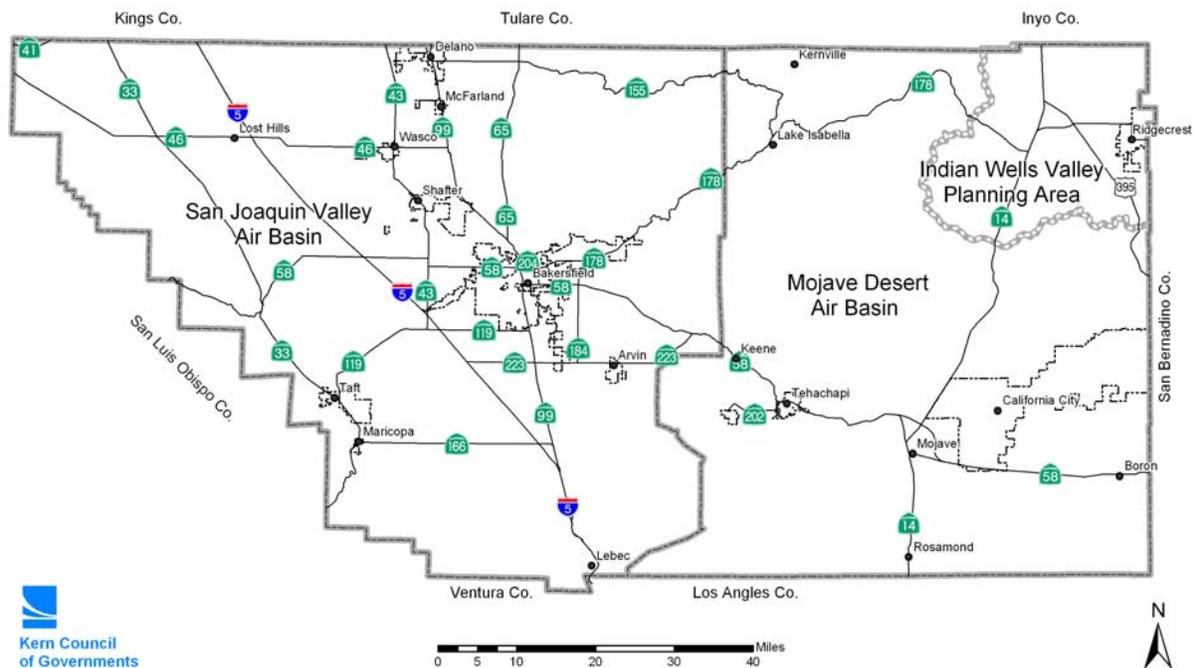
The federal transportation conformity rule (40 Code of Federal Regulations Parts 51 and 93) specifies criteria and procedures for conformity determinations for transportation plans, programs, and projects and their respective amendments. The federal transportation conformity rule was first promulgated in 1993 by the U.S. Environmental Protection Agency (EPA), following the passage of amendments to the federal Clean Air Act in 1990. The federal transportation conformity rule has been revised several times since its initial release to reflect both EPA rule changes and court opinions. On July 1, 2004 EPA published the final rule for the new 8-hour ozone and PM<sub>2.5</sub> standards. The transportation conformity rule is summarized in Chapter 1.

The conformity rule 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 is designated as nonattainment areas with respect to federal air quality standards for ozone and particulate matter under ten and 2.5 microns in diameter (PM<sub>10</sub> and PM<sub>2.5</sub>); 4 of the 8 counties are also unclassified/attainment (maintenance) for carbon monoxide (CO). Therefore, transportation

plans and programs for the nonattainment areas for the Kern County area must satisfy the requirements of the federal transportation conformity rule.

Kern Council of Governments (KernCOG) is also located in the federally designated Mojave Desert and Indian Wells Planning Area. Map 1 illustrates the portions of the San Joaquin Valley and Mojave Desert air basins in Kern County. The Mojave Desert planning area incorporates the east half of the County including all of the Indian Wells Valley planning area. The Mojave Desert area is currently designated as nonattainment for the National Ambient Air Quality Standards (NAAQS) for 8-hour ozone; whereas the Indian Wells Planning area is designated as a maintenance area for PM-10. The KernCOG transportation plans and programs also satisfy the requirements of the federal transportation conformity rule for these nonattainment areas.

### Map 1 – Kern County Air Quality Planning Areas



Under the federal transportation conformity rule, 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 with a budget that has been found to be adequate by EPA for transportation conformity purposes, or an emissions reduction 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) consultation.

On-going interagency consultation is conducted through the San Joaquin Valley Model Coordinating Committee to ensure Valley-wide coordination, communication and compliance with Federal and State Clean Air Act requirements. Each of the eight Valley Transportation Planning Agencies (TPAs) and the San Joaquin Valley Unified Air Pollution Control (Valley Air) District are represented. The Federal Highway Administration, Federal Transit Administration, the Environmental Protection Agency, the California Air Resources Board and Caltrans are also represented on the committee. The final determination of conformity for the TIP and RTP is the responsibility of the Federal Highway Administration and the Federal Transit Administration.

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 rule are: (1) the emissions budget test, and (2) the emissions reduction 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 emissions reduction 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 2008, 2010, 2013, 2020, and 2030 for each pollutant. All analyses were conducted using the latest planning assumptions and emissions models. The major conclusions of the Kern Council of Governments Conformity Analysis are:

- For carbon monoxide, the total regional vehicle-related emissions associated with implementation of the TIP/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 vehicle-related emissions (VOC and NO<sub>x</sub>) associated with implementation of the TIP/RTP for all years tested are projected to be less than the adequate emissions budgets specified in the *Extreme Ozone Attainment Demonstration 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 TIP/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 *Amended 2003 PM-10 Plan*. The conformity tests for PM-10 are therefore satisfied.
  
- For PM<sub>2.5</sub>, areas violating both the annual and 24-hour standards for PM<sub>2.5</sub> must address both standards in the conformity determination. The San Joaquin Valley currently violates both standards, and the conformity determination includes both analyses. Before an adequate or approved SIP budget is available, conformity is generally demonstrated with interim emission tests. Conformity may be demonstrated if the emissions from the proposed transportation system are either less than or no greater than the 2002 motor vehicle emissions in a given area (see Section 93.119). The San Joaquin Valley chooses to use the “no-greater-than-2002 emissions test”. The modeling results for all analysis years indicated that the “Build” scenarios are less than the 2002 Base Year emissions estimates for both the 24-hour and annual standards. The TIP/RTP therefore satisfies the conformity emissions tests for PM<sub>2.5</sub>.
  
- The TIP/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 Valley Air District’s procedures (Rule 9120) have not been approved by EPA, consultation has been conducted in accordance with federal requirements.

Regional emissions analyses were also conducted for the Eastern Kern Ozone area (2009, 2015, 2020, and 2030) and the Indian Wells Valley PM-10 area (2013, 2020, and 2030).

- For ozone, the total regional vehicle-related emissions (VOC and NO<sub>x</sub>) associated with implementation of the TIP/RTP for all years tested are projected to be less than the adequate emissions budgets specified in the Ozone Attainment Demonstration, Maintenance Plan, and Redesignation Request. The conformity tests for ozone are therefore satisfied.
  
- For PM-10, the total regional vehicle-related emissions associated with implementation of the TIP/RTP for all years tested are projected to be less than the approved emissions budgets from the PM-10 Attainment Demonstration, Maintenance Plan, and Redesignation Request. The conformity tests for PM-10 are therefore satisfied.

## **REPORT ORGANIZATION**

The report is organized into six chapters. Chapter 1 provides an overview of the applicable federal and state conformity rules 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 rule for transportation control measures. Chapter 5 provides an overview of the interagency requirements and the San Joaquin Valley Transportation Planning Agencies general approach to compliance. The results of the conformity analysis for the TIP/RTP are provided in Chapter 6.

Appendix F includes public hearing documentation conducted on the Conformity Analysis for the 2006 TIP and 2004 RTP on June 15, 2006. Comments received on the conformity analysis and responses made as part of the public involvement process are included in Appendix G.

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

The criteria for determining conformity of transportation programs and plans under the federal transportation conformity rule (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 2006 Transportation Improvement Programs (TIP) and the 2004 Regional Transportation Plans (RTP) was prepared based on these criteria and tests. Presented first is a review of the development of the applicable conformity rule and guidance procedures, followed by summaries of conformity rule requirements, air quality designation status, conformity test requirements, and analysis years for the Conformity Analysis.

Kern Council of Governments is the designated Metropolitan Planning Organization (MPO) for Kern County in the San Joaquin Valley. As a result of this designation, Kern Council of Governments prepares the TIP, RTP, and associated conformity analyses. The TIP serves as a detailed three-year programming document for the preservation, expansion, and management of the transportation system. The 2004 RTP has a 2030 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.

### **FEDERAL AND STATE CONFORMITY RULES**

#### **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 (EPA/DOT, 1991a and 1991b) 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 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 (EPA, 2004).

EPA issued a final rule on May 6, 2005 to add the following PM<sub>2.5</sub> precursors to the transportation conformity rule: nitrogen oxides (NO<sub>x</sub>), volatile organic compounds (VOCs), sulfur oxides (SO<sub>x</sub>), and ammonia (NH<sub>3</sub>) (EPA, 2005). The rule specifies when each of these precursors must be considered in PM<sub>2.5</sub> nonattainment areas, before and after PM<sub>2.5</sub> SIPs are submitted.

In late March 2006, EPA and FHWA published “Transportation Conformity Guidance for Qualitative Hot-Spot Analyses in PM<sub>2.5</sub> and PM<sub>10</sub> Nonattainment and Maintenance Areas”. This guidance affects Federal project-level approvals for “projects of air quality concern” in PM<sub>2.5</sub> and PM<sub>10</sub> nonattainment areas on or after April 5, 2006.

## 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 2 of the guidance applies to nonattainment areas that do not have conformity budgets for an air quality standard that can be used for conformity. This Part currently applies to the San Joaquin Valley for PM<sub>2.5</sub>. As a result, the individual modeling and conformity results are compiled into one regional emissions analysis for the entire nonattainment area that accompanies each plan/TIP conformity determination (see Appendix D). DOT will then issue its conformity determination on the TIPs/RTPs at the same time.

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 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 DOT conformity determination.

Part 4 of the guidance applies to 8-hour ozone nonattainment areas with adequate or approved 1-hour SIP budgets. The conformity rule indicates that 8-hour areas with adequate or approved 1-hour budgets must use these budgets for 8-hour conformity before 8-hour budgets are available. The budget test using the existing 1-hour ozone SIP budgets fulfills the regional emissions analysis requirement for the 8-hour ozone standard.

## DISTRICT RULE

The Valley 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.” The federal transportation conformity rule therefore still governs, as a transportation conformity SIP has not yet been approved for this area.

## **CONFORMITY RULE 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 rule 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, 2004a). 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 March 2006 (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. EMFAC 2002 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 the Federal Highway Administration (FHWA), Federal Transit Administration (FTA), EPA, Caltrans, CARB, and the Valley 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 hearing.

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

The conformity rule (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.

Kern Council of Governments 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 2006 TIP and 2004 includes analysis of existing and future air quality impacts for each applicable pollutant.

The San Joaquin Valley is currently designated as nonattainment for the National Ambient Air Quality Standards (NAAQS) for 8-hour ozone and particulate matter under ten and 2.5 microns in diameter (PM-10 and PM2.5); 4 of the 8 counties are also designated attainment/unclassified (maintenance) areas for carbon monoxide (CO). State Implementation Plans have been prepared to address carbon monoxide, ozone, and PM-10:

- The 2004 Revision to the California State Implementation Plan for Carbon Monoxide was approved by EPA on November 20, 2005 (effective January 30, 2006).
- EPA published a budget adequacy determination for the Extreme Ozone Attainment Demonstration Plan on February 15, 2005 (effective March 2, 2005).
- The Amended 2003 PM-10 Plan was approved by EPA on April 28, 2004 (effective June 25, 2004).

The San Joaquin Valley is designated a serious nonattainment area for the new 8-hour ozone standard with an attainment deadline of 2013. It is important to note that the nonattainment area boundary is the same as the previous 1-hour ozone nonattainment boundary and includes eight counties/MPOs. EPA also designated the San Joaquin Valley as nonattainment for the new PM2.5 standards. State Implementation Plans have not yet been developed to address the new 8-hour ozone and PM2.5 standards.

## **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 PM-10 are summarized below.

Section 93.124(d) of the 1997 Final Transportation Conformity Rule 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**

Applies to Fresno, Kern, San Joaquin, and Stanislaus counties.

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 20, 2005, effective January 30, 2006.

For Carbon Monoxide, the federal transportation conformity rule 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**

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

OZONE

Under the existing conformity rule, regional emissions analyses for ozone areas must address nitrogen oxides (NOx) and volatile organic compounds (VOC) precursors.

Section 93.109(e) of the conformity rule addresses regional conformity tests in 8-hour ozone areas that have 1-hour ozone SIPs. The conformity rule indicates that 8-hour areas with adequate or approved 1-hour budgets must use these budgets for 8-hour conformity before 8-hour budgets are available. The budget test using the existing 1-hour ozone SIP budgets fulfills the regional emissions analysis requirement for the 8-hour ozone standard.

The applicable scenario in the Conformity Rule for the San Joaquin Valley is Scenario 1: Areas where the 8-hour ozone area boundary is exactly the same as the 1-hour ozone boundary. The SJV has been designated as a Serious nonattainment area for the 8-hour ozone standard.

In these areas, conformity must generally be demonstrated using the budget test with the 1-hour SIP budgets. In the San Joaquin Valley, 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 plans.

The motor vehicle emissions budgets for VOC and NOx are specified in the Extreme Ozone Attainment Demonstration Plan in tons per average summer day. EPA published the notice of adequacy determination in the February 15, 2005 Federal Register, effective March 2, 2005. The budgets for 2008 and 2010 from Table 3-4 of the plan are provided in the table below and will be used to compare to emissions resulting from the 2006 TIP and 2004 RTP.

**Table 1-2  
Budgets from the Extreme Ozone Attainment Demonstration Plan <sup>1</sup>**

| County              | VOC Emissions (tons/day) |             | NOx Emissions (tons/day) |             |
|---------------------|--------------------------|-------------|--------------------------|-------------|
|                     | 2008                     | 2010        | 2008                     | 2010        |
| <b>Fresno</b>       | <b>15.8</b>              | <b>13.0</b> | <b>33.7</b>              | <b>27.7</b> |
| <b>Kern (SJVAB)</b> | <b>11.5</b>              | <b>9.6</b>  | <b>32.7</b>              | <b>27.2</b> |
| <b>Kings</b>        | <b>2.5</b>               | <b>2.1</b>  | <b>6.2</b>               | <b>5.4</b>  |
| <b>Madera</b>       | <b>3.9</b>               | <b>3.3</b>  | <b>8.4</b>               | <b>7.2</b>  |
| <b>Merced</b>       | <b>5.0</b>               | <b>4.0</b>  | <b>11.4</b>              | <b>9.1</b>  |
| <b>San Joaquin</b>  | <b>9.3</b>               | <b>7.7</b>  | <b>22.4</b>              | <b>17.9</b> |
| <b>Stanislaus</b>   | <b>8.5</b>               | <b>7.0</b>  | <b>17.4</b>              | <b>14.0</b> |
| <b>Tulare</b>       | <b>8.5</b>               | <b>6.9</b>  | <b>18.8</b>              | <b>15.3</b> |

<sup>1</sup> Emissions totals reflect the emissions reductions benefits from motor vehicle inspection and maintenance (I/M), state measure reductions, and reductions from the Valley Air District's Indirect Source Review (Rule 9510) and mobile source incentive programs. All emissions are expressed as summer tons/day, and were derived using EMFAC2002, Version 2.2 (April 2003) with updated vehicle population and vehicle miles traveled data. I/M adjustments and state measure reductions are county and year specific and are provided by ARB with the motor vehicle emissions inventories. ISR and incentive reductions are county and year-specific.

It is important to note that VOC and NOx motor vehicle emissions budgets were established for 2002 and 2005 in the Amended 2002 and 2005 Ozone Rate of Progress Plan. EPA published the notice of adequacy determination in the July 24, 2003 Federal Register, effective August 8, 2003. However, none of these budgets are included in this conformity analysis, since they are prior to the implementation of the 2006 Transportation Improvement Program.

PM-10

The Amended 2003 PM-10 Plan that was approved by EPA on April 28, 2004 contains motor vehicle emission budgets for PM-10 and NO<sub>x</sub>, as well as a trading mechanism. Motor vehicle emission budgets are established for 2005, 2008, and 2010 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 budgets from Table 3-2 of the plan are provided below and will be used to compare emissions for each analysis year.

**Table 1-3  
On-Road Motor Vehicle PM-10 Emissions Budgets**

| County             | 2008  |                 | 2010  |                 |
|--------------------|-------|-----------------|-------|-----------------|
|                    | PM-10 | NO <sub>x</sub> | PM-10 | NO <sub>x</sub> |
| <b>Fresno</b>      | 13.3  | 36.4            | 16.2  | 29.7            |
| <b>Kern</b>        | 10.7  | 34.2            | 10.8  | 28.4            |
| <b>Kings</b>       | 5.6   | 6.5             | 6.7   | 5.4             |
| <b>Madera</b>      | 4.3   | 9.1             | 4.5   | 7.8             |
| <b>Merced</b>      | 5.2   | 12.5            | 5.3   | 9.9             |
| <b>San Joaquin</b> | 9.0   | 23.4            | 9.2   | 18.3            |
| <b>Stanislaus</b>  | 6.1   | 18.7            | 6.1   | 14.9            |
| <b>Tulare</b>      | 7.9   | 20.1            | 8.9   | 16.4            |

The PM-10 SIP allows trading from the motor vehicle emissions budget for the PM-10 precursor NO<sub>x</sub> 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 2010 budget for PM-10 with a portion of the 2010 budget for NO<sub>x</sub>, and use these adjusted motor vehicle emissions budgets for PM-10 and NO<sub>x</sub> to demonstrate transportation conformity with the PM-10 SIP for analysis years after 2010. As noted above, EPA signed the final approval notice for the Amended PM-10 Plan on April 28, 2004, which includes approval of the trading mechanism.

The trading mechanism will be used only for conformity analyses for analysis years after 2010. To ensure that the trading mechanism does not impact the ability to meet the NO<sub>x</sub> budget, the NO<sub>x</sub> emission reductions available to supplement the PM-10 budget shall only be those remaining after the NO<sub>x</sub> budget has been met.

*Potential Update to Conformity Test Requirements for PM-10*

On February 16, 2006, the San Joaquin Valley Air Pollution Control District adopted the 2006 PM-10 Plan. The 2006 PM-10 Plan updates the motor vehicle emissions budgets for the SJV by sub-area for 2008 and 2010 PM-10 and NO<sub>x</sub>. The average annual daily emissions are applicable for both the annual and 24-hour PM-10 standards. The federally approved trading mechanism contained in the Amended 2003 PM10 Plan remains unchanged.

This Plan has not been officially submitted to EPA at this time. Consequently, it is not anticipated that the updated motor vehicle emissions budgets will be adequate prior to Federal approval of this conformity analysis.

### 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. Before an adequate or approved SIP budget is available, conformity is generally demonstrated with interim emission tests.

Conformity may be demonstrated if the emissions from the proposed transportation system are either less than or no greater than the 2002 motor vehicle emissions in a given area (see Section 93.119). The 2002 baseline year emissions level must be based on the latest planning assumptions available for the year 2002, the latest emissions model, and appropriate methods for estimating travel and speeds as required by the conformity rule. PM2.5 nonattainment areas may also elect to use the “build-no-greater-than-no-build test”. Conformity is demonstrated if the emissions from the proposed transportation system (“build” scenario) are less than or equal to emissions from the existing transportation system (“no-build” scenario).

The rule allows PM2.5 nonattainment areas to choose between the two interim emissions test each time that they determine conformity before adequate or approved PM2.5 SIP budgets are established. However, the same test must be used for each analysis year in a given conformity determination. The San Joaquin Valley chooses to use the “no-greater-than-2002 emissions test”. The regional emissions analyses in PM2.5 nonattainment areas must consider directly emitted PM2.5 motor vehicle emissions from tailpipe, brake wear, and tire wear. In California, areas will use EMFAC2002.

Prior to adequate or approved PM2.5 SIP budgets, re-entrained road dust and construction-related fugitive dust from highway or transit projects will only be included in the regional emissions analyses if EPA or ARB has determined that it is a “significant contributor” to the PM2.5 regional air quality problem. Until a significance finding is made, PM2.5 areas can presume that re-entrained road dust is not a significant contributor and not include road dust in the PM2.5 transportation conformity analysis prior to the SIP. In addition, construction-related dust emissions are not to be included in any PM2.5 conformity analyses before adequate or approved PM2.5 SIP budgets are established. ARB has indicated the significance determination will be made as part of the SIP process. As a result, the SJV PM2.5 conformity analysis will not include re-entrained road dust or construction-related fugitive dust from transportation projects.

In addition, prior to the submission of a SIP, NO<sub>x</sub> emissions must be considered, unless both ARB and EPA make a finding the NO<sub>x</sub> is not a “significant contributor” to the PM2.5 air quality problem. Conversely, VOC, SO<sub>x</sub>, and ammonia emissions do not have to be considered in conformity, unless either ARB or EPA makes a finding that onroad emissions of any of these precursors is a “significant contributor” to the area’s PM2.5 air quality issues. ARB has

indicated that significance determinations would be made as part of the SIP process. As a result, the SJV PM2.5 conformity analysis will only address the precursor NOx.

Table 1-4 summarizes PM2.5 and NOx emission estimates for the 2002 base year by sub-area, as documented in the Final PM2.5 Conformity Analysis. These emission estimates were calculated by running EMFAC for the 2002 base year using default vehicle population, VMT, and speed fraction data; the result is then rounded up to the next tenths place (consistent with ARB policy). The 24-hour estimate is multiplied by 365 to yield an annual estimate.

**Table 1-4  
On-Road Motor Vehicle PM2.5 Emissions Budgets**

| County             | 2002 24-Hour |      | 2002 Annual |       |
|--------------------|--------------|------|-------------|-------|
|                    | PM2.5        | NOx  | PM2.5       | NOx   |
| <b>Fresno</b>      | 1.1          | 50.4 | 402         | 18396 |
| <b>Kern</b>        | 1.1          | 53.3 | 402         | 19455 |
| <b>Kings</b>       | 0.2          | 8.6  | 73          | 3139  |
| <b>Madera</b>      | 0.3          | 10.4 | 110         | 3796  |
| <b>Merced</b>      | 0.4          | 19.3 | 146         | 7045  |
| <b>San Joaquin</b> | 0.8          | 36.9 | 292         | 13469 |
| <b>Stanislaus</b>  | 0.6          | 27.7 | 219         | 10111 |
| <b>Tulare</b>      | 0.6          | 30   | 219         | 10950 |

### ANALYSIS YEARS

The conformity rule (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 year in which specific analysis is not required need to be documented.

For the selection of the horizon years, the conformity rule 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 rule 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. 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. CO emissions for the maintenance year 2018 will be

interpolated from 2010 and 2020. CO emissions are not estimated for 2003 since that year is not impacted by the 2006 TIP and/or 2004 RTP.

On March 8, 2005, EPA issued Guidance for Determining the “Attainment Year” for Transportation Conformity in new 8-hour ozone and PM<sub>2.5</sub> Nonattainment Areas (EPA, 2005b). Per CAA section 172(a)(2), all PM<sub>2.5</sub> nonattainment areas will have an initial maximum statutory attainment date of April 5, 2010.

Nonattainment areas that do not have any adequate or approved budgets are not required to demonstrate conformity and perform a regional emissions analysis for their attainment year. Under Section 93.119(g)(1) of the conformity rule, nonattainment areas using interim emission tests are required to perform a regional emissions analysis for the following years:

- A year no more than 5 years beyond the year in which the conformity determination is made (e.g., 2010);
- The last year of the transportation plan’s forecast period (e.g., 2030); and
- Any additional years within the time frame of the transportation plan so that analysis years are no more than 10 years apart (e.g., 2020).

A summary of the analysis years resulting from the above described rules and guidance for the Conformity Analysis is provided below.

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

| Pollutant         | Budget Years | Attainment/Maintenance Year | Intermediate Years | RTP Horizon Year |
|-------------------|--------------|-----------------------------|--------------------|------------------|
| CO                | 2010         | 2018 (interpolated)         | 2020               | 2030             |
| Ozone             | 2008/2010    | 2013                        | 2020               | 2030             |
| PM-10             | 2008         | 2010                        | 2020               | 2030             |
| PM <sub>2.5</sub> | NA           | 2010                        | 2020               | 2030             |

## **AIR QUALITY DESIGNATIONS APPLICABLE TO THE MOJAVE DESERT AND INDIAN WELLS VALLEY PLANNING AREAS OF KERN COUNTY**

KernCOG is also located in the federally designated Mojave Desert and Indian Wells Planning Area. Conformity for 2006 TIP AND 2004 RTP also includes analysis of existing and future air quality impacts for each applicable pollutant.

The Mojave Desert area is currently designated as nonattainment for the National Ambient Air Quality Standards (NAAQS) for 8-hour ozone; where as the Indian Wells Planning area is designated as a maintenance area for PM-10. The Kern County Air Pollution Control District is responsible for air quality plan development for these areas. State Implementation Plans have been prepared to address 1-hour ozone, and PM-10:

- The Ozone Attainment Demonstration, Maintenance Plan, and Redesignation Request was approved by EPA on April 22, 2004 (effective June 21, 2004).
- The PM-10 Attainment demonstration, Maintenance Plan, and Redesignation Request was approved by EPA on May 7, 2003 (effective June 6, 2003).

The Eastern Kern area has been designated as a Subpart 1 (Basic) nonattainment area for the new 8-hour standard with an attainment year of 2009. The 8-hour ozone area boundary is smaller than, but completely encompassed by, the previous 1-hour ozone nonattainment area boundary. No State Implementation Plan has been developed to address the new 8-hour ozone at this time. EPA has not designated these areas as nonattainment for the new PM<sub>2.5</sub> standards.

## **CONFORMITY TEST REQUIREMENTS**

### **Ozone**

The same rule requirements apply for Eastern Kern County, which has an approved ozone maintenance plan. The Eastern Kern area has been designated as a Subpart 1 (Basic) nonattainment area for the new 8-hour standard with an attainment year of 2009. Scenario 2 applies since the 8-hour ozone area boundary is smaller than, but completely encompassed by, the previous 1-hour ozone nonattainment area boundary. Under this scenario, the area can use a budget test using a subset of the existing budget or continue to model the entire 1-hour nonattainment area. Kern COG demonstrated conformity for the 8-hour ozone standard using a budget test and modeled the entire 1-hour nonattainment area consistent with the federally approved 2004 TIP/RTP/Conformity Analysis.

The Eastern Kern County planning area has an Ozone Attainment Demonstration, Maintenance Plan, and Redesignation Request (adopted January 9, 2003 and amended May 1, 2003) that includes conformity budgets. EPA published final approval of the plan and conformity budgets April 22, 2004, effective June 21, 2004. The motor vehicle emission budgets for ROG and NO<sub>x</sub> are provided in Table 5-2 for 2005, and 2015 in tons per day are provided below.

**Eastern Kern County Ozone Emissions Budgets**

| County         | 2005 ROG<br>(tons/day) | 2005 NO <sub>x</sub><br>(tons/day) | 2015 ROG<br>(tons/day) | 2015 NO <sub>x</sub><br>(tons/day) |
|----------------|------------------------|------------------------------------|------------------------|------------------------------------|
| Kern - Eastern | 3.9                    | 7.1                                | 2.1                    | 4.0                                |

PM-10

The Indian Wells Valley planning area (includes a portion of Kern) has an approved Maintenance Plan for PM-10 that includes conformity budgets. The motor vehicle emissions budget for PM-10 are specified in the September 5, 2003 PM-10 Attainment Demonstration, Maintenance Plan, and Redesignation Request. EPA finalized approval of this plan on May 7, 2003, effective June 6, 2003. The budgets for 2001 and 2013 from Table 7-2 of the Plan provided below will be used to compare with each analysis year emissions. Emission budget includes dust from paved and unpaved roads, as well as dust from construction activities. Vehicle exhaust was determined not to be significant and was not included in the budget.

**Kern County Indian Wells Valley Area PM-10 Emissions Budgets**

| County                     | 2001 (tons/day) | 2013 (tons/day) |
|----------------------------|-----------------|-----------------|
| Kern – Indian Wells Valley | 1.6             | 1.7             |

ANALYSIS YEARS

A summary of the analysis years resulting from the above described rules and guidance for the Conformity Analysis is provided below.

**Other Portions of Kern County Conformity Analysis Years**

| Pollutant             | Budget Years | Attainment/Maintenance<br>Year | Intermediate<br>Years | RTP Horizon<br>Year |
|-----------------------|--------------|--------------------------------|-----------------------|---------------------|
| E. Kern Ozone         | 2015         | 2009                           | 2020                  | 2030                |
| Indian Wells<br>PM-10 |              | 2013                           | 2020                  | 2030                |

## **CHAPTER 2 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 rule, 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.” Initial modeling began in March 2006.

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.

The Kern Council of Governments uses the TP+/CUBE transportation model. The model was validated in 2001 for the 1998 base year. The latest planning assumptions used in the transportation model validation and 2006 Conformity Analysis is summarized in Table 2-1.

**Table 2-1  
Summary of Latest Planning Assumptions  
for the Kern Council of Governments 2006 Conformity Analysis**

| <b>Assumption</b>      | <b>Year and Source of Data (MPO action)</b>  | <b>Modeling</b>  | <b>Next Scheduled Update</b>   |
|------------------------|--|--|--|
| Population             | The 1998 base year population was based on the latest available DOF estimates at that time. Since the validation, the population forecasts were updated to incorporate 2000 census totals. In July 2005, the Kern COG policy board approved a regional growth forecast target of 2 percent countywide based on historic trend data and public input. | This data is disaggregated to the TAZ level for input into the TP+/CUBE for the base year validation. The population data from the DOF and U.S. Census, combined with Kern County Assessor's year-structure-built data provided the 2005 base for future year projections.       | The Kern COG Board has established a policy to revisit the regional growth forecast every 3-5 years. The next countywide target update is scheduled for July 2008. Disaggregation to the TAZs for use by the model normally takes 6 to 9 months to develop after approval of the new forecast.   |
| Employment             | Employment data is based on Summer 2003 employer locations derived from InfoUSA data and California Employment Development Dept (EDD). The forecast is based on a jobs per household (JPH) ratio, and assumes a gradual decrease in the ratio from 1.27JPH in 2003 to 1.15JPH in 2030 as the population ages.  | This data is disaggregated to the TAZ level for input into the TP+/CUBE. The employment data was geocoded by Kern COG and used to allocate the EDD estimates for the 1998 base year, the 2003 employment base year, and extrapolated using the JPH ratio for all forecast years. | Employment data is anticipated to be purchased for 2008 for incorporation into the 2008 base year validation.  |
| Traffic Counts         | 1998 traffic counts collected by Kern COG, its member agencies and Caltrans.   | TP+/CUBE was validated using these traffic counts.   | Next model validation will use 2003 base year traffic counts.  |
| Vehicle Mile of Travel | The transportation model was validated in 2001 to the 1998 base year. The validation came within 3 percent of Caltrans HPMS VMT estimate.  | TP+/CUBE is the transportation model used to estimate VMT in KERN 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                 | The 2001 transportation model validation was based on survey data free flow speeds collected in 1998 by the cities, County, Caltrans, and Kern COG.<br><br>Speed distributions were updated in EMFAC 2002,   | TP+/CUBE transportation model includes a feedback loop that assures congested speeds are consistent with travel speeds.<br><br>EMFAC 2002  | Speed studies are conducted by the cities and the County on functionally classified routes on an on-going basis. This information is gathered and incorporated into each new model validation. Updated speed data for the 2003 base year is scheduled to be incorporated in upcoming model validation. In 2006 Kern COG released an RFP to incorporate local speed survey reporting into |

| <b>Assumption</b>                 | <b>Year and Source of Data (MPO action)</b>   | <b>Modeling</b>   | <b>Next Scheduled Update</b>  |
|-----------------------------------|---|---|---|
|                                   | using methodology approved by ARB and with information from the transportation model.   |   | a regional traffic count database. This effort will improve the methodology and ease future model updates.  |
| Vehicle Registrations             | EMFAC 2002 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. | EMFAC 2002  | ARB has indicated updated vehicle registration data will be included in the next update to EMFAC anticipated to be available in early 2007. ARB has committed to update the fleet information in EMFAC on a 3-year cycle thereafter (see 1/31/06 letter to EPA and FHWA). |
| State Implementation Plan Measure | 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.  |

## **SOCIOECONOMIC DATA**

### POPULATION, EMPLOYMENT AND LAND USE

The conformity rule 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.

The Kern Regional Transportation Modeling Committee (KRTMC) provides oversight for the land use and socioeconomic data inputs into the model. The KRTMC is made up of local government planning and public works staff. The KRTMC is a subcommittee of the Transportation Technical Advisory Committee to the Kern COG Board. The KRTMC was established by a Memorandum of Understanding (MOU) between Kern COG (representing the outlying communities), the City of Bakersfield, the County of Kern and Caltrans District 6 to coordinate modeling in the region. The MOU affirms the Kern COG policy for its Board to revise and adopt the countywide forecast targets every 3-5 years. In addition, the committee serves as the land use modeling committee for the Kern Blueprint effort.

Land use and socioeconomic data at the zonal level are used for determining trip generation. The KRTMC updates the distribution of zonal data as new information and planning assumptions are available. The housing forecasts are based on the US Census and State of California Department of Finance (DOF) projections, and locally adopted forecasts based on historic performance. The employment forecasts were developed primarily California Employment Development Department (EDD) data and distributed using directory listing data from InfoUSA and from general plan land use data applying estimates of market absorption rates, jobs housing balance ratios. Employment data is currently stratified into three broad sectors: Retail, Basic/Industrial, and Service/Other based on SIC/NIACs code listings provided by InfoUSA. Population and employment growth were distributed among the County jurisdictions based on local data and a consensus process through the KRTMC. Income stratification for zonal data is based on the 2000 Census and is used in place of vehicle availability to determine mode choice and trip generation rates. School enrollment forecasts and future school location are developed in consultation with local school districts.

The KRTMC representatives work daily with developers and the public on future growth applications. Recently, developers have begun using the Kern COG model to test infrastructure needs created by new developments. These land use and infrastructure changes are worked into the regional conformity model after the development is approved and reflected in the TIP RTP or Local impact fee project lists as necessary.

## **TRANSPORTATION MODELING**

The San Joaquin Valley Transportation Planning Agencies (TPAs) utilize the TP+/Viper 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 rule are summarized below, followed by a description of how the Kern Council of Governments transportation modeling methodology meets those requirements.

Supporting Documentation:

The Kern COG regional travel demand model contains incorporates a congestion feedback loop with a fully integrated transit mode split. The model uses socio-economic data for 1100 TAZs and is integrated with ArcGIS software to manage both network and land use inputs.

TRAFFIC COUNTS

The conformity rule 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:

The Kern COG regional travel demand model was validated in 2001 to 1998 observed counts at more than 200 locations. The validation incorporated data for Kern County from the most recent available California household travel survey and an on-board bus origin and destination survey. 75 percent of freeways, expressways and principle arterials meet the maximum desirable deviation established by the 1992 Caltrans Travel Forecasting Guidelines and transit boardings were within 6 percent of observed counts in the base year.

SPEEDS

The conformity rule 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 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:

Kern COG's member agencies routinely perform speed surveys on functionally classified routes throughout the region. These observed speeds are inputted into the model as the freeflow speeds. The valley traffic models include a feedback loop that uses congested travel times as an input to the trip distribution step. The feedback loop ensures that the congested travel speeds used as input to the air pollution emission models are consistent with the travel speeds used throughout the traffic model process.

TRANSIT

The conformity rule 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:

The Golden Empire Transit (GET) District is a member of the KRTMC and provides updates to the fixed transit network upon request by Kern COG modeling staff. The transit network as modeled reflects the latest available changes from GET.

VALIDATION/CALIBRATION

The conformity rule 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:

The models were validated by comparing its estimates of base year traffic conditions with base year traffic counts. The base year validations meet standard criteria for replicating total traffic volumes on various road types and for percent error on links. The base year validation also meets standard 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 Caltrans HPMS 1998 estimate of VMT in Kern County was 18,072,800. The 1998 model base year estimated 17,945,412 VMT. The 1998 model estimate is 1 percent lower than the Caltrans 1998 HPMS VMT and within the validation of plus or minus 3 percent desirable target range.

#### FUTURE NETWORKS

The conformity rule 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 2006 Federal Transportation Improvement Programs (2006 TIP) and the 2004 Regional Transportation Plan (2004 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.

**TRAFFIC ESTIMATES**

A summary of the population, employment, and travel characteristics for the Kern Council of Governments 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>Total Lane Miles</b> |
|---------------------|-------------------------------------|-------------------------------|---------------------------------------|-------------------------|
| <b>2008</b>         | 678.3                               | 250.4                         | 19.4                                  | 4,960                   |
| <b>2010</b>         | 704.2                               | 258.2                         | 20.7                                  | 5,070                   |
| <b>2013</b>         | 745.4                               | 270.3                         | 22.4                                  | 5,220                   |
| <b>2020</b>         | 845.7                               | 301.1                         | 26.9                                  | 5,540                   |
| <b>2030</b>         | 1011.6                              | 348.6                         | 33.7                                  | 5,910                   |

**Traffic Network Comparison for Horizon Years Evaluated in Conformity Analysis  
for Mojave**

| <b>Horizon Year</b> | <b>Total Population (thousands)</b> | <b>Employment (thousands)</b> | <b>Average Weekday VMT (millions)</b> | <b>Total Lane Miles</b> |
|---------------------|-------------------------------------|-------------------------------|---------------------------------------|-------------------------|
| <b>2009</b>         | 127.3                               | 63.2                          | 5.0                                   | 1690                    |
| <b>2015</b>         | 151.8                               | 70.3                          | 6.0                                   | 1780                    |
| <b>2020</b>         | 165.1                               | 76.7                          | 6.8                                   | 1840                    |
| <b>2030</b>         | <b>196.5</b>                        | <b>90.4</b>                   | <b>8.4</b>                            | <b>2310</b>             |

**Traffic Network Comparison for Horizon Years Evaluated in Conformity Analysis  
for Indian Wells**

| <b>Horizon Year</b> | <b>Total Population (thousands)</b> | <b>Employment (thousands)</b> | <b>Average Weekday VMT (millions)</b> | <b>Total Lane Miles</b> |
|---------------------|-------------------------------------|-------------------------------|---------------------------------------|-------------------------|
| 2013                | 37.2                                | 18.0                          | 0.9                                   | 320                     |
| 2020                | 39.4                                | 20.1                          | 1.1                                   | 340                     |
| 2030                | 41.5                                | 23.3                          | 1.3                                   | 340                     |

**VEHICLE REGISTRATIONS**

Kern Council of Governments 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 EMFAC2002 model ([http://www.arb.ca.gov/msei/on-road/latest\\_revisions.htm#pop](http://www.arb.ca.gov/msei/on-road/latest_revisions.htm#pop)). EMFAC 2002 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.

**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 Extreme Ozone Attainment Demonstration Plan (Extreme OADP) that reduce mobile source emissions and are included in the conformity demonstration are shown in Table 2-3.

**Table 2-3  
Extreme Plan Measures Assumed in the Conformity Analysis**

| <b>Measure Description</b> | <b>Reference</b> | <b>Pollutants</b>        |
|----------------------------|------------------|--------------------------|
| Smog Reductions            | Extreme OADP     | Summer ROG<br>Summer NOx |
| State Measure Reductions   | Extreme OADP     | Summer ROG<br>Summer NOx |
| Local Measure Reductions   | Extreme OADP     | Summer NOx               |

PM-10

Committed control measures in the EPA approved Amended 2003 PM-10 Plan that reduce mobile source emissions and are included in the conformity demonstration are shown in Table 2-4.

**Table 2-4  
Amended PM-10 Plan Measures Assumed in the Conformity Analysis**

| <b>Measure Description</b>      | <b>Reference</b>        | <b>Pollutants</b>                                |
|---------------------------------|-------------------------|--|
| State Measures                  | Amended 2003 PM-10 Plan | PM-10 annual exhaust<br>NOx annual exhaust       |
| Smog Check Reductions           | Amended 2003 PM-10 Plan | NOx annual exhaust                               |
| ISR & Inc.                      | Amended 2003 PM-10 Plan | NOx annual exhaust                               |
| District Rule 8061/ISR Controls | Amended 2003 PM-10 Plan | PM-10 paved road dust<br>PM-10 unpaved road dust |
| District Rule 8021 Controls     | Amended 2003 PM-10 Plan | PM-10 road construction dust                     |

PM2.5

Committed control measures in the EPA approved Amended 2003 PM-10 Plan that reduce mobile source emissions (exhaust only) are shown in the table above. It is important to note that the PM-10 exhaust reductions for State Measures in the EPA Approved Amended 2003 PM-10 Plan are reduced by the ARB size fraction for diesel exhaust to yield a PM2.5 exhaust 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 Amended 2003 PM-10 Plan only affects diesel vehicle exhaust.

The PM-10 diesel exhaust emission reductions contained in the EPA Approved Amended 2003 PM-10 Plan (dated 12/19/03) are reduced by the ARB size fraction for diesel vehicle exhaust to yield a PM2.5 diesel exhaust emission reduction. 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.

**STATE IMPLEMENTATION PLAN MEASURES APPLICABLE TO THE MOJAVE DESERT AND INDIAN WELLS VALLEY PLANNING AREAS OF KERN COUNTY**

No committed control measures are included in the conformity demonstration for ozone or PM-10. As previously indicated, EPA has not designated these areas as nonattainment for the new PM2.5 standards.

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

The model used to estimate emissions for carbon monoxide, ozone precursors, and PM-10 is EMFAC2002 (April 23, 2003). ARB 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 Transportation Improvement Program or Regional Transportation Plan (RTP) are consistent with the applicable SIPs, which include:

- The 2004 Revision to the California State Implementation Plan for Carbon Monoxide was approved by EPA on November 20, 2005 (effective January 30, 2006).
- EPA published an adequacy determination for the Extreme Ozone Attainment Demonstration Plan on February 15, 2005 (effective March 2, 2005).
- The Amended 2003 PM-10 Plan was approved by EPA on April 28, 2004 (effective June 25, 2004).

Regional emissions have been estimated for the horizon years 2008, 2010, 2013, 2020 and 2030. The conformity rule requirements for the selection of the horizon years are summarized in Chapter 1.

#### **EMFAC2002 (April 23, 2003)**

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 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 rule requires the use of the latest emission estimation model in the development of conformity determinations. EMFAC2002 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 April 1, 2003 EPA announced the availability of this latest version of the California EMFAC model for use in state implementation plan (SIP) development in California. The notice also established a 3-month grace period before EMFAC2002 was required to be used statewide in all new transportation conformity analyses in California; the grace period ended on June 30, 2003.

Since the transportation conformity rule (40 CFR 93.110) requires areas to use the latest information for estimating vehicle activity, EPA also approved the CARB methodology for updating the default vehicle activity data in EMFAC2002. 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. 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 EMFAC2002 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.

Fresno COG, working with CARB, developed guidelines to update speed distributions in EMFAC2002 by allocating VMT percentage to speed bin with the most recent output from individual MPO traffic models. These guidelines are available on the Fresno COG website ([www.fresnocog.org](http://www.fresnocog.org)). Kern COG used a TP+ script to export 14 separate speed bins for 3 peak periods and 1 off peak period. The speed bins were exported for each of the three air basins for use in EMFAC 2002 in accordance with the develop guidelines.

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.

### **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 Amended 2003 PM-10 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 Amended 2003 PM-10 plan. The National Ambient Air Quality Standards for PM-10 consist of a 24-hour standard and an annual average standard, both represented by the motor vehicle emissions budgets established in the Amended 2003 PM-10 Plan. 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/>). ARB 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 vehicle miles traveled (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 an ARB methodology in which the miles of unpaved road are multiplied by the assumed vehicle miles traveled (VMT) and an emission factor. In the Amended 2003 PM-10 Plan, it is assumed that all non-agricultural unpaved roads within the SJV 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 Rule 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 an ARB 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 NO<sub>x</sub> 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 2010.

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

EPA issued guidance for creating annual on-road mobile source emission inventories for PM<sub>2.5</sub> in August 2005 (EPA, 2005c). The guidance indicates that all areas currently designated nonattainment for PM<sub>2.5</sub> are violating the annual standard for the pollutant. Therefore, in order to be consistent with the standard, PM<sub>2.5</sub> nonattainment areas must develop annual emission inventories for the purpose of developing SIP budgets and demonstrating transportation conformity.

EMFAC 2002 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 vehicle miles traveled (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 San Joaquin Valley 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 San Joaquin Valley MPOs believe that the average annual day calculated from the current traffic models and EMFAC 2002 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.

Whatever approach is selected, the latest planning assumptions, latest emissions model, and appropriate methods for estimating travel and speeds must be used as required by the conformity rule. In addition, the selected interim emissions tests should be used consistently when completing a conformity test. That is the regional conformity analysis for the baseline year test should be based on the same approach that was used to develop the baseline inventory for conformity purposes.

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 EMFAC2002. As indicated in 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.

### **AIR QUALITY MODELING APPLICABLE TO THE MOJAVE DESERT AND INDIAN WELLS VALLEY PLANNING AREAS OF KERN COUNTY**

The model used to estimate emissions for ozone precursors is EMFAC2002 (April 23, 2003) using the methodology described above. PM-10 onroad exhaust is not significant and not included in the emissions budgets or the conformity estimates. ARB emission factors for PM-10 have been used to calculate reentrained paved road dust consistent with the SIP; unpaved road dust, and fugitive dust associated with road construction have been estimated using the methodology described above. However, there is no PM-10 trading mechanism. For the Conformity Analysis, model inputs not dependent on the Transportation Improvement Program or Regional Transportation Plan (RTP) are consistent with the applicable SIPs, which include:

- The Ozone Attainment Demonstration, Maintenance Plan, and Redesignation Request was approved by EPA on April 22, 2004 (effective June 21, 2004).
- The PM-10 Attainment demonstration, Maintenance Plan, and Redesignation Request was approved by EPA on May 7, 2003 (effective June 6, 2003).

Regional emissions have been estimated for the horizon years 2009, 2013, 2015, 2020 and 2030. The conformity rule requirements for the selection of the horizon years are summarized in Chapter 1.

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

Step-by-step air quality modeling procedures, including instructions, references and controls, for the Conformity Analysis are available on the Fresno COG website at [<http://www.fresnocog.org/>]. In addition, documentation of the conformity analysis is provided in Appendix C, including:

- 2006 Conformity EMFAC Spreadsheet
- 2006 Conformity Paved Road Spreadsheet
- 2006 Conformity Unpaved Road Dust Spreadsheet
- 2006 Conformity Construction Spreadsheet
- 2006 Trading Spreadsheet
- 2006 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 Rule 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.

### **TRANSPORTATION CONFORMITY RULE REQUIREMENTS FOR TCMs**

The Transportation Conformity Rule 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 Rule, 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.”

## **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 20, 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 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. However, 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. EPA signed the final approval notice for the Amended 2003 PM-10 Plan on April 28, 2004. Since these commitments are included in the plan by reference, the commitments were approved by EPA as TCMs.

**Other Portions of Kern:** No TCMs are included in the air quality plans for the Eastern Kern County or Indian Wells Valley planning areas.

#### **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 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). TPA 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 Federal Transportation Conformity Rule.

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.

For both the 8-hour and PM<sub>2.5</sub> conformity demonstrations, the SJV MPOs updated the Project TID Table that was prepared at the request of FHWA for the 2004 Conformity Analysis. This documentation has been updated as part of this Conformity Analysis. A summary of this information is provided in Appendix E.

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 was 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 has been prepared 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 have 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”. A summary of this information is provided in Appendix E.

#### **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 E, 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.

## **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 rule 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 Valley 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 rule requires compliance with 93.105 (a)(2) and (e) and 23 CFR 450.

Section 93.112 of the conformity rule 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 F includes the public hearing process documentation. The response to comments received as part of the public comment process are included in Appendix G.

### **INTERAGENCY CONSULTATION**

Consultation is generally conducted through the San Joaquin Valley Model Coordinating Committee. The San Joaquin Valley Model and Coordinating Committee (MCC) has been established by the Valley Transportation Planning Agency's Director's Association to provide a coordinated approach to valley air quality, conformity and transportation modeling issues. The committee's goal is to ensure Valley wide coordination, communication and compliance with Federal and State Clean Air Act requirements. Each of the eight Valley Transportation Planning Agencies (TPAs) and the San Joaquin Valley Air Pollution Control District (SJVAPCD) are represented. In addition, the Federal Highway Administration, Federal Transit Administration, the Environmental Protection Agency, the California Air Resources Board and Caltrans are all represented on the committee. The MCC meets approximately monthly; agendas, minutes, and other air quality related items are posted on the Fresno COG website at <http://www.fresnocog.org>

It is important to note that this Conformity Analysis is essentially a combination of the 2004 Conformity, 8-Hour Conformity, and PM<sub>2.5</sub> Conformity Analyses. Interagency consultation was conducted on the proposed processes, instruction, and draft boilerplate documentation for each of these previous conformity analyses from August 2003 through December 2005. There have been no changes to the conformity requirements or air quality modeling approach contained

in this Conformity Analysis. The conformity instructions are posted on the Fresno COG website at <http://www.fresnocog.org>.

The latest planning assumption (LPA) tables from the 2004 conformity analysis and the status of LPA and transportation network modeling updates were reviewed on the July 20, 2005 MCC call for each MPO in the San Joaquin Valley. FHWA requested that additional information be included in the tables for this conformity analysis, which are contained in Chapter 2.

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 was applied to the 2002 RACM Commitments. 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, which is provided in Chapter 4.

Interagency consultation also includes the local transportation providers in the MPO region (e.g., cities, transit districts). The cities, county and transit districts include representative on the Transportation Technical Advisory Committee (TTAC). The TIP/RTP are developed by the TTAC which then makes advisory recommendations to the Transportation Planning Policy Committee (TPPC) consisting of elected representatives from each agency and the TTAC reviews. Actions of the TPPC are confirmed by Kern COG's Board.

## **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 the subject of a public notice and 30 day review period prior to adoption. A public hearing 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 federal transportation conformity rule 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 emissions reduction 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 federal transportation conformity rule 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 federal transportation conformity rule. Separate tests were conducted for carbon monoxide (CO), 8-hour ozone (VOC and NO<sub>x</sub>), particulate matter under ten and 2.5 microns in diameter (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 federal transportation conformity rule 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 (VOC/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 CO emissions predicted for the “Build” scenario for 2010 are less than the 2010 emissions budgets and 2018, 2020, and 2030 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 Extreme Ozone Attainment Demonstration Plan budgets established for VOC and NO<sub>x</sub> for an average summer (ozone) season day. EPA published the notice of adequacy determination in the February 15, 2005 Federal Register, effective March 2, 2005. The modeling results for all analysis years indicate that the VOC 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.

For PM-10, the applicable conformity test is the emissions budget test, using the Amended 2003 PM-10 Plan budgets for PM-10 and NOx. This Plan was approved by EPA on April 28, 2004, effective June 25, 2004. The modeling results for all analysis years indicate that the PM-10 emissions predicted for the “Build” scenarios are less than the emissions budgets for 2008 and 2010. The TIP/RTP therefore satisfy the conformity emissions tests for PM-10.

For PM2.5, 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. Before an adequate or approved SIP budget is available, conformity is generally demonstrated with interim emission tests. Conformity may be demonstrated if the emissions from the proposed transportation system are either less than or no greater than the 2002 motor vehicle emissions in a given area (see Section 93.119). The San Joaquin Valley chose to use the “no-greater-than-2002 emissions test”. The modeling results for all analysis years indicated that the “Build” scenarios are less than the 2002 Base Year emissions estimates for both the 24-hour and annual standards. The TIP/RTP therefore satisfy the conformity emissions tests for PM2.5.

As all requirements of the Transportation Conformity Rule have been satisfied, a finding of conformity for the 2006 Transportation Improvement Program and the 2004 Regional Transportation Plan is supported.

Table 6-1

2006 Conformity Results Summary -- KERN SJV

| Pollutant       | Scenario    | Emissions Total (tons/day) |  | DID YOU PASS? |  |
|-----------------|-------------|----------------------------|--|---------------|--|
|                 |             | CO                         |  | CO            |  |
| Carbon Monoxide | 2010 Budget | 180                        |  |               |  |
|                 | 2010        | 112.93                     |  | YES           |  |
|                 | 2018 Budget | 180                        |  |               |  |
|                 | 2018        | 68.3                       |  | YES           |  |
|                 | 2020        | 57.2                       |  | YES           |  |
|                 | 2030        | 41.57                      |  | YES           |  |

|       | Scenario    | Emissions Total (tons/day) |      | DID YOU PASS? |     |
|-------|-------------|----------------------------|------|---------------|-----|
|       |             | VOC                        | NOx  | VOC           | NOx |
| Ozone | 2008 Budget | 11.5                       | 32.7 |               |     |
|       | 2008        | 11.5                       | 32.6 | YES           | YES |
|       | 2010 Budget | 9.6                        | 27.2 |               |     |
|       | 2010        | 9.6                        | 27.0 | YES           | YES |
|       | 2013        | 7.9                        | 20.6 | YES           | YES |
|       | 2020        | 5.6                        | 11.3 | YES           | YES |
|       | 2030        | 4.2                        | 7.2  | YES           | YES |

**2006 Conformity Results Summary -- KERN SJV (continued)**

| PM-10 |                      | PM-10 | NOx  | PM-10 | NOx |
|-------|----------------------|-------|------|-------|-----|
|       | 2008 Budget          | 10.7  | 34.2 |       |     |
|       | 2008                 | 10.6  | 34.1 | YES   | YES |
|       | 2010 Budget          | 10.8  | 28.4 |       |     |
|       | 2010                 | 10.7  | 28.2 | YES   | YES |
|       | 2010 Adjusted Budget | 13.1  | 25.0 |       |     |
|       | 2020                 | 13.1  | 11.9 | YES   | YES |
|       | 2010 Adjusted Budget | 15.8  | 20.9 |       |     |
|       | 2030                 | 15.8  | 7.6  | YES   | YES |

| PM2.5<br>24-Hour Standard |                | PM2.5 | NOx  | PM2.5 | NOx |
|---------------------------|----------------|-------|------|-------|-----|
|                           | 2002 Base Year | 1.1   | 53.3 |       |     |
|                           | 2010           | 0.9   | 28.2 | YES   | YES |
|                           | 2020           | 0.9   | 11.9 | YES   | YES |
|                           | 2030           | 1.0   | 7.6  | YES   | YES |

| PM2.5 Annual<br>Standard |                | PM2.5 | NOx   | PM2.5 | NOx |
|--------------------------|----------------|-------|-------|-------|-----|
|                          | 2002 Base Year | 402   | 19455 |       |     |
|                          | 2010           | 329   | 10293 | YES   | YES |
|                          | 2020           | 329   | 4344  | YES   | YES |
|                          | 2030           | 365   | 2774  | YES   | YES |

**2006 Conformity Results Summary -- KERN (Mojave Desert)**

| Pollutant | Scenario    | Emissions Total (tons/day) |     | DID YOU PASS? |     |
|-----------|-------------|----------------------------|-----|---------------|-----|
|           |             | ROG                        | NOx | ROG           | NOx |
| Ozone     | 2005 Budget | 3.9                        | 7.1 |               |     |
|           | 2009        | 2.4                        | 4.8 | YES           | YES |
|           | 2015 Budget | 2.1                        | 4.0 |               |     |
|           | 2015        | 1.6                        | 3.0 | YES           | YES |
|           | 2020        | 1.2                        | 2.2 | YES           | YES |
|           | 2030        | 1.0                        | 1.5 | YES           | YES |

**2006 Conformity Results Summary -- KERN (Indian Wells Valley)**

| PM-10 | Scenario    | PM-10 | PM-10 | NOx |
|-------|-------------|-------|-------|-----|
|       |             | 1.7   |       |     |
| PM-10 | 2013 Budget | 1.7   |       |     |
|       | 2013        | 1.2   | YES   | YES |
|       | 2020        | 1.2   | YES   | YES |
|       | 2030        | 1.3   | YES   | YES |

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**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                |          |
| §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.                 |          |
| §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, App. B        |          |
| §93.108            | Document that the TIP/RTP is financially constrained (23 CFR 450).  | E.S.                 |          |
| §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                |          |
| §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                |          |
| USDOT/EPA 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                |          |
| §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 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. | Ch. 2                |          |
| §93.111            | Document the use of the latest emissions model approved by EPA.   | Ch. 3                |          |
| §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.   | Ch. 5                |          |

| 40 CFR               | Criteria   | Page                              | Comments |
|----------------------|--|-----------------------------------|----------|
|                      | Include documentation of consultation on conformity tests and methodologies as well as responses to written comments.  |                                   |          |
| §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, 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)    | <u>For areas with SIP budgets:</u> 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                             |          |
| §93.118 (b)          | Document for which years consistency with motor vehicle emissions budgets must be shown.   | Ch. 1                             |          |
| §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                             |          |
| §93.119 <sup>1</sup> | <u>For areas without applicable SIP budgets:</u> 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.  | Ch. 6                             |          |
| §93.119 (g)          | Document the use of the appropriate analysis years in the regional emissions analysis for areas without applicable SIP budgets.  | Ch. 1                             |          |
| §93.119 (h,i)        | Document how the baseline and action scenarios are defined for each analysis year.   | Ch. 3                             |          |
| §93.122 (a)(1)       | Document that all regionally significant federal and non-Federal projects in the 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  | Ch. 2, 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                             |          |
| §93.122              | For nonregulatory measures that are not included in the STIP, include written  | N/A                               |          |

| 40 CFR                              | Criteria  | Page            | Comments |
|-------------------------------------|---|-----------------|----------|
| (a)(4,5,6)                          | 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.   |                 |          |
| §93.122<br>(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           |          |
| §93.122<br>(b)(1)(ii) <sup>2</sup>  | Document the land use, population, employment, and other network-based travel model assumptions.  | Ch. 2           |          |
| §93.122<br>(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           |          |
| §93.122<br>(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           |          |
| §93.122<br>(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           |          |
| §93.122<br>(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           |          |
| §93.122<br>(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           |          |
| §93.122<br>(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           |          |
| §93.122<br>(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   | Ch. 2           |          |
| §93.122<br>(e, f)                   | Document, in areas where a SIP identifies construction-related PM10 or PM 2.5 as significant pollutants, the inclusion of PM10 and/or PM 2.5 construction emissions in the conformity analysis.   | Ch. 3           |          |
| §93.122<br>(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,<br>§93.127,<br>§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,<br>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**

## Appendix B – Transportation Project Listing – Exempt Projects

| Jurisdiction/Agency | TIP/RTP<br>Project ID | CTIPs<br>Project ID | Description  | Est. Cost   | CTIPs<br>Exempt Code | Air Basins    |
|---------------------|-----------------------|---------------------|--|-------------|----------------------|---------------|
| GET                 | KER040801             |                     | PURCHASE 27 BUS STOP SHELTERS & BENCHES  | \$280,100   | 2.07                 | San Joaquin   |
| GET                 | KER040802             |                     | MAINTENANCE REPAIR EQUIPMENT AND REPLACEMENT   | \$143,525   | 2.04                 | San Joaquin   |
| Arvin               | KER050501             |                     | IN ARVIN: UPGRADE/IMPROVE EXISTING CNG FUELING STATION BY PURCHASING AND INSTALLING A NEW COMPRESSOR AND STORAGE VESSELS | \$505,656   | 2.04                 | San Joaquin   |
| Bakersfield         | KER050502             |                     | IN BAKERSFIELD: LNG/CNG STATION  | \$1,763,000 | 2.04                 | San Joaquin   |
| Wasco               | KER000520             |                     | CONSTRUCT NEW TRANSIT TRANSFER STATION   | \$700,000   | 2.08                 | San Joaquin   |
| KCOG                | KER040401             |                     | IN KERN COUNTY: REGIONAL TRAFFIC COUNT PROGRAM   | \$270,000   | 1.07                 | various       |
| GET                 | KER040805             |                     | UPGRADE BUS CAMERA SYSTEM  | \$345,000   | 2.04                 | San Joaquin   |
| Kern Co.            | KER041001             |                     | IN BAKERSFIELD: COTTONWOOD ROAD BETWEEN CASA LOMA AND SR 58; SIDEWALK IMPROVEMENTS AND CLASS II BICYCLE PATH             | \$400,000   | 3.02                 | San Joaquin   |
| Forest Serv         | KER031401             |                     | IN KERN COUNTY: ON BITTER CREEK; REHAB EXISTING ROAD FOR EDUCATIONAL TOURS   | \$1,050,000 | 1.10                 | San Joaquin   |
| Forest Serv         | KER021401             |                     | IN KERN COUNTY: ON FOREST HIGHWAY 95, CUDDY VALLEY ROAD/MT. PINOS; 8.1 MILES OF 3R WORK TO BE DONE BY THE COUNTY         | \$1,380,000 | 1.10                 | San Joaquin   |
| GET                 | KER010807             |                     | STORAGE FACILITY   | \$28,000    | 2.11                 | San Joaquin   |
| GET                 | KER030804             |                     | CNG STATION PHASE II, REPLACE CATERPILLAR ENGINES WITH GE ELECTRIC ENGINES AND RETROFIT                                  | \$750,000   | 2.04                 | San Joaquin   |
| GET                 | KER030807             |                     | PURCHASE AND INSTALL VEHICLE RECORDERS   | \$150,000   | 2.05                 | San Joaquin   |
| GET                 | KER030808             |                     | PURCHASE AND INSTALL 500 BUS STOP SIGNS  | \$100,000   | 4.11                 | San Joaquin   |
| GET                 | KER030809             |                     | REPLACE 128 WOODEN BUS BENCHES   | \$64,000    | 2.08                 | San Joaquin   |
| GET                 | KER030822             |                     | TRAFFIC SIGNAL PRIORITY SYSTEM PHASE II  | \$937,500   | 5.07                 | San Joaquin   |
| KCSS                | KER060511             |                     | PURCHASE SEVENTEEN REPLACEMENT CNG REGULAR EDUCATION SCHOOL BUSES (PARTNERSHIP PROGRAM)                                  | \$2,890,000 | 2.10                 | San Joaquin   |
| DUSD                | KER060512             |                     | CONSTRUCT CNG FUELING STATION (PARTNERSHIP PROGRAM)  | \$1,000,000 | 2.05                 | San Joaquin   |
| Ridgecrest          | KER060513             |                     | CONSTRUCT CNG FUELING STATION  | \$1,686,295 | 2.05                 | Indian Wells  |
| Wasco               | KER060514             |                     | UPGRADE EXISTING CNG FUELING STATION   | \$498,238   | 2.04                 | San Joaquin   |
| Cal. City           | KER060515             |                     | IN CALIFORNIA CITY: UNPAVED SECTION OF MENDIBURU RD FROM HACIENDA BLVD TO 96TH ST (0.5 MILE); SURFACE UNPAVED STREET     | \$485,382   | 1.10                 | Mojave Desert |
| Delano              | KER060516             |                     | IN DELANO: COUNTY LINE RD FROM HIGH ST TO BROWNING RD; SHOULDER STABILIZATION  | \$56,478    | 1.04                 | San Joaquin   |
| Bakersfield         | KER060517             |                     | IN BAKERSFIELD: PURCHASE EIGHT REPLACEMENT LNG TRUCKS  | \$256,000   | 2.02                 | San Joaquin   |
| Bakersfield         | KER060518             |                     | IN BAKERSFIELD: PURCHASE A REPLACEMENT CNG STREET SWEEPER  | \$65,000    | 2.02                 | San Joaquin   |
| Bakersfield         | KER060519             |                     | IN BAKERSFIELD: ON NORTHBOUND MT. VERNON AVE TO EASTBOUND SR 178 ON-RAMP; CONSTRUCT RIGHT TURN CHANNELIZATION            | \$338,000   | 5.01                 | San Joaquin   |
| Bakersfield         | KER060521             |                     | IN BAKERSFIELD: AT VARIOUS LOCATIONS; SIGNAL COORDINATION (INTERCONNECT)   | \$2,287,000 | 5.07                 | San Joaquin   |
| Bakersfield         | KER060520             |                     | IN BAKERSFIELD: WHITE LN AT ASHE RD; CONSTRUCT DOUBLE LEFT TURN LANES  | \$860,000   | 5.01                 | San Joaquin   |

| Jurisdiction/<br>Agency | TIP/RTP<br>Project ID | CTIPs<br>Project ID | Description   | Est. Cost   | CTIPs<br>Exempt Code | Air Basins    |
|-------------------------|-----------------------|---------------------|---|-------------|----------------------|---------------|
| Bakersfield             | KER060522             |                     | IN BAKERSFIELD: AT VARIOUS LOCATIONS; NEW SIGNALS AND SIGNAL SYNCHRONIZATION  | \$2,783,000 | 5.07                 | San Joaquin   |
| Bakersfield             | KER060523             |                     | IN BAKERSFIELD: AT VARIOUS LOCATIONS; TRAFFIC MONITORING CAMERAS  | \$520,000   | 1.07                 | San Joaquin   |
| Kern Co.                | KER060524             |                     | IN KERN COUNTY: AT VARIOUS LOCATIONS; SURFACE UNPAVED SHOULDERS   | \$8,933,200 | 1.04                 | San Joaquin   |
| Kern Co.                | KER060525             |                     | IN KERN COUNTY: AT VARIOUS LOCATIONS; SURFACE UNPAVED STREETS   | \$2,415,000 | 1.10                 | Mojave Desert |
| Wasco                   | KER061001             |                     | IN WASCO: ON CENTRAL AVENUE BETWEEN POSO DR AND SR 46; CONSTRUCT LANDSCAPE MEDIAN   | \$1,079,000 | 3.02                 | San Joaquin   |
| Cal. City               | KER061002             |                     | IN CALIFORNIA CITY: ON CALIFORNIA CITY BETWEEN YERBA BLVD AND NEURALIA; CONSTRUCT SIDEWALK AND SIDEWALK IMPROVEMENTS                                    | \$710,000   | 3.02                 | Mojave Desert |
| Arvin                   | KER061003             |                     | IN ARVIN: ON DERBY ST BETWEEN HAVEN DR AND SCHIPPER AVE; CONSTRUCT SIDEWALK, SIDEWALK IMPROVEMENTS, AND BIKE LANE                                       | \$659,000   | 3.02                 | San Joaquin   |
| GET                     | KER040804             |                     | DOWNTOWN AND SOUTHWEST FACILITY   | \$99,000    | 2.11                 | San Joaquin   |
| GET                     | KER040809             |                     | PURCHASE FIVE PARATRANSIT BUSES   | \$450,000   | 2.10                 | San Joaquin   |
| GET                     | KER010809             |                     | MAINTENANCE AND ADM. FACILITY (REHAB FACILITY)  | \$515,000   | 2.01                 | San Joaquin   |
| GET                     | KER030801             |                     | TRAFFIC SIGNAL PRIORITY SYSTEM  | \$922,199   | 5.07                 | San Joaquin   |
| GET                     | KER030803             |                     | PURCHASE AND INSTALL BUS AND PARATRANSIT CAMERA EQUIPMENT   | \$175,000   | 2.04                 | San Joaquin   |
| GET                     | KER020806             |                     | REPLACE FIVE CNG PARATRANSIT BUSES  | \$450,000   | 2.10                 | San Joaquin   |
| GET                     | KER040806             |                     | PREVENTATIVE MAINTENANCE FY 2004-2005   | \$3,850,000 | 2.01                 | San Joaquin   |
| GET                     | KER040807             |                     | PREVENTATIVE MAINTENANCE FY 2005-2006   | \$4,050,000 | 2.01                 | San Joaquin   |
| GET                     | KER040808             |                     | PREVENTATIVE MAINTENANCE FY 2006-2007   | \$4,252,500 | 2.01                 | San Joaquin   |
| Kern Co.                | KER041002             |                     | IN TEHACHAPI: 4 MILES AT VARIOUS LOCATIONS; BICYCLE AND PEDESTRIAN PATH   | \$880,000   | 3.02                 | San Joaquin   |
| Kern Co.                | KER041004             |                     | IN FRAZIER PARK: MT. PINOS WAY BETWEEN ALHAMBRA ST AND POMONA ST. & MONTEREY TRAIL BETWEEN FRAZIER PARK ROAD AND MT. PINOS WAY; STREETSCAPE IMPROVEMENT | \$600,000   | 4.09                 | San Joaquin   |
| Taft                    | KER041005             |                     | IN TAFT: SUNSET RAILROAD R/W BETWEEN HILLARD STREET AND SANDY CREEK; RAILS TO TRAILS PHASE 2  | \$513,663   | 4.12                 | San Joaquin   |
| Kern Co.                | KER041007             |                     | IN LAKE ISABELLA: LAKE ISABELLA BLVD. BETWEEN ERSKINE CREEK AND LAKE ISABELLA PARK; BICYCLE PATH AND SIDEWALK PROJECT                                   | \$300,000   | 3.02                 | San Joaquin   |
| Cal. City               | KER041008             |                     | IN CALIFORNIA CITY: CALIFORNIA CITY BLVD. BETWEEN RANDSBURG MOJAVE ROAD AND CONKLIN ROAD; SIDEWALK IMPROVEMENTS   | \$197,656   | 3.02                 | Mojave Desert |
| Kern Co.                | KER041010             |                     | IN BAKERSFIELD: OLIVE DRIVE BETWEEN LANDCO DRIVE AND VICTOR STREET; LANDSCAPING   | \$141,000   | 4.09                 | San Joaquin   |
| Arvin                   | KER041011             |                     | IN ARVIN: SYCAMORE ROAD BETWEEN COMANCHE DRIVE AND DERBY STREET; CLASS II BIKE LANE PROJECT   | \$213,000   | 3.02                 | San Joaquin   |
| Ridgecrest              | KER041012             |                     | IN RIDGECREST: BOWMAN ROAD BETWEEN GATEWAY ST. TO DOWNS ST; BICYCLE REST STATIONS   | \$226,000   | 3.02                 | Indian Wells  |
| Wasco                   | KER041013             |                     | IN WASCO: SR 43 BETWEEN 16TH STREET AND KIMBERLINA ROAD; LANDSCAPE BEAUTIFICATION   | \$633,000   | 4.09                 | San Joaquin   |
| Bakersfield             | KER050512             |                     | IN BAKERSFIELD: AUBURN ST - OSWELL ST TO FAIRFAX RD; SIGNAL COORDINATION (INTERCONNECT)   | \$135,600   | 5.07                 | San Joaquin   |

| Jurisdiction/<br>Agency | TIP/RTP<br>Project ID | CTIPs<br>Project ID | Description   | Est. Cost | CTIPs<br>Exempt Code | Air Basins    |
|-------------------------|-----------------------|---------------------|---|-----------|----------------------|---------------|
| Bakersfield             | KER050513             |                     | IN BAKERSFIELD: COFFEE RD - HAGEMAN RD TO MEANY RD; SIGNAL COORDINATION (INTERCONNECT)  | \$65,500  | 5.07                 | San Joaquin   |
| Bakersfield             | KER050514             |                     | IN BAKERSFIELD: COLUMBUS S - CHESTER AVE TO RIVER BLVD; SIGNAL COORDINATION (INTERCONNECT)  | \$326,000 | 5.07                 | San Joaquin   |
| Bakersfield             | KER050515             |                     | IN BAKERSFIELD: COLUMBUS ST - RIVER BLVD TO OSWELL ST & OSWELL ST - COLUMBUS ST TO AUBURN ST; SIGNAL COORDINATION (INTERCONNECT)    | \$322,300 | 5.07                 | San Joaquin   |
| Bakersfield             | KER050516             |                     | IN BAKERSFIELD: STOCKDALE HWY - BUENA VISTA TO OLD RIVER RD; SIGNAL COORDINATION (INTERCONNECT)                                     | \$47,400  | 5.07                 | San Joaquin   |
| Bakersfield             | KER050517             |                     | IN BAKERSFIELD: TRUXTUN AVE - MOHAWK ST TO OAK ST; SIGNAL COORDINATION (INTERCONNECT)   | \$85,100  | 5.07                 | San Joaquin   |
| Bakersfield             | KER050519             |                     | IN BAKERSFIELD: AUBURN ST/LA COSTA ST; NEW SIGNAL   | \$160,000 | 5.02                 | San Joaquin   |
| Bakersfield             | KER050520             |                     | IN BAKERSFIELD: ASHE RD - HARRIS RD TO PANAMA LANE; NEW SIGNAL AND SIGNAL COORDINATION (INTERCONNECT)                               | \$249,600 | 5.07                 | San Joaquin   |
| Bakersfield             | KER050521             |                     | IN BAKERSFIELD: HAGEMAN RD/MAIN PLAZA DR; NEW SIGNAL AND SIGNAL COORDINATION (INTERCONNECT)   | \$160,000 | 5.07                 | San Joaquin   |
| Bakersfield             | KER050522             |                     | IN BAKERSFIELD: WHITE LN/LILLY DR; NEW SIGNAL AND SIGNAL COORDINATION (INTERCONNECT)  | \$160,000 | 5.07                 | San Joaquin   |
| Bakersfield             | KER050523             |                     | IN BAKERSFIELD: 4TH ST - CHESTER AVE TO "H" ST; SIGNAL COORDINATION (INTERCONNECT)  | \$20,400  | 5.07                 | San Joaquin   |
| Bakersfield             | KER050524             |                     | IN BAKERSFIELD: 30TH ST - CHESTER AVE TO "F" ST; SIGNAL COORDINATION (INTERCONNECT)   | \$33,900  | 5.07                 | San Joaquin   |
| Bakersfield             | KER050525             |                     | IN BAKERSFIELD: ASHE RD - DISTRICT BLVD TO WHITE LANE; SIGNAL COORDINATION (INTERCONNECT)   | \$45,200  | 5.07                 | San Joaquin   |
| Bakersfield             | KER050526             |                     | IN BAKERSFIELD: BRIMHALL RD - CALLOWAY DR TO HARVEST CREEK; SIGNAL COORDINATION (INTERCONNECT)                                      | \$124,300 | 5.07                 | San Joaquin   |
| Bakersfield             | KER050527             |                     | IN BAKERSFIELD: "F" ST - 26TH ST TO 30TH ST; SIGNAL COORDINATION (INTERCONNECT)   | \$36,100  | 5.07                 | San Joaquin   |
| Bakersfield             | KER050528             |                     | IN BAKERSFIELD: HAGEMAN RD - COFFEE RD TO FRUITVALE AVE; SIGNAL COORDINATION (INTERCONNECT)   | \$117,700 | 5.07                 | San Joaquin   |
| Bakersfield             | KER050529             |                     | IN BAKERSFIELD: PANAMA LN - AKERS RD TO "H" ST; SIGNAL COORDINATION (INTERCONNECT)  | \$180,800 | 5.07                 | San Joaquin   |
| Bakersfield             | KER050530             |                     | IN BAKERSFIELD: WHITE LN - "H" ST TO FAMBOUGH ST; SIGNAL COORDINATION (INTERCONNECT)  | \$41,800  | 5.07                 | San Joaquin   |
| Bakersfield             | KER050531             |                     | IN BAKERSFIELD: NEW SIGNAL COFFEE RD/PEANUT AVE & INTERCONNECT COFFEE RD: PEANUT AVE TO HAGEMAN RD                                  | \$241,500 | 5.07                 | San Joaquin   |
| Bakersfield             | KER050532             |                     | IN BAKERSFIELD: "H" ST/MCKEE RD; NEW SIGNAL & SIGNAL COORDINATION (INTERCONNECT)  | \$160,000 | 5.07                 | San Joaquin   |
| Bakersfield             | KER050533             |                     | IN BAKERSFIELD: "P" ST/BELLE TERRACE; NEW SIGNAL & SIGNAL COORDINATION (INTERCONNECT)   | \$160,000 | 5.07                 | San Joaquin   |
| Bakersfield             | KER050534             |                     | IN BAKERSFIELD: NEW SIGNAL AT RIVERLAKES DR/SOUTHSHORE DR & INTERCONNECT AT RIVERLAKES DR: SOUTHSHORE DR TO HAGEMAN RD              | \$193,200 | 5.07                 | San Joaquin   |
| Bakersfield             | KER050535             |                     | IN BAKERSFIELD: OAK ST/SR 178; IMPROVEMENT OF EXISTING TRAFFIC SIGNAL DELAY/SYNCHRONIZATION   | \$287,500 | 5.02                 | San Joaquin   |
| Cal. City               | KER050538             |                     | IN CALIFORNIA CITY: CALIFORNIA CITY BLVD AT VICTOR WAY, ORCHID DR, & HACIENDA BLVD; PURCHASE AND INSTALL THREE 6' X 8' BUS SHELTERS | \$32,189  | 2.07                 | Mojave Desert |
| Cal. City               | KER050539             |                     | IN CALIFORNIA CITY: REDWOOD BLVD ON SOUTH-SIDE OF ROADWAY FROM HACIENDA BLVD TO NEURALIA RD (1.5 MILES); SURFACE UNPAVED STREET     | \$877,161 | 1.10                 | Mojave Desert |

| Jurisdiction/<br>Agency | TIP/RTP<br>Project ID | CTIPs<br>Project ID | Description  | Est. Cost   | CTIPs<br>Exempt Code | Air Basins    |
|-------------------------|-----------------------|---------------------|--|-------------|----------------------|---------------|
| CTSA                    | KER050540             |                     | IN BAKERSFIELD: PURCHASE OF ONE 12+2 WHEEL CHAIR PASSENGER MEDIUM CNG BUSES  | \$65,000    | 2.10                 | San Joaquin   |
| GET                     | KER050541             |                     | IN BAKERSFIELD: PURCHASE FIVE 25 FT CNG PARATRANSIT VEHICLES   | \$400,000   | 2.02                 | San Joaquin   |
| GET                     | KER050542             |                     | IN BAKERSFIELD: OUTREACH PROGRAM   | \$60,000    | 4.01                 | San Joaquin   |
| GET                     | KER050543             |                     | IN BAKERSFIELD: PURCHASE NINE 25 FT CNG PARATRANSIT VEHICLES   | \$770,400   | 2.02                 | San Joaquin   |
| KCOG                    | KER050544             |                     | IN KERN COUNTY: COUNTYWIDE WITH SPECIAL EMPHASIS ON SAN JOAQUIN VALLEY PORTION OF KERN COUNTY, PUBLIC OUTREACH PROGRAM, AND SOME CAPITAL | \$160,000   | 4.01                 | various       |
| KCOG                    | KER050545             |                     | IN KERN COUNTY: RIDESHARE PROGRAM  | \$480,000   | 3.01                 | various       |
| Kern Co.                | KER050546             |                     | IN KERN COUNTY: PURCHASE FOUR REPLACEMENT 35 FT CNG BUSES  | \$1,000,000 | 2.10                 | various       |
| Kern Co.                | KER050547             |                     | IN KERN COUNTY: PURCHASE SEVEN REPLACEMENT TYPE II DIESEL MINI BUSES   | \$538,545   | 2.10                 | various       |
| Kern Co.                | KER050548             |                     | IN RIDGECREST: DRUMMOND AVE - CAMPBELL ST TO JACKS RANCH RD (0.5 MILE); SURFACE UNPAVED STREET   | \$201,250   | 1.10                 | Indian Wells  |
| Kern Co.                | KER050549             |                     | IN BAKERSFIELD: SNOW RD - GOLDEN STATE HWY TO ALLEN RD (3.75 MILES); SURFACE UNPAVED SHOULDERS   | \$500,000   | 1.04                 | San Joaquin   |
| Kern Co.                | KER050550             |                     | IN RIDGECREST: BRADY ST - RIDGECREST BLVD TO LAS FLORES AVE (0.5 MILE); SURFACE UNPAVED STREET   | \$201,250   | 1.10                 | Indian Wells  |
| Kern Co.                | KER050551             |                     | IN BAKERSFIELD: GOLDEN STATE HIGHWAY - SNOW RD TO NORRIS RD (0.7 MILE); SURFACE UNPAVED SHOULDERS  | \$80,500    | 1.04                 | San Joaquin   |
| Kern Co.                | KER050552             |                     | IN ROSAMOND: ROSAMOND BLVD - SR 14 TO 90TH ST (7 MILES); SURFACE UNPAVED SHOULDERS   | \$860,500   | 1.04                 | Mojave Desert |
| Kern Co.                | KER050555             |                     | NEAR RIDGECREST: KENDALL AVE - COLLEGE HEIGHTS BLVD TO MATURANGO AVE (1.2 MILES); SURFACE UNPAVED STREET                                 | \$433,500   | 1.10                 | Indian Wells  |
| Kern Co.                | KER050556             |                     | NEAR RIDGECREST: SPRINGER AVE - COLLEGE HEIGHTS BLVD TO GATEWAY BLVD (1 MILE); SURFACE UNPAVED STREET                                    | \$391,000   | 1.10                 | Indian Wells  |
| Kern Co.                | KER050560             |                     | IN BAKERSFIELD: ALLEN RD - HAGEMAN RD TO SNOW RD (1.4 MILES); SURFACE UNPAVED SHOULDERS  | \$161,000   | 1.04                 | San Joaquin   |
| Kern Co.                | KER050561             |                     | NEAR BAKERSFIELD: OLD RIVER RD - SR 119 TO I-5 (7 MILES); SURFACE UNPAVED SHOULDERS  | \$805,000   | 1.04                 | San Joaquin   |
| Kern Co.                | KER050562             |                     | IN BAKERSFIELD: FAIRFAX RD - MOUNTAIN VIEW RD TO SR 223 (5 MILES); SURFACE UNPAVED SHOULDERS   | \$575,000   | 1.04                 | San Joaquin   |
| Ridgecrest              | KER050565             |                     | IN RIDGECREST: W. DRUMMOND AVE - DOWNS ST TO INYO ST (1/4 MILE); RECONSTRUCTION INCLUDING CURB, GUTTER, AND SIDEWALK                     | \$442,472   | 1.10                 | Indian Wells  |
| Shafter                 | KER050566             |                     | IN SHAFTER: CALIFORNIA INTEGRATED LOGISTICS CENTER; EQUIPMENT PURCHASE - TWO CONTAINER LIFT MACHINES                                     | \$1,000,000 | 4.01                 | San Joaquin   |
| Taft                    | KER050567             |                     | IN TAFT: GARDNER FIELD RD FROM TAFT HWY (SR 119) TO DUVALL RD (APPROX. 4 MILES); SURFACE UNPAVED SHOULDERS INCLUDING BIKE LANE STRIPING  | \$941,247   | 1.04                 | San Joaquin   |
| Tehachapi               | KER041015             |                     | IN TEHACHAPI: DOWNTOWN; LANDSCAPING IMPROVEMENTS   | \$1,332,000 | 3.02                 | Mojave Desert |
| Kern Co.                | KER050402             |                     | LOCAL STREETS AND ROADS RESURFACING, RECONSTRUCTION OR REHABILITATION AT VARIOUS LOCATIONS (NON-CAPACITY PROJECTS ONLY)                  | \$9,143,792 | 1.10                 | various       |
| Delano                  | KER050405             |                     | LOCAL STREETS AND ROADS RESURFACING, RECONSTRUCTION OR REHABILITATION AT VARIOUS LOCATIONS (NON-CAPACITY PROJECTS ONLY)                  | \$1,469,549 | 1.10                 | San Joaquin   |
| Shafter                 | KER050407             |                     | LOCAL STREETS AND ROADS RESURFACING, RECONSTRUCTION OR REHABILITATION AT VARIOUS LOCATIONS (NON-CAPACITY PROJECTS ONLY)                  | \$420,000   | 1.10                 | San Joaquin   |

| Jurisdiction/<br>Agency | TIP/RTP<br>Project ID | CTIPs<br>Project ID | Description   | Est. Cost    | CTIPs<br>Exempt Code | Air Basins    |
|-------------------------|-----------------------|---------------------|---|--------------|----------------------|---------------|
| Taft                    | KER050408             |                     | LOCAL STREETS AND ROADS RESURFACING, RECONSTRUCTION OR REHABILITATION AT VARIOUS LOCATIONS (NON-CAPACITY PROJECTS ONLY)             | \$349,425    | 1.10                 | San Joaquin   |
| Tehachapi               | KER050409             |                     | LOCAL STREETS AND ROADS RESURFACING, RECONSTRUCTION OR REHABILITATION AT VARIOUS LOCATIONS (NON-CAPACITY PROJECTS ONLY)             | \$380,992    | 1.10                 | San Joaquin   |
| Bakersfield             | KER050537             |                     | IN BAKERSFIELD: AT VARIOUS LOCATIONS; SURFACING UNPAVED SHOULDERS   | \$3,812,000  | 4.01                 | San Joaquin   |
| GET                     | KER030810             |                     | MAINTENANCE EQUIPMENT: VARIOUS SHOP TOOLS, EQUIPMENT AND RELATED  | \$55,000     | 2.04                 | San Joaquin   |
| Arvin                   | KER050403             |                     | LOCAL STREETS AND ROADS RESURFACING, RECONSTRUCTION OR REHABILITATION AT VARIOUS LOCATIONS (NON-CAPACITY PROJECTS ONLY)             | \$500,177    | 1.10                 | San Joaquin   |
| Bakersfield             | KER050401             |                     | LOCAL STREETS AND ROADS RESURFACING, RECONSTRUCTION OR REHABILITATION AT VARIOUS LOCATIONS (NON-CAPACITY PROJECTS ONLY)             | \$9,104,258  | 1.10                 | San Joaquin   |
| Cal. City               | KER050404             |                     | LOCAL STREETS AND ROADS RESURFACING, RECONSTRUCTION OR REHABILITATION AT VARIOUS LOCATIONS (NON-CAPACITY PROJECTS ONLY)             | \$516,008    | 1.10                 | Mojave Desert |
| Ridgecrest              | KER050406             |                     | LOCAL STREETS AND ROADS RESURFACING, RECONSTRUCTION OR REHABILITATION AT VARIOUS LOCATIONS (NON-CAPACITY PROJECTS ONLY)             | \$819,544    | 1.10                 | Indian Wells  |
| Wasco                   | KER050410             |                     | LOCAL STREETS AND ROADS RESURFACING, RECONSTRUCTION OR REHABILITATION AT VARIOUS LOCATIONS (NON-CAPACITY PROJECTS ONLY)             | \$894,235    | 1.10                 | San Joaquin   |
| Wasco                   | KER050569             |                     | IN WASCO: PURCHASE ONE REPLACEMENT 21-28 PASSENGER CNG BUS AND ONE 12-2 CONVERTIBLE TO 6-6 PASSENGER WHEELCHAIR ACCESSIBLE CNG BUS  | \$320,000    | 2.10                 | San Joaquin   |
| Bakersfield             | KER050518             |                     | IN BAKERSFIELD: 26TH ST/"F" ST; NEW SIGNAL  | \$160,000    | 5.02                 | San Joaquin   |
| Kern Co.                | KER051001             |                     | IN LAMONT: AT VARIOUS LOCATIONS; CONSTRUCT SIDEWALK AND SIDEWALK IMPROVEMENTS   | \$292,000    | 3.02                 | San Joaquin   |
| Kern Co.                | KER051012             |                     | IN BAKERSFIELD: ON SEVENTH STANDARD ROAD BETWEEN SR99 AND WINGS WAY; STREETSCAPE IMPROVEMENTS                                       | \$1,090,000  | 3.02                 | San Joaquin   |
| Kern Co.                | KER051003             |                     | IN BAKERSFIELD: ON BELLE TERRACE BETWEEN REAL ROAD AND SOUTH "H" ST; CONSTRUCT SIDEWALK AND SIDEWALK IMPROVEMENTS                   | \$336,000    | 3.02                 | San Joaquin   |
| Kern Co.                | KER051004             |                     | IN LAKE ISABELLA: ON LAKE ISABELLA BLVD BETWEEN LAKE ISABELLA PARK AND KILBRETH DRIVE; BIKE PATH AND CONSTRUCT SIDEWALK             | \$302,000    | 3.02                 | Mojave Desert |
| Kern Co.                | KER051005             |                     | IN BAKERSFIELD: ON COLUMBUS AVE BETWEEN ALTA VISTA DRIVE AND RIVER BLVD; CONSTRUCT PEDESTRIAN SIDEWALK                              | \$101,000    | 3.02                 | San Joaquin   |
| Kern Co.                | KER051006             |                     | IN SOUTH OF BAKERSFIELD: ALONG CUDDY CREEK NEAR COMMUNITY OF FRAZIER PARK; STREAMBED HABITAT ENHANCEMENT AND CONSTRUCT BICYCLE PATH | \$1,168,000  | 3.02                 | San Joaquin   |
| Kern Co.                | KER051007             |                     | IN BAKERSFIELD: ON CASTRO LANE AND BALDWIN ROAD BETWEEN MING AVE AND BELLE TERRACE; CONSTRUCT SIDEWALKS AND SIDEWALK IMPROVEMENTS   | \$310,000    | 3.02                 | San Joaquin   |
| Arvin                   | KER060401             |                     | LOCAL STREETS AND ROADS RESURFACING, RECONSTRUCTION OR REHABILITATION AT VARIOUS LOCATIONS (NON-CAPACITY PROJECTS ONLY)             | \$574,412    | 1.10                 | San Joaquin   |
| Bakersfield             | KER060402             |                     | LOCAL STREETS AND ROADS RESURFACING, RECONSTRUCTION OR REHABILITATION AT VARIOUS LOCATIONS (NON-CAPACITY PROJECTS ONLY)             | \$11,979,245 | 1.10                 | San Joaquin   |
| Arvin                   | KER060501             |                     | PURCHASE ONE REPLACEMENT 26 PASSENGER CNG BUS   | \$125,000    | 2.10                 | San Joaquin   |
| Cal. City               | KER060403             |                     | LOCAL STREETS AND ROADS RESURFACING, RECONSTRUCTION OR REHABILITATION AT VARIOUS LOCATIONS (NON-CAPACITY PROJECTS ONLY)             | \$316,658    | 1.10                 | Mojave Desert |
| Delano                  | KER060404             |                     | LOCAL STREETS AND ROADS RESURFACING, RECONSTRUCTION OR REHABILITATION AT VARIOUS LOCATIONS (NON-CAPACITY PROJECTS ONLY)             | \$1,753,078  | 1.10                 | San Joaquin   |
| McFarland               | KER060405             |                     | LOCAL STREETS AND ROADS RESURFACING, RECONSTRUCTION OR REHABILITATION AT VARIOUS LOCATIONS (NON-CAPACITY PROJECTS ONLY)             | \$838,000    | 1.10                 | San Joaquin   |

| Jurisdiction/<br>Agency | TIP/RTP<br>Project ID | CTIPs<br>Project ID | Description  | Est. Cost    | CTIPs<br>Exempt Code | Air Basins    |
|-------------------------|-----------------------|---------------------|--|--------------|----------------------|---------------|
| Ridgecrest              | KER060406             |                     | LOCAL STREETS AND ROADS RESURFACING, RECONSTRUCTION OR REHABILITATION AT VARIOUS LOCATIONS (NON-CAPACITY PROJECTS ONLY)  | \$1,090,273  | 1.10                 | Indian Wells  |
| Shafter                 | KER060407             |                     | LOCAL STREETS AND ROADS RESURFACING, RECONSTRUCTION OR REHABILITATION AT VARIOUS LOCATIONS (NON-CAPACITY PROJECTS ONLY)  | \$593,018    | 1.10                 | San Joaquin   |
| Taft                    | KER060408             |                     | LOCAL STREETS AND ROADS RESURFACING, RECONSTRUCTION OR REHABILITATION AT VARIOUS LOCATIONS (NON-CAPACITY PROJECTS ONLY)  | \$306,060    | 1.10                 | San Joaquin   |
| Tehachapi               | KER060409             |                     | LOCAL STREETS AND ROADS RESURFACING, RECONSTRUCTION OR REHABILITATION AT VARIOUS LOCATIONS (NON-CAPACITY PROJECTS ONLY)  | \$480,063    | 1.10                 | Mojave Desert |
| Wasco                   | KER060410             |                     | LOCAL STREETS AND ROADS RESURFACING, RECONSTRUCTION OR REHABILITATION AT VARIOUS LOCATIONS (NON-CAPACITY PROJECTS ONLY)  | \$769,000    | 1.10                 | San Joaquin   |
| Kern Co.                | KER060411             |                     | LOCAL STREETS AND ROADS RESURFACING, RECONSTRUCTION OR REHABILITATION AT VARIOUS LOCATIONS (NON-CAPACITY PROJECTS ONLY)  | \$11,662,747 | 1.10                 | various       |
| KCOG                    | KER060412             |                     | REGIONAL TRAFFIC COUNT PROGRAM   | \$270,000    | 1.10                 | various       |
| Various                 | KER060601             |                     | AT VARIOUS LOCATIONS, HIGHWAY BRIDGE REPLACEMENT AND REHAB. (HBP) PROJECTS. NON-CAPACITY PROJECTS ONLY. (40 CFR TABLES 2&3) (INCLUDES SEISMIC RETROFIT)                                | \$14,509,000 | 1.19                 | various       |
| Various                 | KER060602             |                     | AT VARIOUS LOCATIONS, 130-RAILROAD GRADE CROSSING PROTECTION PROJECTS. NON-CAPACITY INCREASING PROJECTS ONLY. (40 CFR TABLES 2&3)  | \$675,000    | 1.01                 | various       |
| State                   | KER060603             |                     | AT VARIOUS LOCATIONS, STATE HIGHWAY PROJECTS TO REPAIR DAMAGE CAUSED BY NATURAL DISASTERS, CIVIL UNREST, OR TERRORIST ACTS. NON-CAPACITY INCREASING PROJECTS ONLY. (40 CFR TABLES 2&3) | \$150,000    | 1.12                 | various       |
| State                   | KER060201             |                     | SHOPP LUMP SUM - IN KERN COUNTY BRIDGE PRESERVATION AT VARIOUS LOCATIONS (NON-CAPACITY PROJECTS ONLY) (40 CFR TABLES 2&3)  | \$19,881,000 | 1.09                 | Various       |
| State                   | KER060202             |                     | SHOPP LUMP SUM - IN KERN COUNTY COLLISION REDUCTION AT VARIOUS LOCATIONS (NON-CAPACITY PROJECTS ONLY) (40 CFR TABLES 2&3)  | \$10,795,000 | 1.09                 | Various       |
| State                   | KER060203             |                     | SHOPP LUMP SUM - IN KERN COUNTY ROADSIDE PRESERVATION AT VARIOUS LOCATIONS (NON-CAPACITY PROJECTS ONLY) (40 CFR TABLES 2&3)  | \$40,840,000 | 1.09                 | Various       |
| State                   | KER060204             |                     | SHOPP LUMP SUM - IN KERN COUNTY ROADWAY PRESERVATION AT VARIOUS LOCATIONS (NON-CAPACITY PROJECTS ONLY) (40 CFR TABLES 2&3)   | \$66,787,000 | 1.09                 | Various       |
| Delano                  | KER060502             |                     | PURCHASE THREE MODIFIED RAISED TOP HANDICAPPED VANS  | \$114,000    | 2.10                 | San Joaquin   |
| GET                     | KER060503             |                     | PURCHASE SEVENTEEN 35 FT CNG AND TWO 35 FT DIESEL REPLACEMENT BUSES  | \$7,600,000  | 2.10                 | San Joaquin   |
| GET                     | KER060504             |                     | PURCHASE NINE REPLACEMENT PARATRANSIT VEHICLES   | \$720,000    | 2.10                 | San Joaquin   |
| GET                     | KER060505             |                     | PURCHASE FIVE REPLACEMENT PARATRANSIT VEHICLES   | \$400,000    | 2.10                 | San Joaquin   |
| Kern Co.                | KER060506             |                     | PURCHASE SIX TYPE II DIESEL REPLACEMENT MINI BUSES   | \$560,730    | 2.10                 | various       |
| Kern Co.                | KER060507             |                     | PURCHASE SIX TYPE II DIESEL REPLACEMENT MINI BUSES   | \$560,730    | 2.10                 | various       |
| McFarland               | KER060508             |                     | PURCHASE AND INSTALL THREE BUS SHELTERS AT VARIOUS LOCATIONS   | \$15,000     | 2.07                 | San Joaquin   |
| Delano                  | KER060512             |                     | INSTALL A SECOND COMPRESSOR FOR EXISTING CNG FUELING STATION   | \$101,660    | 2.04                 | San Joaquin   |
| KCSS                    | KER060510             |                     | PURCHASE FOUR REPLACEMENT CNG SPECIAL EDUCATION SCHOOL BUSES (PARTNERSHIP PROGRAM)   | \$680,000    | 2.10                 | San Joaquin   |
| Kern Co.                | KER010101             |                     | NEAR SHAFTER: ON 7TH STANDARD RD FROM SR 99 TO COFFEE RD; INTERCHANGE UPGRADE AT SR 99 AND GRADE SEPARATION  | \$19,500,000 | 5.04                 | San Joaquin   |

| Jurisdiction/<br>Agency | TIP/RTP<br>Project ID | CTIPs<br>Project ID | Description  | Est. Cost    | CTIPs<br>Exempt Code | Air Basins   |
|-------------------------|-----------------------|---------------------|--|--------------|----------------------|--------------|
| State                   | KER010103             |                     | NEAR RIDGECREST: REDROCK INYOKERN RD TO SR 178; CONVERT 2-LANE CONVENTIONAL HIGHWAY TO 4-LANE EXPRESSWAY WITH CONTROLLED ACCESS (ENVIRONMENTAL ONLY)                         | \$3,810,000  | 4.05                 | Indian Wells |
| KCOG                    | KER060101             |                     | PLANNING, PROGRAMMING AND MONITORING   | \$1,093,000  | 4.01                 | various      |
| State                   | KER010104             |                     | NEAR RIDGECREST: FROM CHINA LAKE BLVD TO SR 178; CONVERT TWO-LANE CONVENTIONAL HIGHWAY TO FOUR-LANE EXPRESSWAY (ENVIRONMENTAL ONLY) (RIP KERN 10%/INYO 40%/MONO 10%;IIP 40%) | \$2,000,000  | 4.05                 | Indian Wells |
| State                   | KER010105             |                     | IN SAN BERNARDINO COUNTY: I-15 TO FARMINGTON RD; WIDENING (KERN RIP \$2 MILLION) (ENVIRONMENTAL ONLY)  | \$14,000,000 | 4.05                 | Outside Kern |
| Ridgecrest              | KER010106             |                     | IN RIDGECREST: ON WEST RIDGECREST BLVD. FROM MAHAN STREET TO CHINA LAKE BLVD; RECONSTRUCT AND WIDEN ROAD TO FOUR LANES (ENVIRONMENTAL ONLY)                                  | \$1,000,000  | 4.05                 | Indian Wells |
| State                   | KER020103             |                     | IN MONO COUNTY: HIGHPOINT CURVE CORRECTIONS PROJECT; MODIFY ROADWAY ALIGNMENT AND INCREASE RADII OF CURVES (RIP KERN 10%/INYO 10%/MONO 40%;IIP 40%)                          | \$1,312,000  | 5.03                 | Outside Kern |
| Bakersfield             | KER020604             |                     | IN BAKERSFIELD: HAGEMAN ROAD EASTERLY ACROSS STATE ROUTE 99 AND CONNECT WITH STATE ROUTE 204   | \$2,444,341  | 4.05                 | San Joaquin  |
| Bakersfield             | KER020605             |                     | IN BAKERSFIELD: 24TH STREET (SR178) AND OAK STREET; CONSTRUCT A GRADE SEPARATED INTERCHANGE AND EXTEND OAK ST TO SILLECT AVE   | \$5,288,682  | 4.05                 | San Joaquin  |
| KCOG                    | KER040101             |                     | PLANNING, PROGRAMMING AND MONITORING   | \$359,000    | 4.01                 | various      |
| State                   | KER040107             |                     | TREE PLANTING  | \$594,000    | 4.09                 | San Joaquin  |
| Kern Co.                | KER040108             |                     | LAVAL ROAD AT I-5 INTERCHANGE UPGRADE  | \$9,520,000  |                      | San Joaquin  |
| State                   | KER060205             |                     | SHOPP LUMP SUM IN KERN COUNTY – REHABILITATION AND TRANSPORTATION ENHNACEMENT AT VARIOUS LOCATIONS (NON-CAPACITY PROJECTS ONLY)  | \$433,000    | 4.05                 | San Joaquin  |
| Bakersfield             | KER050101             |                     | NORTH OF BAKERSFIELD: ON 7TH STANDARD RD FROM SR43 TO SANTA FE WAY; WIDEN TO 4/6 LANE EXPRESSWAY   | \$5,625,000  | 4.05                 | San Joaquin  |
| Bakersfield             | KER050102             |                     | IN BAKERSFIELD: WEST BELTWAY FROM SR119 TO 7TH STANDARD RD; CONSTRUCT 4/6 LANE FREEWAY   | \$15,000,000 | 4.05                 | San Joaquin  |
| Bakersfield             | KER050103             |                     | IN BAKERSFIELD: SOUTH BELTWAY FROM I-5 TO SR58; ROUTE ADOPTION   | \$12,500,000 | 4.05                 | San Joaquin  |
| Bakersfield             | KER050104             |                     | IN BAKERSFIELD: CENTENNIAL CORRIDOR FROM OAK STREET TO SR178; CONSTRUCT NEW 8 LANE FREEWAY   | \$42,358,523 | 4.05                 | San Joaquin  |
| Bakersfield             | KER050105             |                     | IN BAKERSFIELD: SR178 FROM SR99 TO CENTENNIAL CORRIDOR; CONSTRUCT NEW 8 LANE FREEWAY   | \$11,860,386 | 4.05                 | San Joaquin  |
| Bakersfield             | KER050106             |                     | IN BAKERSFIELD: SR178 AT MORNING DRIVE; CONSTRUCT NEW 4/6 LANE FREEWAY WITH INTERCHANGE  | \$2,033,209  | 4.05                 | San Joaquin  |
| Bakersfield             | KER050107             |                     | IN BAKERSFIELD: SR178 FROM VINELAND ROAD TO RANCHERIA ROAD; CONSTRUCT NEW 4/6 LANE FREEWAY   | \$12,876,991 | 4.05                 | San Joaquin  |
| Bakersfield             | KER050108             |                     | IN BAKERSFIELD: SR 178 FROM MESA MARIN TO RANCHERIA ROAD; WIDEN EXISTING HIGHWAY TO 4 LANES WITH SHOULDERS   | \$2,033,209  | 4.05                 | San Joaquin  |
| Bakersfield             | KER050109             |                     | IN BAKERSFIELD: ROSEDALE HWY (SR58) FROM SR 43 TO SR 99; WIDEN TO 4/6 LANES  | \$5,083,023  | 4.05                 | San Joaquin  |
| Bakersfield             | KER050110             |                     | IN BAKERSFIELD: 24TH STREET (SR178) FROM ELM STREET TO D STREET; WIDEN TO 4/6 LANES ON 6 LANE RW   | \$1,694,341  | 4.05                 | San Joaquin  |
| State                   | KER990102             |                     | NEAR TAFT: FROM CHERRY AVE. TO TUPMAN RD; WIDEN TO FOUR LANE EXPRESSWAY (ENVIRONMENTAL ONLY)   | \$2,317,000  | 4.05                 | San Joaquin  |

| Jurisdiction/<br>Agency | TIP/RTP<br>Project ID | CTIPs<br>Project ID | Description  | Est. Cost    | CTIPs<br>Exempt Code | Air Basins  |
|-------------------------|-----------------------|---------------------|--|--------------|----------------------|-------------|
| State                   | KER990104             |                     | NEAR ARVIN: FROM ROUTE 223 TO PANAMA LANE; WIDEN TO FOUR LANES (ENVIRONMENTAL ONLY)  | \$614,000    | 4.05                 | San Joaquin |
| State                   | KER990105             |                     | IN WASCO FROM ROUTE 43 NORTH TO JUMPER AVE. - GRADE SEPARATION; WIDEN TO FOUR LANES; SIGNALIZATION; INTERSECTION IMPROVEMENTS  | \$2,070,000  | 4.05                 | San Joaquin |
| State                   | KER990106             |                     | NEAR TEHACHAPI: AT DENNISON RD; CONSTRUCT NEW INTERCHANGE (RAMPS)(ENVIRONMENTAL ONLY)  | \$2,535,000  | 4.05                 | San Joaquin |
| Bakersfield             | KER990112             |                     | IN BAKERSFIELD FROM ROUTE 99 EAST - CENTENNIAL TRANSPORTATION CORRIDOR - METROPOLITAN BAKERSFIELD TRANSPORTATION SYSTEMS STUDY | \$19,687,500 | 4.05                 | San Joaquin |

**Appendix B – Transportation Project Listing – Regionally Significant Projects**

| Jurisdiction/<br>Agency | Air<br>basin | Description         |                    |                   |                  | Funding<br>Source | Project ID | Est. Cost    | Analysis Year (traffic lanes open) |   |    |    |    |    |    |
|-------------------------|--------------|---------------------|--------------------|-------------------|------------------|-------------------|------------|--------------|------------------------------------|---|----|----|----|----|----|
|                         |              | Facility Name/Route | Project Limits     |                   | Improvement Type |                   |            |              | 8                                  | 9 | 10 | 13 | 15 | 20 | 30 |
| Caltrans                | IWV          | SR14                | SR178              | REDROCK RANDSBURG | Widen Lanes      | RTP04             |            |              | 1                                  | 1 | 1  | 2  | 2  | 2  | 2  |
| Caltrans                | IWV          | SR14                | INYOKERN           | SR178             | Widen Lanes      | RTP04             |            |              | 1                                  | 1 | 1  | 2  | 2  | 2  | 2  |
| Caltrans                | IWV          | SR14                | SR395              | INYOKERN          | Widen Lanes      | RTP04             |            |              | 1                                  | 1 | 1  | 2  | 2  | 2  | 2  |
| Caltrans                | IWV          | SR395               | SR14               | INYOKERN          | Widen Lanes      | LOCAL             |            |              | 1                                  | 1 | 1  | 1  | 1  | 2  | 2  |
| Caltrans                | IWV          | SR395               | INYOKERN           | BOWMAN RD         | Widen Lanes      | RTP04             |            |              | 1                                  | 1 | 1  | 1  | 1  | 2  | 2  |
| Caltrans                | IWV          | SR395               | BOWMAN RD          | CHINA LAKE        | Widen Lanes      | RTP04             |            |              | 1                                  | 1 | 1  | 1  | 1  | 2  | 2  |
| Kern County             | MD           | 90TH WEST           | ROSAMOND           | HOLIDAY           | Widen Lanes      | LOCAL             |            |              | 1                                  | 1 | 1  | 1  | 1  | 1  | 2  |
| Kern County             | MD           | 90TH WEST           | HOLIDAY            | GASKELL           | Widen Lanes      | LOCAL             |            |              | 1                                  | 1 | 1  | 1  | 1  | 1  | 2  |
| Kern County             | MD           | 90TH WEST           | GASKELL            | A AVE             | Widen Lanes      | LOCAL             |            |              | 1                                  | 1 | 1  | 1  | 1  | 1  | 2  |
| California City         | MD           | CAL CITY BL         | SR14               | RAILROAD          | Widen Lanes      | RTP04             |            |              | 1                                  | 1 | 1  | 2  | 2  | 2  | 2  |
| Kern County             | MD           | ROSAMOND BL         | 60TH ST            | 50TH ST           | Widen Lanes      | LOCAL             |            |              | 1                                  | 1 | 1  | 1  | 2  | 2  | 2  |
| Kern County             | MD           | ROSAMOND BL         | 50TH ST            | 40TH ST           | Widen Lanes      | LOCAL             |            |              | 1                                  | 1 | 1  | 1  | 3  | 3  | 3  |
| Kern County             | MD           | ROSAMOND BL         | 40TH ST            | 30TH ST           | Widen Lanes      | LOCAL             |            |              | 1                                  | 1 | 1  | 3  | 3  | 3  | 3  |
| Kern County             | MD           | ROSAMOND BL         | 30TH ST            | 25TH ST           | Widen Lanes      | LOCAL             |            |              | 2                                  | 2 | 2  | 3  | 3  | 3  | 3  |
| Kern County             | MD           | ROSAMOND BL         | 25TH ST            | SR14              | Widen Lanes      | LOCAL             |            |              | 2                                  | 2 | 2  | 2  | 3  | 3  | 3  |
| Kern County             | MD           | ROSAMOND BL         | SR14               | 20TH ST           | Widen Lanes      | LOCAL             |            |              | 2                                  | 2 | 2  | 2  | 3  | 3  | 3  |
| Kern County             | MD           | ROSAMOND BL         | 20TH ST            | SIERRA HWY        | Widen Lanes      | LOCAL             |            |              | 2                                  | 2 | 2  | 2  | 3  | 3  | 3  |
| Kern County             | MD           | ROSAMOND BL         | SIERRA HWY         | 15TH ST           | Widen Lanes      | LOCAL             |            |              | 2                                  | 2 | 2  | 2  | 3  | 3  | 3  |
| Kern County             | MD           | ROSAMOND BL         | 15TH ST            | 10TH ST           | Widen Lanes      | LOCAL             |            |              | 2                                  | 2 | 2  | 2  | 3  | 3  | 3  |
| Caltrans                | MD           | SR14                | SR58               | SR58BYPASS        | Widen Lanes      | RTP04/TIP06       | KER990108  | \$59,898,000 | 2                                  | 2 | 2  | 2  | 2  | 2  | 2  |
| Caltrans                | MD           | SR14                | CALIFORNIA CITY    | SR58BYPASS        | Widen Lanes      | RTP04/TIP06       | KER990108  | \$59,898,000 | 2                                  | 2 | 2  | 2  | 2  | 2  | 2  |
| Caltrans                | MD           | SR14                | JAWBONE CANYON     | CALIFORNIA CITY   | Widen Lanes      | RTP04/TIP06       | KER990108  | \$59,898,000 | 2                                  | 2 | 2  | 2  | 2  | 2  | 2  |
| Caltrans                | MD           | SR58                | WOODFORD TEHACHAPI | SR202             | Widen Lanes      | LOCAL             |            |              | 2                                  | 2 | 2  | 2  | 2  | 2  | 3  |

| Jurisdiction/<br>Agency | Air<br>basin | Description         |                |                    |                  | Funding<br>Source | Project ID | Est. Cost    | Analysis Year (traffic lanes open) |   |    |    |    |    |    |
|-------------------------|--------------|---------------------|----------------|--------------------|------------------|-------------------|------------|--------------|------------------------------------|---|----|----|----|----|----|
|                         |              | Facility Name/Route | Project Limits |                    | Improvement Type |                   |            |              | 8                                  | 9 | 10 | 13 | 15 | 20 | 30 |
| Caltrans                | MD           | SR58                | DENNISON       | DENNISON           | New interchange  | RTP04             |            | 1            | 1                                  | 1 | 1  | 1  | 1  | 1  | 1  |
| Caltrans                | MD           | SR58                | HART FLAT RD   | WOODFORD TEHACHAPI | Widen Lanes      | SHOPP             |            | 2            | 2                                  | 2 | 2  | 2  | 2  | 2  | 3  |
| Caltrans                | MD           | VALLEY BL           | TUCKER         | REEVES             | Widen Lanes      | LOCAL             |            | 1            | 1                                  | 1 | 2  | 2  | 2  | 2  | 2  |
| Caltrans                | MD           | VALLEY BL           | REEVES         | GOLDEN HILLS       | Widen Lanes      | LOCAL             |            | 1            | 1                                  | 1 | 2  | 2  | 2  | 2  | 2  |
| Kern County             | SJV          | 7TH_STANDAR         | WINGS WAY      | AIRPORT            | Widen Lanes      | LOCAL             |            | 1            | 1                                  | 1 | 1  | 1  | 2  | 2  | 2  |
| Kern County             | SJV          | 7TH_STANDAR         | AIRPORT        | MC CRAY            | Widen Lanes      | LOCAL             |            | 2            | 2                                  | 2 | 2  | 2  | 2  | 2  | 2  |
| Kern County             | SJV          | 7TH_STANDAR         | ZERKER         | ALLEN              | Widen Lanes      | RTP04/TIP06       | KER990103  | \$23,475,000 | 1                                  | 2 | 2  | 2  | 2  | 2  | 2  |
| Kern County             | SJV          | 7TH_STANDAR         | ALLEN          | OLD FARM           | Widen Lanes      | RTP04/TIP06       | KER990103  | \$23,475,000 | 1                                  | 2 | 2  | 2  | 2  | 2  | 2  |
| Kern County             | SJV          | 7TH_STANDAR         | OLD FARM       | JEWETTA            | Widen Lanes      | RTP04/TIP06       | KER990103  | \$23,475,000 | 1                                  | 2 | 2  | 2  | 2  | 2  | 2  |
| Kern County             | SJV          | 7TH_STANDAR         | VERDUGO        | CALLOWAY           | Widen Lanes      | RTP04/TIP06       | KER990103  | \$23,475,000 | 1                                  | 2 | 2  | 2  | 2  | 2  | 2  |
| Kern County             | SJV          | 7TH_STANDAR         | JEWETTA        | VERDUGO            | Widen Lanes      | RTP04/TIP06       | KER990103  | \$23,475,000 | 1                                  | 2 | 2  | 2  | 2  | 2  | 2  |
| Kern County             | SJV          | 7TH_STANDAR         | CALLOWAY       | RIVERLAKES         | Widen Lanes      | RTP04/TIP06       | KER990103  | \$23,475,000 | 1                                  | 2 | 2  | 2  | 2  | 2  | 2  |
| Kern County             | SJV          | 7TH_STANDAR         | RIVERLAKES     | COFFEE             | Widen Lanes      | RTP04/TIP06       | KER990103  | \$23,475,000 | 1                                  | 2 | 2  | 2  | 2  | 2  | 2  |
| Kern County             | SJV          | 7TH_STANDAR         | COFFEE         | SR99               | Widen Lanes      | RTP04/TIP06       | KER010101  | \$19,500,000 | 2                                  | 2 | 2  | 2  | 2  | 2  | 2  |
| Kern County             | SJV          | 7TH_STANDAR         | SR99           | SR99               | Interchange      | RTP04/TIP06       | KER010101  | \$19,500,000 | 2                                  | 2 | 2  | 2  | 2  | 2  | 2  |
| Kern County             | SJV          | 7TH_STANDAR         | SR99           | SR65               | Widen Lanes      | RTP04/TIP07       | KER010108  | \$2,665,000  | 2                                  | 2 | 2  | 2  | 2  | 2  | 2  |
| Kern County             | SJV          | 7TH_STANDAR         | SR65           | PEGASUS            | Widen Lanes      | RTP04/TIP08       | KER010108  | \$2,665,000  | 2                                  | 2 | 2  | 2  | 2  | 2  | 2  |
| Kern County             | SJV          | 7TH_STANDAR         | PEGASUS        | WINGS WAY          | Widen Lanes      | RTP04/TIP09       | KER010108  | \$2,665,000  | 2                                  | 2 | 2  | 2  | 2  | 2  | 2  |
| Kern County             | SJV          | AIRPORT             | DECATUR        | NORRIS             | Widen Lanes      | LOCAL             |            | 2            | 2                                  | 2 | 2  | 2  | 3  | 3  |    |
| Kern County             | SJV          | AIRPORT             | ROBERTS LN     | DECATUR            | Widen Lanes      | LOCAL             |            | 2            | 2                                  | 2 | 3  | 3  | 3  | 3  |    |
| Bakersfield             | SJV          | AIRPORT             | ROBERTS LN     | SR99               | Widen Lanes      | LOCAL             |            | 2            | 2                                  | 2 | 3  | 3  | 3  | 3  |    |
| Bakersfield             | SJV          | ALFRED HARRELL      | FAIRFAX        | MORNING DR         | Widen Lanes      | LOCAL             |            | 1            | 1                                  | 1 | 1  | 1  | 2  | 2  |    |
| Bakersfield             | SJV          | ALFRED HARRELL      | MORNING DR     | LAKE MING          | Widen Lanes      | LOCAL             |            | 1            | 1                                  | 1 | 1  | 1  | 2  | 2  |    |
| Bakersfield             | SJV          | ALFRED HARRELL      | LAKE MING      | SR178              | Widen Lanes      | LOCAL             |            | 1            | 1                                  | 1 | 1  | 1  | 2  | 2  |    |

| Jurisdiction/<br>Agency | Air<br>basin | Description<br>Facility Name/Route<br>Project Limits |                  |                  | Improvement Type | Funding<br>Source | Project ID | Est. Cost | Analysis Year (traffic lanes open) |   |    |    |    |    |    |
|-------------------------|--------------|--|------------------|------------------|------------------|-------------------|------------|-----------|------------------------------------|---|----|----|----|----|----|
|                         |              |  |                  |                  |                  |                   |            |           | 8                                  | 9 | 10 | 13 | 15 | 20 | 30 |
| Bakersfield             | SJV          | ALFRED HARRELL                                       | COMANCHE         | PALADINO         | Widen Lanes      | LOCAL             |            | 1         | 1                                  | 1 | 1  | 1  | 1  | 2  | 2  |
| Bakersfield             | SJV          | ALFRED HARRELL                                       | PALADINO         | SR178            | Widen Lanes      | LOCAL             |            | 1         | 1                                  | 1 | 1  | 1  | 1  | 2  | 2  |
| Kern County             | SJV          | ALLEN  | HAGEMAN          | MEACHAM          | Widen Lanes      | LOCAL             |            | 1         | 1                                  | 1 | 1  | 1  | 1  | 1  | 2  |
| Kern County             | SJV          | ALLEN  | MEACHAM          | SR58             | Widen Lanes      | LOCAL             |            | 1         | 1                                  | 1 | 1  | 1  | 1  | 1  | 2  |
| Bakersfield             | SJV          | CALLOWAY   | SNOW             | NORRIS           | Widen Lanes      | LOCAL             |            | 1         | 1                                  | 3 | 3  | 3  | 3  | 3  | 3  |
| Bakersfield             | SJV          | CALLOWAY   | NORRIS           | OLIVE            | Widen Lanes      | LOCAL             |            | 1         | 1                                  | 3 | 3  | 3  | 3  | 3  | 3  |
| Bakersfield             | SJV          | CALLOWAY   | OLIVE            | NORIEGA          | Widen Lanes      | LOCAL             |            | 2         | 2                                  | 3 | 3  | 3  | 3  | 3  | 3  |
| Bakersfield             | SJV          | CALLOWAY   | NORIEGA          | HAGEMAN          | Widen Lanes      | LOCAL             |            | 2         | 2                                  | 3 | 3  | 3  | 3  | 3  | 3  |
| Bakersfield             | SJV          | CALLOWAY   | HAGEMAN          | MEACHAM          | Widen Lanes      | LOCAL             |            | 2         | 2                                  | 3 | 3  | 3  | 3  | 3  | 3  |
| Bakersfield             | SJV          | CALLOWAY   | MEACHAM          | SR58             | Widen Lanes      | LOCAL             |            | 2         | 2                                  | 3 | 3  | 3  | 3  | 3  | 3  |
| Bakersfield             | SJV          | CALLOWAY   | BRIMHALL         | WESTSIDE PARKWAY | Widen Lanes      | LOCAL             |            | 2         | 2                                  | 3 | 3  | 3  | 3  | 3  | 3  |
| Bakersfield             | SJV          | CALLOWAY   | WESTSIDE PARKWAY | STOCKDALE        | Widen Lanes      | LOCAL             |            | 2         | 2                                  | 3 | 3  | 3  | 3  | 3  | 3  |
| Kern County             | SJV          | CALLOWAY   | 7TH STANDARD     | ETCHART          | Widen Lanes      | LOCAL             |            | 1         | 1                                  | 1 | 2  | 2  | 2  | 2  | 2  |
| Kern County             | SJV          | CALLOWAY   | ETCHART          | SNOW             | Widen Lanes      | LOCAL             |            | 1         | 1                                  | 1 | 2  | 2  | 2  | 2  | 2  |
| Kern County             | SJV          | CALLOWAY   | SR58             | PALM             | Widen Lanes      | LOCAL             |            | 2         | 2                                  | 3 | 3  | 3  | 3  | 3  | 3  |
| Kern County             | SJV          | CALLOWAY   | PALM             | BRIMHALL         | Widen Lanes      | LOCAL             |            | 2         | 2                                  | 3 | 3  | 3  | 3  | 3  | 3  |
| Kern County             | SJV          | CHINA GRADE  | MANOR            | MONTE CRISTO     | Widen Lanes      | LOCAL             |            | 1         | 1                                  | 1 | 1  | 1  | 1  | 2  | 2  |
| Kern County             | SJV          | CHINA GRADE  | MONTE CRISTO     | CHINA GRADE LOOP | Widen Lanes      | LOCAL             |            | 1         | 1                                  | 1 | 1  | 1  | 1  | 2  | 2  |
| Kern County             | SJV          | CHINA GRADE  | CHINA GRADE LOOP | ALFRED HARRELL   | Widen Lanes      | LOCAL             |            | 1         | 1                                  | 1 | 1  | 1  | 1  | 2  | 2  |
| Bakersfield             | SJV          | COFFEE   | NORRIS           | OLIVE            | Widen Lanes      | LOCAL             |            | 2         | 2                                  | 2 | 2  | 2  | 2  | 2  | 3  |
| Kern County             | SJV          | COFFEE   | 7TH STANDARD     | ETCHART          | Widen Lanes      | LOCAL             |            | 1         | 1                                  | 1 | 2  | 2  | 3  | 3  | 3  |
| Kern County             | SJV          | COFFEE   | ETCHART          | SNOW             | Widen Lanes      | LOCAL             |            | 1         | 1                                  | 1 | 2  | 2  | 3  | 3  | 3  |
| Kern County             | SJV          | COFFEE   | SNOW             | NORRIS           | Widen Lanes      | LOCAL             |            | 1         | 1                                  | 1 | 2  | 2  | 3  | 3  | 3  |
| Bakersfield             | SJV          | DOWNTOWN PARKWAY                                     | SR 99            | F ST             | New Freeway      | RTP04             |            | 0         | 0                                  | 0 | 3  | 3  | 3  | 3  | 3  |

| Jurisdiction/<br>Agency | Air<br>basin | Description         |                |             |                      | Funding<br>Source | Project ID | Est. Cost   | Analysis Year (traffic lanes open) |   |    |    |    |    |    |
|-------------------------|--------------|---------------------|----------------|-------------|----------------------|-------------------|------------|-------------|------------------------------------|---|----|----|----|----|----|
|                         |              | Facility Name/Route | Project Limits |             | Improvement Type     |                   |            |             | 8                                  | 9 | 10 | 13 | 15 | 20 | 30 |
| Bakersfield             | SJV          | DOWNTOWN PARKWAY    | F ST           | CHESTER AVE | New Freeway          | RTP04             |            | 0           | 0                                  | 0 | 0  | 3  | 3  | 3  |    |
| Bakersfield             | SJV          | DOWNTOWN PARKWAY    | CHESTER AVE    | Q ST        | New Freeway/Frontage | RTP04             |            | 0           | 0                                  | 0 | 0  | 3  | 3  | 6  |    |
| Bakersfield             | SJV          | DOWNTOWN PARKWAY    | Q ST           | SR 178      | New Freeway          | RTP04             |            | 0           | 0                                  | 0 | 0  | 0  | 3  | 3  |    |
| Caltrans                | SJV          | FREMONT             | 11TH AVE       | SR155       | Widen Lanes          | LOCAL             |            | 3           | 3                                  | 3 | 3  | 3  | 3  | 4  |    |
| Bakersfield             | SJV          | GOSFORD             | SR119          | MC KEE      | Widen Lanes          | LOCAL             |            | 1           | 1                                  | 1 | 1  | 1  | 2  | 3  |    |
| Bakersfield             | SJV          | GOSFORD             | MC KEE         | HOSKING     | Widen Lanes          | LOCAL             |            | 1           | 1                                  | 1 | 1  | 1  | 2  | 3  |    |
| Bakersfield             | SJV          | GOSFORD             | BERKSHIRE      | PANAMA LN   | Widen Lanes          | LOCAL             |            | 1           | 1                                  | 1 | 1  | 1  | 2  | 3  |    |
| Bakersfield             | SJV          | GOSFORD             | PANAMA LN      | HARRIS      | Widen Lanes          | LOCAL             |            | 2           | 2                                  | 2 | 2  | 2  | 2  | 3  |    |
| Kern County             | SJV          | GOSFORD             | HOSKING        | BERKSHIRE   | Widen Lanes          | LOCAL             |            | 1           | 1                                  | 1 | 1  | 1  | 2  | 3  |    |
| Bakersfield             | SJV          | HAGEMAN             | ALLEN          | OLD FARM    | Widen Lanes          | LOCAL             |            | 1           | 1                                  | 3 | 3  | 3  | 3  | 3  |    |
| Bakersfield             | SJV          | HAGEMAN             | OLD FARM       | JEWETTA     | Widen Lanes          | LOCAL             |            | 2           | 2                                  | 3 | 3  | 3  | 3  | 3  |    |
| Bakersfield             | SJV          | HAGEMAN             | JEWETTA        | VERDUGO     | Widen Lanes          | LOCAL             |            | 2           | 2                                  | 3 | 3  | 3  | 3  | 3  |    |
| Bakersfield             | SJV          | HAGEMAN             | FRUITVALE      | MOHAWK      | Widen Lanes          | LOCAL             |            | 2           | 2                                  | 3 | 3  | 3  | 3  | 3  |    |
| Kern County             | SJV          | HAGEMAN             | SANTA FE       | ALLEN       | Widen Lanes          | LOCAL             |            | 1           | 1                                  | 3 | 3  | 3  | 3  | 3  |    |
| Bakersfield             | SJV          | HAGEMAN             | MOHAWK         | SR 99       | New road/interchange | RTP04             |            | 0           | 3                                  | 3 | 3  | 3  | 3  | 3  |    |
| Caltrans                | SJV          | I-5                 | LAVAL          | LAVAL       | Interchange          | RTP04/TIP06       | KER040108  | \$9,520,000 | 2                                  | 2 | 2  | 2  | 2  | 2  |    |
| Caltrans                | SJV          | I-5                 | COUNTY LINE    | LAVAL       | Widen Lanes          | SHOPP             |            | 3           | 3                                  | 3 | 3  | 3  | 3  | 4  |    |
| Caltrans                | SJV          | I-5                 | LAVAL          | SR99        | Widen Lanes          | SHOPP             |            | 3           | 3                                  | 3 | 3  | 3  | 3  | 4  |    |
| Bakersfield             | SJV          | OLD_RIVER           | PANAMA LN      | HARRIS      | Widen Lanes          | LOCAL             |            | 2           | 2                                  | 2 | 2  | 2  | 2  | 3  |    |
| Bakersfield             | SJV          | OLD_RIVER           | HARRIS         | PACHECO     | Widen Lanes          | LOCAL             |            | 2           | 2                                  | 2 | 2  | 2  | 2  | 3  |    |
| Bakersfield             | SJV          | OLD_RIVER           | PACHECO        | CAMPUS PARK | Widen Lanes          | LOCAL             |            | 2           | 2                                  | 2 | 3  | 3  | 3  | 3  |    |
| Bakersfield             | SJV          | OLD_RIVER           | CAMPUS PARK    | WHITE LN    | Widen Lanes          | LOCAL             |            | 2           | 2                                  | 2 | 3  | 3  | 3  | 3  |    |
| Kern County             | SJV          | OLD_RIVER           | HOSKING        | BERKSHIRE   | Widen Lanes          | LOCAL             |            | 1           | 1                                  | 1 | 1  | 1  | 2  | 2  |    |
| Kern County             | SJV          | OLD_RIVER           | BERKSHIRE      | PANAMA LN   | Widen Lanes          | LOCAL             |            | 1           | 1                                  | 1 | 1  | 1  | 2  | 2  |    |

| Jurisdiction/<br>Agency | Air<br>basin | Description         |                  |                    |                  | Funding<br>Source | Project ID | Est. Cost | Analysis Year (traffic lanes open) |   |    |    |    |    |    |
|-------------------------|--------------|---------------------|------------------|--------------------|------------------|-------------------|------------|-----------|------------------------------------|---|----|----|----|----|----|
|                         |              | Facility Name/Route | Project Limits   |                    | Improvement Type |                   |            |           | 8                                  | 9 | 10 | 13 | 15 | 20 | 30 |
| Bakersfield             | SJV          | OSWELL              | SR178            | BERNARD            | Widen Lanes      | LOCAL             |            |           | 2                                  | 2 | 2  | 2  | 2  | 2  | 3  |
| Kern County             | SJV          | OSWELL              | BERNARD          | COLLEGE            | Widen Lanes      | LOCAL             |            |           | 2                                  | 2 | 2  | 2  | 2  | 2  | 3  |
| Kern County             | SJV          | OSWELL              | COLLEGE          | NILES              | Widen Lanes      | LOCAL             |            |           | 2                                  | 2 | 2  | 2  | 2  | 2  | 3  |
| Kern County             | SJV          | OSWELL              | NILES            | KENTUCKY           | Widen Lanes      | LOCAL             |            |           | 2                                  | 2 | 2  | 2  | 2  | 2  | 3  |
| Kern County             | SJV          | OSWELL              | KENTUCKY         | CALIFORNIA         | Widen Lanes      | LOCAL             |            |           | 2                                  | 2 | 2  | 2  | 2  | 2  | 3  |
| Kern County             | SJV          | OSWELL              | CALIFORNIA       | EDISON HWY         | Widen Lanes      | LOCAL             |            |           | 2                                  | 2 | 2  | 2  | 2  | 2  | 3  |
| Kern County             | SJV          | OSWELL              | EDISON HWY       | VIRGINIA           | Widen Lanes      | LOCAL             |            |           | 2                                  | 2 | 2  | 2  | 2  | 2  | 3  |
| Kern County             | SJV          | OSWELL              | VIRGINIA         | BRUNDAGE           | Widen Lanes      | LOCAL             |            |           | 2                                  | 2 | 2  | 2  | 2  | 2  | 3  |
| Bakersfield             | SJV          | PANAMA_LN           | H ST             | MONITOR            | Widen Lanes      | LOCAL             |            |           | 2                                  | 2 | 2  | 2  | 2  | 2  | 3  |
| Bakersfield             | SJV          | PANAMA_LN           | MONITOR          | UNION              | Widen Lanes      | LOCAL             |            |           | 1                                  | 1 | 1  | 1  | 1  | 1  | 3  |
| Kern County             | SJV          | PANAMA_LN           | RENFRO           | ALLEN              | Widen Lanes      | LOCAL             |            |           | 0                                  | 0 | 0  | 1  | 1  | 2  | 2  |
| Caltrans                | SJV          | SR119               | BUENA VISTA BLVD | GREEN              | Widen Lanes      | LOCAL             |            |           | 1                                  | 1 | 1  | 1  | 1  | 2  | 2  |
| Caltrans                | SJV          | SR119               | GREEN            | OLD RIVER RD       | Widen Lanes      | LOCAL             |            |           | 1                                  | 1 | 1  | 1  | 1  | 2  | 2  |
| Caltrans                | SJV          | SR119               | OLD RIVER RD     | PROGRESS           | Widen Lanes      | LOCAL             |            |           | 1                                  | 1 | 1  | 1  | 1  | 2  | 2  |
| Caltrans                | SJV          | SR119               | PROGRESS         | GOSFORD            | Widen Lanes      | LOCAL             |            |           | 1                                  | 1 | 1  | 1  | 1  | 2  | 2  |
| Caltrans                | SJV          | SR119               | GOSFORD          | ASHE               | Widen Lanes      | LOCAL             |            |           | 1                                  | 1 | 1  | 1  | 1  | 2  | 2  |
| Caltrans                | SJV          | SR119               | ASHE             | STINE RD           | Widen Lanes      | LOCAL             |            |           | 1                                  | 1 | 1  | 1  | 1  | 2  | 2  |
| Caltrans                | SJV          | SR119               | STINE RD         | VAN HORN           | Widen Lanes      | LOCAL             |            |           | 1                                  | 1 | 1  | 1  | 1  | 2  | 2  |
| Caltrans                | SJV          | SR119               | VAN HORN         | WIBLE RD           | Widen Lanes      | LOCAL             |            |           | 1                                  | 1 | 1  | 1  | 1  | 2  | 2  |
| Caltrans                | SJV          | SR119               | WIBLE RD         | HUGHES LN          | Widen Lanes      | LOCAL             |            |           | 1                                  | 1 | 1  | 1  | 1  | 2  | 2  |
| Caltrans                | SJV          | SR119               | HUGHES           | SR99               | Widen Lanes      | LOCAL             |            |           | 1                                  | 1 | 1  | 1  | 1  | 2  | 2  |
| Caltrans                | SJV          | SR119               | ELK HILLS        | SR43               | Widen Lanes      | RTP04             |            |           | 1                                  | 1 | 1  | 1  | 2  | 2  | 2  |
| Caltrans                | SJV          | SR155               | BROWNING         | BOWMAN RD          | Widen Lanes      | LOCAL             |            |           | 1                                  | 1 | 1  | 1  | 1  | 1  | 2  |
| Caltrans                | SJV          | SR155               | BOWMAN RD        | FAMOSO PORTERVILLE | Widen Lanes      | LOCAL             |            |           | 1                                  | 1 | 1  | 1  | 1  | 1  | 2  |

| Jurisdiction/<br>Agency | Air<br>basin | Description         |                |               |                         | Funding<br>Source | Project ID | Est. Cost    | Analysis Year (traffic lanes open) |   |    |    |    |    |    |
|-------------------------|--------------|---------------------|----------------|---------------|-------------------------|-------------------|------------|--------------|------------------------------------|---|----|----|----|----|----|
|                         |              | Facility Name/Route | Project Limits |               | Improvement Type        |                   |            |              | 8                                  | 9 | 10 | 13 | 15 | 20 | 30 |
| Caltrans                | SJV          | SR178               | OAK            | BEECH         | Widen Lanes/Interchange | RTP04             |            |              | 2                                  | 2 | 2  | 2  | 2  | 3  | 3  |
| Caltrans                | SJV          | SR178               | BEECH          | PINE ST       | Widen Lanes             | RTP04             |            |              | 2                                  | 2 | 2  | 2  | 2  | 3  | 3  |
| Caltrans                | SJV          | SR178               | FAIRFAX        | MORNING DR    | Widen Lanes             | RTP04             |            |              | 2                                  | 2 | 2  | 2  | 2  | 2  | 3  |
| Caltrans                | SJV          | SR178               | MORNING DR     | VINELAND      | Widen Lanes             | RTP04             |            |              | 2                                  | 2 | 2  | 2  | 2  | 2  | 3  |
| Caltrans                | SJV          | SR178               | VINELAND       | SR184         | Widen Lanes             | RTP04             |            |              | 1                                  | 1 | 1  | 2  | 2  | 2  | 2  |
| Caltrans                | SJV          | SR178               | SR184          | COMANCHE      | Widen Lanes             | RTP04             |            |              | 1                                  | 1 | 1  | 2  | 2  | 2  | 2  |
| Caltrans                | SJV          | SR178               | COMANCHE       | MIRAMONTE     | Widen Lanes             | RTP04             |            |              | 1                                  | 1 | 1  | 2  | 2  | 2  | 2  |
| Caltrans                | SJV          | SR178               | MIRAMONTE      | RANCHERIA RD  | Widen Lanes             | RTP04             |            |              | 1                                  | 1 | 1  | 2  | 2  | 2  | 2  |
| Caltrans                | SJV          | SR178               | OSWELL         | FAIRFAX       | Widen Lanes             | RTP04/TIP06       | KER000104  | \$21,747,800 | 2                                  | 2 | 2  | 2  | 2  | 2  | 3  |
| Caltrans                | SJV          | SR184               | MESA MARIN DR  | SR178         | Widen Lanes             | LOCAL             |            |              | 1                                  | 1 | 1  | 1  | 1  | 1  | 2  |
| Caltrans                | SJV          | SR184               | VINELAND       | MESA MARIN DR | Widen Lanes             | LOCAL             |            |              | 1                                  | 1 | 1  | 1  | 1  | 1  | 2  |
| Caltrans                | SJV          | SR184               | MONICA ST      | VINELAND      | Widen Lanes             | LOCAL             |            |              | 1                                  | 1 | 1  | 1  | 1  | 1  | 2  |
| Caltrans                | SJV          | SR184               | SHALANE        | MONICA ST     | Widen Lanes             | LOCAL             |            |              | 1                                  | 1 | 1  | 1  | 1  | 1  | 2  |
| Caltrans                | SJV          | SR184               | MORNING DR     | SHALANE       | Widen Lanes             | LOCAL             |            |              | 1                                  | 1 | 1  | 1  | 1  | 1  | 2  |
| Caltrans                | SJV          | SR184               | NILES          | PIONEER       | Widen Lanes             | LOCAL             |            |              | 1                                  | 1 | 1  | 1  | 1  | 2  | 2  |
| Caltrans                | SJV          | SR184               | PIONEER        | MILLS         | Widen Lanes             | LOCAL             |            |              | 1                                  | 1 | 1  | 1  | 1  | 2  | 2  |
| Caltrans                | SJV          | SR184               | MILLS          | EDISON        | Widen Lanes             | LOCAL             |            |              | 1                                  | 1 | 1  | 1  | 1  | 2  | 2  |
| Caltrans                | SJV          | SR184               | KERRNITA       | REDBANK       | Widen Lanes             | LOCAL             |            |              | 1                                  | 1 | 1  | 1  | 1  | 1  | 2  |
| Caltrans                | SJV          | SR184               | REDBANK        | WILSON        | Widen Lanes             | LOCAL             |            |              | 1                                  | 1 | 1  | 1  | 1  | 1  | 2  |
| Caltrans                | SJV          | SR184               | WILSON         | MULLER        | Widen Lanes             | LOCAL             |            |              | 1                                  | 1 | 1  | 1  | 1  | 1  | 2  |
| Caltrans                | SJV          | SR184               | MULLER         | WHITE LN      | Widen Lanes             | LOCAL             |            |              | 1                                  | 1 | 1  | 1  | 1  | 1  | 2  |
| Caltrans                | SJV          | SR184               | WHITE LN       | HERMOSA       | Widen Lanes             | LOCAL             |            |              | 1                                  | 1 | 1  | 1  | 1  | 1  | 2  |
| Caltrans                | SJV          | SR184               | HERMOSA        | FAIRVIEW RD   | Widen Lanes             | LOCAL             |            |              | 1                                  | 1 | 1  | 1  | 1  | 1  | 2  |
| Caltrans                | SJV          | SR184               | FAIRVIEW RD    | PANAMA LN     | Widen Lanes             | LOCAL             |            |              | 1                                  | 1 | 1  | 1  | 1  | 1  | 2  |

| Jurisdiction/<br>Agency | Air<br>basin | Description         |                  |                  |                  | Funding<br>Source | Project ID | Est. Cost | Analysis Year (traffic lanes open) |   |    |    |    |    |    |
|-------------------------|--------------|---------------------|------------------|------------------|------------------|-------------------|------------|-----------|------------------------------------|---|----|----|----|----|----|
|                         |              | Facility Name/Route | Project Limits   |                  | Improvement Type |                   |            |           | 8                                  | 9 | 10 | 13 | 15 | 20 | 30 |
| Caltrans                | SJV          | SR184               | PANAMA LN        | KAM AVE          | Widen Lanes      | RTP04             |            |           | 1                                  | 1 | 1  | 2  | 2  | 2  | 2  |
| Caltrans                | SJV          | SR184               | KAM AVE          | MOUNTAIN VIEW    | Widen Lanes      | RTP04             |            |           | 1                                  | 1 | 1  | 2  | 2  | 2  | 2  |
| Caltrans                | SJV          | SR184               | MOUNTAIN VIEW    | MC KEE           | Widen Lanes      | RTP04             |            |           | 1                                  | 1 | 1  | 2  | 2  | 2  | 2  |
| Caltrans                | SJV          | SR184               | MOUNTAIN VIEW    | SR119            | Widen Lanes      | RTP04             |            |           | 1                                  | 1 | 1  | 2  | 2  | 2  | 2  |
| Caltrans                | SJV          | SR184               | DI GIORGIO       | TRI DUNCON       | Widen Lanes      | RTP04             |            |           | 1                                  | 1 | 1  | 1  | 1  | 2  | 2  |
| Caltrans                | SJV          | SR184               | TRI DUNCON       | BUENA VISTA BLVD | Widen Lanes      | RTP04             |            |           | 1                                  | 1 | 1  | 1  | 1  | 2  | 2  |
| Caltrans                | SJV          | SR184               | BUENA VISTA BLVD | SUNSET BLVD      | Widen Lanes      | RTP04             |            |           | 1                                  | 1 | 1  | 1  | 1  | 2  | 2  |
| Caltrans                | SJV          | SR184               | SUNSET BLVD      | SR223            | Widen Lanes      | RTP04             |            |           | 1                                  | 1 | 1  | 1  | 1  | 2  | 2  |
| Caltrans                | SJV          | SR204               | CHESTER          | F ST             | Widen Lanes      | LOCAL             |            |           | 2                                  | 2 | 2  | 2  | 2  | 3  | 3  |
| Caltrans                | SJV          | SR204               | F ST             | SR99             | Widen Lanes      | LOCAL             |            |           | 2                                  | 2 | 2  | 2  | 2  | 2  | 3  |
| Caltrans                | SJV          | SR223               | SR99             | UNION            | Widen Lanes      | RTP04             |            |           | 1                                  | 1 | 1  | 1  | 1  | 2  | 2  |
| Caltrans                | SJV          | SR223               | UNION            | FAIRFAX          | Widen Lanes      | RTP04             |            |           | 1                                  | 1 | 1  | 1  | 1  | 2  | 2  |
| Caltrans                | SJV          | SR223               | FAIRFAX          | SR184            | Widen Lanes      | RTP04             |            |           | 1                                  | 1 | 1  | 1  | 1  | 2  | 2  |
| Caltrans                | SJV          | SR46                | WILDWOOD         | SCOFIELD         | Widen Lanes      | RTP04             |            |           | 1                                  | 1 | 1  | 1  | 1  | 2  | 2  |
| Caltrans                | SJV          | SR46                | SCOFIELD         | LEONARD          | Widen Lanes      | RTP04             |            |           | 1                                  | 1 | 1  | 1  | 1  | 2  | 2  |
| Caltrans                | SJV          | SR46                | LEONARD          | WESTERN          | Widen Lanes      | RTP04             |            |           | 1                                  | 1 | 1  | 1  | 1  | 2  | 2  |
| Caltrans                | SJV          | SR46                | WESTERN          | MAGNOLIA         | Widen Lanes      | RTP04             |            |           | 1                                  | 1 | 1  | 1  | 1  | 2  | 2  |
| Caltrans                | SJV          | SR46                | MAGNOLIA         | CENTRAL          | Widen Lanes      | RTP04             |            |           | 1                                  | 1 | 1  | 1  | 1  | 2  | 2  |
| Caltrans                | SJV          | SR46                | CENTRAL          | PALM             | Widen Lanes      | RTP04             |            |           | 1                                  | 1 | 1  | 1  | 1  | 2  | 2  |
| Caltrans                | SJV          | SR46                | PALM             | GRIFFITH         | Widen Lanes      | RTP04             |            |           | 1                                  | 1 | 1  | 1  | 1  | 2  | 2  |
| Caltrans                | SJV          | SR46                | GRIFFITH         | F ST             | Widen Lanes      | RTP04             |            |           | 1                                  | 1 | 1  | 1  | 1  | 2  | 2  |
| Caltrans                | SJV          | SR46                | F ST             | SR43             | Widen Lanes      | RTP04             |            |           | 1                                  | 1 | 1  | 1  | 1  | 2  | 2  |
| Caltrans                | SJV          | SR46                | SR43             | ROOT             | Widen Lanes      | RTP04             |            |           | 2                                  | 2 | 2  | 2  | 2  | 2  | 2  |
| Caltrans                | SJV          | SR46                | ROOT             | SR99             | Widen Lanes      | RTP04             |            |           | 2                                  | 2 | 2  | 2  | 2  | 2  | 2  |

| Jurisdiction/<br>Agency | Air<br>basin | Description         |                    |                    | Improvement Type | Funding<br>Source | Project ID | Est. Cost    | Analysis Year (traffic lanes open) |   |    |    |    |    |    |
|-------------------------|--------------|---------------------|--------------------|--------------------|------------------|-------------------|------------|--------------|------------------------------------|---|----|----|----|----|----|
|                         |              | Facility Name/Route | Project Limits     |                    |                  |                   |            |              | 8                                  | 9 | 10 | 13 | 15 | 20 | 30 |
| Caltrans                | SJV          | SR46                | COUNTY LINE        | KECKS              | Widen Lanes      | RTP04/TIP06       | KER990109  | \$72,500,000 | 1                                  | 1 | 1  | 2  | 2  | 2  | 2  |
| Caltrans                | SJV          | SR46                | KECKS              | BITTERWATER VALLEY | Widen Lanes      | RTP04/TIP06       | KER060102  | \$7,775,000  | 1                                  | 1 | 1  | 2  | 2  | 2  | 2  |
| Caltrans                | SJV          | SR46                | BITTERWATER VALLEY | SR33               | Widen Lanes      | RTP04/TIP06       | KER060102  | \$7,775,000  | 1                                  | 1 | 1  | 2  | 2  | 2  | 2  |
| Caltrans                | SJV          | SR46                | SR33               | LOST HILLS         | Widen Lanes      | RTP04/TIP06       | KER000103  | \$44,425,000 | 1                                  | 1 | 1  | 2  | 2  | 2  | 2  |
| Caltrans                | SJV          | SR46                | LOST HILLS         | I-5                | Widen Lanes      | RTP04/TIP06       | KER000103  | \$2,300,000  | 1                                  | 1 | 1  | 2  | 2  | 2  | 2  |
| Caltrans                | SJV          | SR58                | SR99               | H ST               | Widen Lanes      | LOCAL             |            |              | 2/3                                | 3 | 3  | 3  | 3  | 3  | 3  |
| Caltrans                | SJV          | SR58                | UNION              | COTTONWOOD         | Widen Lanes      | LOCAL             |            |              | 2                                  | 2 | 2  | 2  | 2  | 3  | 3  |
| Caltrans                | SJV          | SR58                | SR43               | CHERRY             | Widen Lanes      | RTP04             |            |              | 1                                  | 1 | 1  | 1  | 1  | 2  | 2  |
| Caltrans                | SJV          | SR58                | CHERRY             | SUPERIOR           | Widen Lanes      | RTP04             |            |              | 1                                  | 1 | 1  | 1  | 1  | 2  | 2  |
| Caltrans                | SJV          | SR58                | SUPERIOR           | GREELEY            | Widen Lanes      | RTP04             |            |              | 1                                  | 1 | 1  | 1  | 1  | 2  | 2  |
| Caltrans                | SJV          | SR58                | GREELEY            | DRIVER             | Widen Lanes      | RTP04             |            |              | 1                                  | 1 | 1  | 1  | 1  | 2  | 2  |
| Caltrans                | SJV          | SR58                | DRIVER             | NORD               | Widen Lanes      | RTP04             |            |              | 1                                  | 1 | 1  | 1  | 1  | 2  | 2  |
| Caltrans                | SJV          | SR58                | NORD               | WEGIS              | Widen Lanes      | RTP04             |            |              | 1                                  | 1 | 1  | 1  | 1  | 2  | 2  |
| Caltrans                | SJV          | SR58                | WEGIS              | HEATH              | Widen Lanes      | RTP04             |            |              | 1                                  | 1 | 1  | 1  | 1  | 2  | 2  |
| Caltrans                | SJV          | SR58                | HEATH              | RENFRO             | Widen Lanes      | RTP04             |            |              | 1                                  | 1 | 1  | 1  | 1  | 2  | 2  |
| Caltrans                | SJV          | SR58                | GENERAL BEALE      | SR223              | Widen Lanes      | SHOPP             |            |              | 2                                  | 2 | 2  | 2  | 2  | 2  | 3  |
| Caltrans                | SJV          | SR58                | SR223              | BEALVILLE          | Widen Lanes      | SHOPP             |            |              | 2                                  | 2 | 2  | 2  | 2  | 2  | 3  |
| Caltrans                | SJV          | SR58                | BEALVILLE          | HART FLAT RD       | Widen Lanes      | SHOPP             |            |              | 2                                  | 2 | 2  | 2  | 2  | 2  | 3  |
| Caltrans                | SJV          | SR65                | JAMES              | 7TH STANDARD       | Widen Lanes      | LOCAL             |            |              | 1                                  | 1 | 1  | 2  | 2  | 2  | 2  |
| Caltrans                | SJV          | SR99                | OLIVE              | OLIVE              | Add interchange  | RTP04             |            |              | 1                                  | 1 | 1  | 1  | 1  | 2  | 2  |
| Caltrans                | SJV          | SR99                | PANAMA LN          | WHITE LN           | Widen Lanes      | RTP04             |            |              | 3                                  | 3 | 3  | 4  | 4  | 4  | 4  |
| Caltrans                | SJV          | SR99                | HOSKING            | PANAMA LN          | Widen Lanes      | RTP04             |            |              | 3                                  | 3 | 3  | 3  | 3  | 3  | 4  |
| Caltrans                | SJV          | SR99                | SR119              | HOSKING            | Widen Lanes      | RTP04             |            |              | 3                                  | 3 | 3  | 3  | 3  | 3  | 4  |
| Caltrans                | SJV          | SR99                | SR223              | SR119              | Widen Lanes      | RTP04             |            |              | 3                                  | 3 | 3  | 3  | 3  | 3  | 4  |

| Jurisdiction/<br>Agency | Air<br>basin | Description         |                |                  |                  | Funding<br>Source | Project ID | Est. Cost | Analysis Year (traffic lanes open) |   |    |    |    |    |    |
|-------------------------|--------------|---------------------|----------------|------------------|------------------|-------------------|------------|-----------|------------------------------------|---|----|----|----|----|----|
|                         |              | Facility Name/Route | Project Limits |                  | Improvement Type |                   |            |           | 8                                  | 9 | 10 | 13 | 15 | 20 | 30 |
| Caltrans                | SJV          | SR99                | MING           | STOCKDALE        | Widen Lanes      | RTP04/SHOPP       |            |           | 4                                  | 4 | 5  | 5  | 5  | 5  | 5  |
| Caltrans                | SJV          | SR99                | WHITE LN       | MING             | Widen Lanes      | RTP04             |            |           | 4                                  | 4 | 4  | 4  | 4  | 4  | 4  |
| Bakersfield             | SJV          | STINE_RD            | PANAMA LN      | HARRIS           | Widen Lanes      | LOCAL             |            |           | 2                                  | 2 | 3  | 3  | 3  | 3  | 3  |
| Bakersfield             | SJV          | STINE_RD            | HARRIS         | PACHECO          | Widen Lanes      | LOCAL             |            |           | 2                                  | 2 | 3  | 3  | 3  | 3  | 3  |
| Bakersfield             | SJV          | STINE_RD            | PACHECO        | DISTRICT         | Widen Lanes      | LOCAL             |            |           | 2                                  | 2 | 2  | 2  | 2  | 2  | 3  |
| Bakersfield             | SJV          | STOCKDALE           | RENFRO         | ALLEN            | Widen Lanes      | LOCAL             |            |           | 2                                  | 2 | 3  | 3  | 3  | 3  | 3  |
| Bakersfield             | SJV          | STOCKDALE           | ALLEN          | JEWETTA          | Widen Lanes      | LOCAL             |            |           | 2                                  | 2 | 3  | 3  | 3  | 3  | 3  |
| Bakersfield             | SJV          | STOCKDALE           | JEWETTA        | BUENA VISTA BLVD | Widen Lanes      | LOCAL             |            |           | 2                                  | 2 | 3  | 3  | 3  | 3  | 3  |
| Bakersfield             | SJV          | STOCKDALE           | BUENA VISTA    | CALLOWAY         | Widen Lanes      | LOCAL             |            |           | 2                                  | 2 | 3  | 3  | 3  | 3  | 3  |
| Bakersfield             | SJV          | STOCKDALE           | CALIFORNIA     | MONTCLAIR        | Widen Lanes      | LOCAL             |            |           | 2                                  | 2 | 2  | 3  | 3  | 3  | 3  |
| Bakersfield             | SJV          | STOCKDALE           | MONTCLAIR      | STINE RD         | Widen Lanes      | LOCAL             |            |           | 2                                  | 2 | 2  | 3  | 3  | 3  | 3  |
| Bakersfield             | SJV          | STOCKDALE           | STINE          | REAL             | Widen Lanes      | LOCAL             |            |           | 2                                  | 2 | 2  | 3  | 3  | 3  | 3  |
| Bakersfield             | SJV          | STOCKDALE           | REAL           | SR99             | Widen Lanes      | LOCAL             |            |           | 2                                  | 2 | 2  | 3  | 3  | 3  | 3  |
| Bakersfield             | SJV          | STOCKDALE           | SR99           | OAK              | Widen Lanes      | LOCAL             |            |           | 2                                  | 2 | 2  | 3  | 3  | 3  | 3  |
| Kern County             | SJV          | STOCKDALE           | NORD           | WEGIS            | Widen Lanes      | LOCAL             |            |           | 1                                  | 1 | 1  | 3  | 3  | 3  | 3  |
| Kern County             | SJV          | STOCKDALE           | WEGIS          | HEATH            | Widen Lanes      | LOCAL             |            |           | 1                                  | 1 | 1  | 3  | 3  | 3  | 3  |
| Kern County             | SJV          | STOCKDALE           | HEATH          | RIDER            | Widen Lanes      | LOCAL             |            |           | 1                                  | 1 | 1  | 2  | 2  | 2  | 3  |
| Kern County             | SJV          | STOCKDALE           | RIDER          | RENFRO           | Widen Lanes      | LOCAL             |            |           | 1                                  | 1 | 1  | 2  | 2  | 2  | 3  |
| Bakersfield             | SJV          | UNION               | MANOR          | COLUMBUS         | Widen Lanes      | LOCAL             |            |           | 2                                  | 2 | 2  | 2  | 2  | 2  | 3  |
| Bakersfield             | SJV          | UNION               | SR58           | BELLE TERRACE    | Widen Lanes      | LOCAL             |            |           | 2                                  | 2 | 2  | 2  | 2  | 3  | 3  |
| Bakersfield             | SJV          | UNION               | MING           | WILSON           | Widen Lanes      | LOCAL             |            |           | 2                                  | 2 | 2  | 2  | 2  | 3  | 3  |
| Bakersfield             | SJV          | UNION               | WILSON         | PLANZ            | Widen Lanes      | LOCAL             |            |           | 2                                  | 2 | 2  | 2  | 2  | 3  | 3  |
| Bakersfield             | SJV          | UNION               | PLANZ          | CHESTER          | Widen Lanes      | LOCAL             |            |           | 2                                  | 2 | 2  | 2  | 2  | 3  | 3  |
| Bakersfield             | SJV          | UNION               | CHESTER        | WHITE LN         | Widen Lanes      | LOCAL             |            |           | 2                                  | 2 | 2  | 2  | 2  | 3  | 3  |

| Jurisdiction/<br>Agency | Air<br>basin | Description         |                |             |                      | Funding<br>Source | Project ID | Est. Cost    | Analysis Year (traffic lanes open) |   |    |    |    |    |    |
|-------------------------|--------------|---------------------|----------------|-------------|----------------------|-------------------|------------|--------------|------------------------------------|---|----|----|----|----|----|
|                         |              | Facility Name/Route | Project Limits |             | Improvement Type     |                   |            |              | 8                                  | 9 | 10 | 13 | 15 | 20 | 30 |
| Bakersfield             | SJV          | UNION               | PACHECO        | FAIRVIEW RD | Widen Lanes          | LOCAL             |            |              | 2                                  | 2 | 2  | 2  | 2  | 3  | 3  |
| Bakersfield             | SJV          | UNION               | FAIRVIEW RD    | PANAMA LN   | Widen Lanes          | LOCAL             |            |              | 2                                  | 2 | 2  | 2  | 2  | 3  | 3  |
| Bakersfield             | SJV          | UNION               | PANAMA LN      | BERKSHIRE   | Widen Lanes          | LOCAL             |            |              | 2                                  | 2 | 2  | 2  | 2  | 3  | 3  |
| Kern County             | SJV          | UNION               | BELLE TERRACE  | MING        | Widen Lanes          | LOCAL             |            |              | 2                                  | 2 | 2  | 2  | 2  | 3  | 3  |
| Kern County             | SJV          | UNION               | WHITE LN       | PACHECO     | Widen Lanes          | LOCAL             |            |              | 2                                  | 2 | 2  | 2  | 2  | 3  | 3  |
| Kern County             | SJV          | UNION               | BERKSHIRE      | HOSKING     | Widen Lanes          | LOCAL             |            |              | 2                                  | 2 | 2  | 2  | 2  | 3  | 3  |
| Kern County             | SJV          | UNION               | HOSKING        | MC KEE      | Widen Lanes          | LOCAL             |            |              | 2                                  | 2 | 2  | 2  | 2  | 3  | 3  |
| Kern County             | SJV          | UNION               | MC KEE         | SR119       | Widen Lanes          | LOCAL             |            |              | 2                                  | 2 | 2  | 2  | 2  | 3  | 3  |
| Bakersfield             | SJV          | WESTSIDE PARKWAY    | HEATH          | ALLEN       | New Freeway          | RTP04/TIP06       | KER040105  | \$42,000,000 | 0                                  | 2 | 2  | 2  | 2  | 2  | 2  |
| Bakersfield             | SJV          | WESTSIDE PARKWAY    | ALLEN          | CALLOWAY    | New Freeway          | RTP04/TIP06       | KER040104  | \$40,000,000 | 0                                  | 3 | 3  | 3  | 3  | 3  | 3  |
| Bakersfield             | SJV          | WESTSIDE PARKWAY    | CALLOWAY       | TRUXTUN     | New Freeway/Arterial | RTP04/TIP06       | KER020102  | \$52,600,000 | 3                                  | 3 | 4  | 4  | 4  | 4  | 4  |
| Bakersfield             | SJV          | WESTSIDE PARKWAY    | MOHAWK         | OAK ST      | New Freeway          | RTP04/TIP06       | KER040103  | \$53,800,000 | 0                                  | 3 | 3  | 3  | 3  | 3  | 3  |

**Appendix B – Transportation Project Listing – Federally Funded, Non-Regionally Significant Projects**

| Jurisdiction/<br>Agency | Air<br>basin | Description                 |                |                 |                  | Funding<br>Source | Project ID | Est. Cost | Analysis Year<br>(traffic lanes open) |   |    |    |    |    |    |
|-------------------------|--------------|-----------------------------|----------------|-----------------|------------------|-------------------|------------|-----------|---------------------------------------|---|----|----|----|----|----|
|                         |              | Facility Name/Route         | Project Limits |                 | Improvement Type |                   |            |           | 8                                     | 9 | 10 | 13 | 15 | 20 | 30 |
| Ridgecrest              | IWV          | W Ridgecrest Blvd           | Mahan St       | China Lake Blvd | Widen Lanes      | RTP04             |            |           | 1                                     | 1 | 1  | 2  | 2  | 2  | 2  |
| County/Shafter          | SJV          | 7 <sup>th</sup> Standard Rd | Santa Fe Way   | Zachary Rd      | Widen Lanes      | RTP04/TIP06       |            |           | 1                                     | 2 | 2  | 2  | 2  | 2  | 2  |
| Delano                  | SJV          | Cecil Ave                   | Albany St      | Browning Rd     | Widen Lanes      | RTP04             |            |           | 1                                     | 1 | 1  | 1  | 1  | 2  | 2  |

## **APPENDIX C**

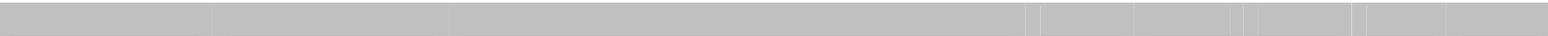
### **CONFORMITY ANALYSIS DOCUMENTATION**

- 2006 Conformity EMFAC Spreadsheet
- 2006 Conformity Paved Road Spreadsheet
- 2006 Conformity Unpaved Road Dust Spreadsheet
- 2006 Conformity Construction Spreadsheet
- 2006 Trading Spreadsheet
- 2006 Conformity Totals Spreadsheet

**EMFAC Emissions**

**KERN**

| <u>Pollutant</u>        | <u>Source</u>           | <u>Description</u>                    | <u>Analysis Year</u> |           |           |
|-------------------------|-------------------------|---------------------------------------|----------------------|-----------|-----------|
|                         |                         |                                       | 2010                 | 2020      | 2030      |
| Carbon Monoxide         | EMFAC 2002 (Winter Run) | CO Total Exhaust (All Vehicles Total) | 112.93               | 57.20     | 41.57     |
| <b>Conformity Total</b> |                         |                                       | <b>113</b>           | <b>57</b> | <b>42</b> |



|                         |     |                               | 2008        | 2010                    | 2013                                   | 2020       | 2030       |
|-------------------------|-----|-------------------------------|-------------|-------------------------|--|------------|------------|
|                         |     |                               | Ozone       | EMFAC 2002 (Summer Run) | ROG Total Exhaust (All Vehicles Total) | 11.77      | 10.45      |
|                         | ARB | Minus I/M Improvement Benefit | 0.27        | 0.23                    | 0.23                                   | 0.23       | 0.23       |
|                         | ARB | State Measure Reductions      | 0.00        | 0.67                    | 0.67                                   | 0.67       | 0.67       |
| <b>Conformity Total</b> |     |                               | <b>11.5</b> | <b>9.6</b>              | <b>7.9</b>                             | <b>5.6</b> | <b>4.2</b> |

|                         |                         |  |             |             |             |             |            |
|-------------------------|-------------------------|--|-------------|-------------|-------------|-------------|------------|
| Ozone                   | EMFAC 2002 (Summer Run) | NOx Total Exhaust (All Vehicles Total) | 33.67       | 29.88       | 23.50       | 14.22       | 10.11      |
|                         | ARB                     | Minus I/M Improvement Benefit          | 0.56        | 0.50        | 0.50        | 0.50        | 0.50       |
|                         | District                | Local Measure Reductions               | 0.54        | 0.60        | 0.60        | 0.60        | 0.60       |
|                         | ARB                     | State Measure Reductions               | 0.00        | 1.80        | 1.80        | 1.80        | 1.80       |
| <b>Conformity Total</b> |                         |  | <b>32.6</b> | <b>27.0</b> | <b>20.6</b> | <b>11.3</b> | <b>7.2</b> |

|                         |                            |  | 2008         | 2010         | 2020         | 2030         |
|-------------------------|----------------------------|--|--------------|--------------|--------------|--------------|
| PM-10                   | EMFAC 2002<br>(Annual Run) | PM-10 Total (All Vehicles Total)<br>* includes tire & brake wear         | 1.28         | 1.30         | 1.42         | 1.69         |
|                         | ARB                        | State Measures   | 0.000        | 0.023        | 0.023        | 0.023        |
|                         | <b>Conformity Total</b>    |  | <b>1.280</b> | <b>1.277</b> | <b>1.397</b> | <b>1.667</b> |
| PM-10                   | EMFAC 2002<br>(Annual Run) | NOx Total Exhaust (All Vehicles Total)                                   | 34.97        | 31.01        | 14.78        | 10.45        |
|                         | ARB                        | Smog Check Reductions  | 0.59         | 0.49         | 0.49         | 0.49         |
|                         | District                   | ISR & Inc.   | 0.33         | 0.38         | 0.38         | 0.38         |
|                         | ARB                        | State Measures   | 0.00         | 1.99         | 1.99         | 1.99         |
|                         | <b>Conformity Total</b>    |  | <b>34.05</b> | <b>28.15</b> | <b>11.92</b> | <b>7.59</b>  |
| PM2.5                   | EMFAC 2002<br>(Annual Run) | PM2.5 Total Exhaust (All Vehicles Total)<br>* includes tire & brake wear | 2010         |              | 2020         | 2030         |
|                         |                            |  | 0.90         |              | 0.93         | 1.07         |
|                         | ARB                        | State Measures   | 0.02         |              | 0.02         | 0.02         |
| <b>Conformity Total</b> |                            | <b>0.9</b>   |              | <b>0.9</b>   | <b>1.0</b>   |              |

|                         |                            |  |             |             |            |
|-------------------------|----------------------------|--|-------------|-------------|------------|
| PM2.5                   | EMFAC 2002<br>(Annual Run) | NOx Total Exhaust (All Vehicles Total) | 31.04       | 14.78       | 10.45      |
|                         | ARB                        | Smog Check Reductions                  | 0.49        | 0.49        | 0.49       |
|                         | District                   | ISR & Inc.                             | 0.38        | 0.38        | 0.38       |
|                         | ARB                        | State Measures                         | 1.99        | 1.99        | 1.99       |
| <b>Conformity Total</b> |                            |  | <b>28.2</b> | <b>11.9</b> | <b>7.6</b> |

**EMFAC Emissions**

KERN -  
OTHER

MD

| <u>Pollutant</u>        | <u>Source</u>           | <u>Description</u>                     | <u>Analysis Year</u> |            |            |            |
|-------------------------|-------------------------|--|----------------------|------------|------------|------------|
|                         |                         |  | 2009                 | 2015       | 2020       | 2030       |
| Ozone                   | EMFAC 2002 (Summer Run) | ROG Total Exhaust (All Vehicles Total) | 2.42                 | 1.56       | 1.24       | 1.00       |
| <b>Conformity Total</b> |                         |  | <b>2.4</b>           | <b>1.6</b> | <b>1.2</b> | <b>1.0</b> |
|                         |                         |  |                      |            |            |            |
| Ozone                   | EMFAC 2002 (Summer Run) | NOx Total Exhaust (All Vehicles Total) | 4.81                 | 3.03       | 2.21       | 1.47       |
| <b>Conformity Total</b> |                         |  | <b>4.8</b>           | <b>3.0</b> | <b>2.2</b> | <b>1.5</b> |

**Paved Road Dust Emissions**

**KERN 2008**

|  | VMT Daily         | VMT<br>(million/year) | Base<br>Emissions<br>(PM10 tpy) | Rain Adj.<br>Emissions<br>(PM10 tpy) | Rain Adj.<br>Emissions<br>(PM10<br>tons/day) | District Rule<br>8061/ISR<br>Control Rates | Control-<br>Adjusted<br>Emissions |
|--|-------------------|-----------------------|---------------------------------|--------------------------------------|--|--|-----------------------------------|
| Enter Freeway VMT ==>                            | 9,449,262         | 3,449                 | 989.500                         | 964.363                              | 2.642  | 0.102                                      | 2.373                             |
| Enter Arterial VMT ==>                           | 8,283,564         | 3,024                 | 1247.986                        | 1216.283                             | 3.332  | 0.306                                      | 2.313                             |
| Enter Collector VMT ==>                          | 440,041           | 161                   | 66.296                          | 64.612                               | 0.177  | 0.517                                      | 0.085                             |
| Urban  | 636,944           | 232                   | 404.387                         | 394.114                              | 1.080  | 0.512                                      | 0.527                             |
| Rural  | 662,942           | 242                   | 1198.124                        | 1167.687                             | 3.199  | 0.090                                      | 2.911                             |
| Enter Total of Urban and Rural Local VMT Here => | 1,299,886         |                       |                                 |                                      |  |  |                                   |
| <b>Totals</b>                                    | <b>19,472,753</b> | <b>7,108</b>          | <b>3906.293</b>                 | <b>3807.059</b>                      | <b>10.430</b>                                |  | <b>8.209</b>                      |

**KERN 2010**

|  | VMT Daily         | VMT<br>(million/year) | Base<br>Emissions<br>(PM10 tpy) | Rain Adj.<br>Emissions<br>(PM10 tpy) | Rain Adj.<br>Emissions<br>(PM10<br>tons/day) | District Rule<br>8061/ISR<br>Control Rates | Control-<br>Adjusted<br>Emissions |
|--|-------------------|-----------------------|---------------------------------|--------------------------------------|--|--|-----------------------------------|
| Enter Freeway VMT ==>                            | 10,365,243        | 3,783                 | 1085.419                        | 1057.845                             | 2.898  | 0.147                                      | 2.472                             |
| Enter Arterial VMT ==>                           | 8,550,221         | 3,121                 | 1288.160                        | 1255.436                             | 3.440  | 0.337                                      | 2.280                             |
| Enter Collector VMT ==>                          | 452,481           | 165                   | 68.170                          | 66.438                               | 0.182  | 0.666                                      | 0.061                             |
| Urban  | 670,674           | 245                   | 425.802                         | 414.985                              | 1.137  | 0.679                                      | 0.365                             |
| Rural  | 698,049           | 255                   | 1261.572                        | 1229.524                             | 3.369  | 0.090                                      | 3.065                             |
| Enter Total of Urban and Rural Local VMT Here => | 1,368,723         |                       |                                 |                                      |  |  |                                   |
| <b>Totals</b>                                    | <b>20,736,668</b> | <b>7,569</b>          | <b>4129.123</b>                 | <b>4024.228</b>                      | <b>11.025</b>                                |  | <b>8.244</b>                      |

**KERN 2020**

|  | VMT Daily     | VMT<br>(million/year) | Base<br>Emissions<br>(PM10 tpy) | Rain Adj.<br>Emissions<br>(PM10 tpy) | Rain Adj.<br>Emissions<br>(PM10<br>tons/day) | District Rule<br>8061/ISR<br>Control Rates | Control-<br>Adjusted<br>Emissions |
|--|---------------|-----------------------|---------------------------------|--------------------------------------|--|--|-----------------------------------|
| Enter Freeway VMT<br>==>                               | Freeway       | 13,697,466            | 5,000                           | 1434.360                             | 1397.922                                     | 0.147                                      | 3.267                             |
| Enter Arterial VMT ==>                                 | Arterial      | 11,030,579            | 4,026                           | 1661.846                             | 1619.630                                     | 0.337                                      | 2.942                             |
| Enter Collector VMT<br>==>                             | Collector     | 524,771               | 192                             | 79.061                               | 77.053                                       | 0.666                                      | 0.071                             |
|  | Urban         | 849,067               | 310                             | 539.061                              | 525.367                                      | 0.679                                      | 0.462                             |
| Enter Total of Urban<br>and Rural Local VMT<br>Here => | Rural         | 883,723               | 323                             | 1597.138                             | 1556.565                                     | 0.090                                      | 3.881                             |
|  | <b>Totals</b> | <b>26,985,606</b>     | <b>9,850</b>                    | <b>5311.466</b>                      | <b>5176.536</b>                              | <b>14.182</b>                              | <b>10.622</b>                     |

**KERN 2030**

|  | VMT Daily     | VMT<br>(million/year) | Base<br>Emissions<br>(PM10 tpy) | Rain Adj.<br>Emissions<br>(PM10 tpy) | Rain Adj.<br>Emissions<br>(PM10<br>tons/day) | District Rule<br>8061/ISR<br>Control Rates | Control-<br>Adjusted<br>Emissions |
|--|---------------|-----------------------|---------------------------------|--------------------------------------|--|--|-----------------------------------|
| Enter Freeway VMT<br>==>                               | Freeway       | 16,817,784            | 6,138                           | 1761.110                             | 1716.372                                     | 0.147                                      | 4.011                             |
| Enter Arterial VMT ==>                                 | Arterial      | 14,259,251            | 5,205                           | 2148.272                             | 2093.698                                     | 0.337                                      | 3.803                             |
| Enter Collector VMT<br>==>                             | Collector     | 617,441               | 225                             | 93.023                               | 90.659                                       | 0.666                                      | 0.083                             |
|  | Urban         | 1,047,271             | 382                             | 664.898                              | 648.007                                      | 0.679                                      | 0.570                             |
| Enter Total of Urban<br>and Rural Local VMT<br>Here => | Rural         | 1,090,017             | 398                             | 1969.970                             | 1919.925                                     | 0.090                                      | 4.787                             |
|  | <b>Totals</b> | <b>33,831,764</b>     | <b>12,349</b>                   | <b>6637.273</b>                      | <b>6468.662</b>                              | <b>17.722</b>                              | <b>13.254</b>                     |

**Paved Road Dust Emissions**

**KERN -- OTHER**

**TABLE 1  
Paved Road PM-10 Emission  
Factors**

| COUNTY | AREA                | Freeway                       |                              | Major                         |                              | Collector                     |                              | Local                         |                              | Local Rural (or SJV Local)    |                              | Avg Vehicle      |
|--------|---------------------|-------------------------------|------------------------------|-------------------------------|------------------------------|-------------------------------|------------------------------|-------------------------------|------------------------------|-------------------------------|------------------------------|------------------|
|        |                     | Silt Load<br>g/m <sup>2</sup> | EF (lbs PM10<br>per 1e6 VMT) | Silt Load<br>g/m <sup>2</sup> | EF (lbs PM10<br>per 1e6 VMT) | Silt Load<br>g/m <sup>2</sup> | EF (lbs PM10<br>per 1e6 VMT) | Silt Load<br>g/m <sup>2</sup> | EF (lbs PM10<br>per 1e6 VMT) | Silt Load<br>g/m <sup>2</sup> | EF (lbs PM10<br>per 1e6 VMT) | Weight<br>(tons) |
| KERN   | INDIAN WELLS VALLEY | 0.020                         | 573.8                        | 0.035                         | 825.5                        | 0.035                         | 825.5                        | 0.320                         | 3479                         | 1.6                           | 9903                         | 2.4              |

**TABLE 2  
1993 HPMS travel fractions**

| COUNTY | Freeway | Major | Collector | Local | SJV Local |
|--------|---------|-------|-----------|-------|-----------|
| KERN   | 0.235   | 0.587 | 0.072     | 0.078 | 0.029     |

**TABLE 3**

Travel fractions and VMT by facility class

| COUNTY | AR<br>EA                        | An<br>aly<br>sis<br>Yea<br>r | Annual<br>VMT<br>(million<br>s) | Travel Fractions |       |               |       |              | VMT       |
|--------|---------------------------------|------------------------------|---------------------------------|------------------|-------|---------------|-------|--------------|-----------|
|        |                                 |                              |                                 | Freeway          | Major | Collect<br>or | Local | SJV<br>Local |           |
| KERN   | IND<br>IAN                      | 201<br>3                     | 326                             | 0.235            | 0.587 | 0.072         | 0.078 | 0.029        | 894,295   |
|        | WE<br>LL<br>S<br>VA<br>LL<br>EY | 202<br>0                     | 392                             | 0.235            | 0.587 | 0.072         | 0.078 | 0.029        | 1,074,442 |
|        |                                 | 203<br>0                     | 487                             | 0.235            | 0.587 | 0.072         | 0.078 | 0.029        | 1,334,815 |

TABLE 4  
Paved Road PM-10  
emissions w/o control

| COUNTY | AR<br>EA                        | An<br>aly<br>sis<br>Yea<br>r | VMT<br>(Annual<br>VMT) | Paved Road PM10 Emissions<br>(tons/yr) |        |               |        | PM10<br>Emiss<br>ions<br>(tons/<br>year) | Total<br>TPD |
|--------|---------------------------------|------------------------------|------------------------|--|--------|---------------|--------|--|--------------|
|        |                                 |                              |                        | Freeway                                | Major  | Collect<br>or | Local  |  |              |
| KERN   | IND<br>IAN                      | 201<br>3                     | 326                    | 22.01                                  | 79.09  | 9.70          | 91.16  | 201.95                                   | 0.55         |
|        | WE<br>LL<br>S<br>VA<br>LL<br>EY | 202<br>0                     | 392                    | 26.44                                  | 95.02  | 11.65         | 109.52 | 242.64                                   | 0.66         |
|        |                                 | 203<br>0                     | 487                    | 32.85                                  | 118.05 | 14.48         | 136.06 | 301.43                                   | 0.83         |

**Unpaved Road Dust Emissions**

**KERN 2008**

|                    | <b>Miles</b> | <b>Vehicle Passes per Day</b> | <b>VMT (1000/year)</b> | <b>Base Emissions (PM10 tpy)</b> | <b>Rain Adj. Emissions (PM10 tpy)</b> | <b>Rain Adj. Emissions (PM10 tons/day)</b> | <b>District Rule 8061/ISR Control Rates</b> | <b>Control-Adjusted Emissions</b> |
|--------------------|--------------|-------------------------------|------------------------|----------------------------------|---------------------------------------|--|---|-----------------------------------|
| <b>City/County</b> | 74.0         | 10                            | 270.1                  | 270.100                          | 242.654                               | 0.665                                      | 0.368                                       | 0.420                             |

**KERN 2010**

|                    | <b>Miles</b> | <b>Vehicle Passes per Day</b> | <b>VMT (1000/year)</b> | <b>Base Emissions (PM10 tpy)</b> | <b>Rain Adj. Emissions (PM10 tpy)</b> | <b>Rain Adj. Emissions (PM10 tons/day)</b> | <b>District Rule 8061/ISR Control Rates</b> | <b>Control-Adjusted Emissions</b> |
|--------------------|--------------|-------------------------------|------------------------|----------------------------------|---------------------------------------|--|---|-----------------------------------|
| <b>City/County</b> | 74.0         | 10                            | 270.1                  | 270.100                          | 242.654                               | 0.665                                      | 0.484                                       | 0.343                             |

**KERN 2020**

|                    | <b>Miles</b> | <b>Vehicle Passes per Day</b> | <b>VMT (1000/year)</b> | <b>Base Emissions (PM10 tpy)</b> | <b>Rain Adj. Emissions (PM10 tpy)</b> | <b>Rain Adj. Emissions (PM10 tons/day)</b> | <b>District Rule 8061/ISR Control Rates</b> | <b>Control-Adjusted Emissions</b> |
|--------------------|--------------|-------------------------------|------------------------|----------------------------------|---------------------------------------|--|---|-----------------------------------|
| <b>City/County</b> | 74.0         | 10                            | 270.1                  | 270.100                          | 242.654                               | 0.665                                      | 0.484                                       | 0.343                             |

**KERN 2030**

|                    | <b>Miles</b> | <b>Vehicle Passes per Day</b> | <b>VMT (1000/year)</b> | <b>Base Emissions (PM10 tpy)</b> | <b>Rain Adj. Emissions (PM10 tpy)</b> | <b>Rain Adj. Emissions (PM10 tons/day)</b> | <b>District Rule 8061/ISR Control Rates</b> | <b>Control-Adjusted Emissions</b> |
|--------------------|--------------|-------------------------------|------------------------|----------------------------------|---------------------------------------|--|---|-----------------------------------|
| <b>City/County</b> | 74.0         | 10                            | 270.1                  | 270.100                          | 242.654                               | 0.665                                      | 0.484                                       | 0.343                             |

**Unpaved Road Dust Emissions**

**KERN -- OTHER  
2013**

|                    | <b>Miles</b> | <b>Vehicle<br/>Passes per<br/>Day</b> | <b>VMT<br/>(1000/year)</b> | <b>Base Emissions<br/>(PM10 tpy)</b> | <b>Emissions (PM10<br/>tons/day)</b> |
|--------------------|--------------|---------------------------------------|----------------------------|--------------------------------------|--------------------------------------|
| <b>City/County</b> | 46.7         | 10                                    | 170.6                      | 170.565                              | 0.467                                |

**KERN -- OTHER 2020**

|                    | <b>Miles</b> | <b>Vehicle<br/>Passes per<br/>Day</b> | <b>VMT<br/>(1000/year)</b> | <b>Base Emissions<br/>(PM10 tpy)</b> | <b>Emissions (PM10<br/>tons/day)</b> |
|--------------------|--------------|---------------------------------------|----------------------------|--------------------------------------|--------------------------------------|
| <b>City/County</b> | 46.7         | 10                                    | 170.6                      | 170.565                              | 0.467                                |

**KERN -- OTHER 2030**

|                    | <b>Miles</b> | <b>Vehicle<br/>Passes per<br/>Day</b> | <b>VMT<br/>(1000/year)</b> | <b>Base Emissions<br/>(PM10 tpy)</b> | <b>Emissions (PM10<br/>tons/day)</b> |
|--------------------|--------------|---------------------------------------|----------------------------|--------------------------------------|--------------------------------------|
| <b>City/County</b> | 46.7         | 10                                    | 170.6                      | 170.565                              | 0.467                                |

**Road Construction Dust**

**KERN**

| Description                           | 2008     |              | 2010  |              | 2020 |              | 2030 |              |
|---------------------------------------|----------|--------------|-------|--------------|------|--------------|------|--------------|
|                                       | Year     | Lane Miles   | Year  | Lane Miles   | Year | Lane Miles   | Year | Lane Miles   |
|                                       | Baseline | 2002         | 4,701 | 2008         | 4963 | 2010         | 5070 | 2020         |
| Horizon                               | 2008     | 4,963        | 2010  | 5,070        | 2020 | 5,536        | 2030 | 5,912        |
| Difference                            | 6        | 262.000      | 2     | 107.000      | 10   | 466.000      | 10   | 376.000      |
| Lane Miles per Year                   |          | 43.667       |       | 53.500       |      | 46.600       |      | 37.600       |
| Acres Disturbed                       |          | 169.374      |       | 207.515      |      | 180.752      |      | 145.842      |
| Acre-Months                           |          | 3,048.727    |       | 3,735.273    |      | 3,253.527    |      | 2,625.164    |
| Emissions (tons/year)                 |          | 335.360      |       | 410.880      |      | 357.888      |      | 288.768      |
| Annual Average Day Emissions (tons)   |          | 0.919        |       | 1.126        |      | 0.981        |      | 0.791        |
| District Rule 8021 Control Rates      |          | 0.290        |       | 0.290        |      | 0.290        |      | 0.290        |
| <b>Total Emissions (tons per day)</b> |          | <b>0.652</b> |       | <b>0.799</b> |      | <b>0.696</b> |      | <b>0.562</b> |

**Road Construction Dust**

**KERN - INDIAN WELLS VALLEY**

| Description                           | 2013     |              | 2020 |              | 2030 |              |
|---------------------------------------|----------|--------------|------|--------------|------|--------------|
|                                       | Year     | Lane Miles   | Year | Lane Miles   | Year | Lane Miles   |
|                                       | Baseline | 2005         | 266  | 2013         | 320  | 2020         |
| Horizon                               | 2013     | 320          | 2020 | 336          | 2030 | 336          |
| Difference                            | 8        | 54.000       | 7    | 16.000       | 10   | 0.000        |
| Lane Miles per Year                   |          | 6.750        |      | 2.286        |      | 0.000        |
| Acres Disturbed                       |          | 26.182       |      | 8.866        |      | 0.000        |
| Acre-Months                           |          | 471.273      |      | 159.584      |      | 0.000        |
| Emissions (tons/year)                 |          | 51.840       |      | 17.554       |      | 0.000        |
| <b>Total Emissions (tons per day)</b> |          | <b>0.142</b> |      | <b>0.048</b> |      | <b>0.000</b> |

**PM10 Emission Trading Worksheet**

**KERN CONFORMITY ESTIMATES**

|                        | 2008          |               | 2010          |               | 2020          |               | 2030          |              |
|------------------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|--------------|
|                        | PM10          | NOx           | PM10          | NOx           | PM10          | NOx           | PM10          | NOx          |
| Total On-Road Exhaust  | 1.280         | 34.050        | 1.277         | 28.150        | 1.397         | 11.920        | 1.667         | 7.590        |
| Paved Road Dust        | 8.209         |               | 8.244         | 0.000         | 10.622        | 0.000         | 13.254        | 0.000        |
| Unpaved Road Dust      | 0.420         |               | 0.343         | 0.000         | 0.343         | 0.000         | 0.343         | 0.000        |
| Road Construction Dust | 0.652         |               | 0.799         | 0.000         | 0.696         | 0.000         | 0.562         | 0.000        |
| <b>Total</b>           | <b>10.561</b> | <b>34.050</b> | <b>10.663</b> | <b>28.150</b> | <b>13.058</b> | <b>11.920</b> | <b>15.826</b> | <b>7.590</b> |

**Difference (2010 Budget - 2020)**

|                                  | <b>PM10</b> | <b>NOx</b>  |
|----------------------------------|-------------|-------------|
| 2010                             | 10.8        | 28.4        |
| 2020                             | 13.1        | 11.9        |
| <b>Difference</b>                | <b>-2.3</b> | <b>16.5</b> |
| * 1.5 (Adjustment to NOx Budget) | 3.5         |             |

**Difference (2010 Budget - 2030)**

|                                  | <b>PM10</b> | <b>NOx</b>  |
|----------------------------------|-------------|-------------|
| 2010                             | 10.8        | 28.4        |
| 2030                             | 15.8        | 7.6         |
| <b>Difference</b>                | <b>-5.0</b> | <b>20.8</b> |
| * 1.5 (Adjustment to NOx Budget) | 7.5         |             |

**1:1.5 PM10 to NOx Trading**

|                    | <b>PM10</b> | <b>NOx</b>  |
|--------------------|-------------|-------------|
| <b>2010 Budget</b> | <b>10.8</b> | <b>28.4</b> |

|                              |             |             |
|------------------------------|-------------|-------------|
| <b>Adjusted 2010 Budget</b>  | <b>13.1</b> | <b>25.0</b> |
| <b>2020 Conformity Total</b> | <b>13.1</b> | <b>11.9</b> |
| <b>Difference</b>            | <b>0.0</b>  | <b>13.1</b> |

**NOTE: FINAL DIFFERENCE MUST BE POSITIVE**

|                              |             |             |
|------------------------------|-------------|-------------|
| <b>Adjusted 2010 Budget</b>  | <b>15.8</b> | <b>20.9</b> |
| <b>2030 Conformity Total</b> | <b>15.8</b> | <b>7.6</b>  |
| <b>Difference</b>            | <b>0.0</b>  | <b>13.3</b> |

**NOTE: FINAL DIFFERENCE MUST BE POSITIVE**

## PM10 Emission Trading Worksheet

### KERN - IWV CONFORMITY ESTIMATES

|                        | 2013         |              | 2020         |              | 2030         |              |
|------------------------|--------------|--------------|--------------|--------------|--------------|--------------|
|                        | PM10         | NOx          | PM10         | NOx          | PM10         | NOx          |
| Total On-Road Exhaust  |              |              |              |              |              |              |
| Paved Road Dust        | 0.550        |              | 0.660        |              | 0.830        |              |
| Unpaved Road Dust      | 0.467        |              | 0.467        |              | 0.467        |              |
| Road Construction Dust | 0.142        |              | 0.048        |              | 0.000        |              |
| <b>Total</b>           | <b>1.159</b> | <b>0.000</b> | <b>1.175</b> | <b>0.000</b> | <b>1.297</b> | <b>0.000</b> |

### 2006 Conformity Results Summary -- KERN SJV

| Pollutant       | Scenario    | Emissions Total (tons/day) | DID YOU PASS? |
|-----------------|-------------|----------------------------|---------------|
| Carbon Monoxide |             | <b>CO</b>                  | <b>CO</b>     |
|                 | 2010 Budget | 180                        |               |
|                 | 2010        | 112.93                     | <b>YES</b>    |
|                 | 2018 Budget | 180                        |               |
|                 | 2018        | 68.3                       | <b>YES</b>    |
|                 | 2020        | 57.2                       | <b>YES</b>    |
|                 | 2030        | 41.57                      | <b>YES</b>    |

| Ozone |             | VOC         | NOx  | VOC  | NOx |
|-------|-------------|-------------|------|------|-----|
|       |             | 2008 Budget | 11.5 | 32.7 |     |
|       | 2008        | 11.5        | 32.6 | YES  | YES |
|       | 2010 Budget | 9.6         | 27.2 |      |     |
|       | 2010        | 9.6         | 27.0 | YES  | YES |
|       | 2013        | 7.9         | 20.6 | YES  | YES |
|       | 2020        | 5.6         | 11.3 | YES  | YES |
|       | 2030        | 4.2         | 7.2  | YES  | YES |

| PM-10 |                      | PM-10       | NOx  | PM-10 | NOx |
|-------|----------------------|-------------|------|-------|-----|
|       |                      | 2008 Budget | 10.7 | 34.2  |     |
|       | 2008                 | 10.6        | 34.1 | YES   | YES |
|       | 2010 Budget          | 10.8        | 28.4 |       |     |
|       | 2010                 | 10.7        | 28.2 | YES   | YES |
|       | 2010 Adjusted Budget | 13.1        | 25.0 |       |     |
|       | 2020                 | 13.1        | 11.9 | YES   | YES |
|       | 2010 Adjusted Budget | 15.8        | 20.9 |       |     |
|       | 2030                 | 15.8        | 7.6  | YES   | YES |

| PM2.5<br>24-Hour Standard |                | PM2.5 | NOx  |  | PM2.5 | NOx |
|---------------------------|----------------|-------|------|--|-------|-----|
|                           | 2002 Base Year | 1.1   | 53.3 |  |       |     |
|                           | 2010           | 0.9   | 28.2 |  | YES   | YES |
|                           | 2020           | 0.9   | 11.9 |  | YES   | YES |
|                           | 2030           | 1.0   | 7.6  |  | YES   | YES |

| PM2.5 Annual<br>Standard |                | PM2.5 | NOx   |  | PM2.5 | NOx |
|--------------------------|----------------|-------|-------|--|-------|-----|
|                          | 2002 Base Year | 402   | 19455 |  |       |     |
|                          | 2010           | 329   | 10293 |  | YES   | YES |
|                          | 2020           | 329   | 4344  |  | YES   | YES |
|                          | 2030           | 365   | 2774  |  | YES   | YES |

**2006 Conformity Results Summary -- KERN (Mojave Desert)**

| Pollutant | Scenario    | Emissions Total (tons/day) |     | DID YOU PASS? |     |
|-----------|-------------|----------------------------|-----|---------------|-----|
|           |             | ROG                        | NOx | ROG           | NOx |
| Ozone     | 2005 Budget | 3.9                        | 7.1 |               |     |
|           | 2009        | 2.4                        | 4.8 | YES           | YES |
|           | 2015 Budget | 2.1                        | 4.0 |               |     |
|           | 2015        | 1.6                        | 3.0 | YES           | YES |
|           | 2020        | 1.2                        | 2.2 | YES           | YES |
|           | 2030        | 1.0                        | 1.5 | YES           | YES |

**2006 Conformity Results Summary -- KERN (Indian Wells Valley)**

| PM-10 |             | PM-10 | PM-10 | NOx |
|-------|-------------|-------|-------|-----|
|       |             | 1.7   |       |     |
|       | 2013 Budget | 1.7   |       |     |
|       | 2013        | 1.2   | YES   | YES |
|       | 2020        | 1.2   | YES   | YES |
|       | 2030        | 1.3   | YES   | YES |

**APPENDIX D**

**PM2.5 CONFORMITY RESULTS SUMMARY FOR EACH MPO  
IN THE SAN JOAQUIN VALLEY NONATTAINMENT AREA**

**PM2.5 Conformity Results Summary – Fresno**

| PM2.5<br>24-Hour<br>Standard |                | PM2.5 | NOx  |     | PM2.5 | NOx |
|------------------------------|----------------|-------|------|-----|-------|-----|
|                              | 2002 Base Year | 1.1   | 50.4 |     |       |     |
|                              |                |       |      |     |       |     |
|                              | 2010           | 0.9   | 26.8 |     | YES   | YES |
|                              | 2020           | 0.9   | 10.8 |     | YES   | YES |
| 2030                         | 1.0            | 5.9   |      | YES | YES   |     |

| PM2.5<br>Annual<br>Standard |                | PM2.5 | NOx   |     | PM2.5 | NOx |
|-----------------------------|----------------|-------|-------|-----|-------|-----|
|                             | 2002 Base Year | 402   | 18396 |     |       |     |
|                             |                |       |       |     |       |     |
|                             | 2010           | 329   | 9782  |     | YES   | YES |
|                             | 2020           | 329   | 3942  |     | YES   | YES |
| 2030                        | 365            | 2154  |       | YES | YES   |     |

**PM2.5 Conformity Results Summary – Kern**

| PM2.5<br>24-Hour<br>Standard |                | PM2.5 | NOx  |     | PM2.5 | NOx |
|------------------------------|----------------|-------|------|-----|-------|-----|
|                              | 2002 Base Year | 1.1   | 53.3 |     |       |     |
|                              |                |       |      |     |       |     |
|                              | 2010           | 0.9   | 28.2 |     | YES   | YES |
|                              | 2020           | 0.9   | 11.9 |     | YES   | YES |
| 2030                         | 1.0            | 7.6   |      | YES | YES   |     |

| PM2.5<br>Annual<br>Standard |                | PM2.5 | NOx   |     | PM2.5 | NOx |
|-----------------------------|----------------|-------|-------|-----|-------|-----|
|                             | 2002 Base Year | 402   | 19455 |     |       |     |
|                             |                |       |       |     |       |     |
|                             | 2010           | 329   | 10293 |     | YES   | YES |
|                             | 2020           | 329   | 4344  |     | YES   | YES |
| 2030                        | 365            | 2774  |       | YES | YES   |     |

**PM2.5 Conformity Results Summary – Kings**

| PM2.5<br>24-Hour<br>Standard |      | PM2.5          | NOx |     | PM2.5 | NOx |
|------------------------------|------|----------------|-----|-----|-------|-----|
|                              |      | 2002 Base Year | 0.2 | 8.6 |       |     |
|                              |      |                |     |     |       |     |
|                              | 2010 | 0.2            | 5.2 |     | YES   | YES |
|                              | 2020 | 0.2            | 2.3 |     | YES   | YES |
|                              | 2030 | 0.2            | 1.2 |     | YES   | YES |

| PM2.5<br>Annual<br>Standard |      | PM2.5          | NOx  |      | PM2.5 | NOx |
|-----------------------------|------|----------------|------|------|-------|-----|
|                             |      | 2002 Base Year | 73   | 3139 |       |     |
|                             |      |                |      |      |       |     |
|                             | 2010 | 73             | 1898 |      | YES   | YES |
|                             | 2020 | 73             | 840  |      | YES   | YES |
|                             | 2030 | 73             | 438  |      | YES   | YES |

**PM2.5 Conformity Results Summary – Madera**

| PM2.5<br>24-Hour<br>Standard |      | PM2.5          | NOx |      | PM2.5 | NOx |
|------------------------------|------|----------------|-----|------|-------|-----|
|                              |      | 2002 Base Year | 0.3 | 10.4 |       |     |
|                              |      |                |     |      |       |     |
|                              | 2010 | 0.2            | 7.7 |      | YES   | YES |
|                              | 2020 | 0.3            | 4.2 |      | YES   | YES |
|                              | 2030 | 0.3            | 2.9 |      | YES   | YES |

| PM2.5<br>Annual<br>Standard |      | PM2.5          | NOx  |      | PM2.5 | NOx |
|-----------------------------|------|----------------|------|------|-------|-----|
|                             |      | 2002 Base Year | 110  | 3796 |       |     |
|                             |      |                |      |      |       |     |
|                             | 2010 | 73             | 2811 |      | YES   | YES |
|                             | 2020 | 110            | 1533 |      | YES   | YES |
|                             | 2030 | 110            | 1059 |      | YES   | YES |

**PM2.5 Conformity Results Summary – Merced**

| PM2.5<br>24-Hour<br>Standard |      | PM2.5          | NOx |      | PM2.5 | NOx |
|------------------------------|------|----------------|-----|------|-------|-----|
|                              |      | 2002 Base Year | 0.4 | 19.3 |       |     |
|                              |      |                |     |      |       |     |
|                              | 2010 | 0.3            | 9.9 |      | YES   | YES |
|                              | 2020 | 0.3            | 3.4 |      | YES   | YES |
|                              | 2030 | 0.4            | 1.5 |      | YES   | YES |

| PM2.5<br>Annual<br>Standard |      | PM2.5          | NOx  |      | PM2.5 | NOx |
|-----------------------------|------|----------------|------|------|-------|-----|
|                             |      | 2002 Base Year | 146  | 7045 |       |     |
|                             |      |                |      |      |       |     |
|                             | 2010 | 110            | 3614 |      | YES   | YES |
|                             | 2020 | 110            | 1241 |      | YES   | YES |
|                             | 2030 | 146            | 548  |      | YES   | YES |

**PM2.5 Conformity Results Summary – San Joaquin**

| PM2.5<br>24-Hour<br>Standard |      | PM2.5          | NOx  |      | PM2.5 | NOx |
|------------------------------|------|----------------|------|------|-------|-----|
|                              |      | 2002 Base Year | 0.8  | 36.9 |       |     |
|                              |      |                |      |      |       |     |
|                              | 2010 | 0.7            | 17.7 |      | YES   | YES |
|                              | 2020 | 0.7            | 6.3  |      | YES   | YES |
|                              | 2030 | 0.8            | 2.6  |      | YES   | YES |

| PM2.5<br>Annual<br>Standard |      | PM2.5          | NOx  |       | PM2.5 | NOx |
|-----------------------------|------|----------------|------|-------|-------|-----|
|                             |      | 2002 Base Year | 292  | 13469 |       |     |
|                             |      |                |      |       |       |     |
|                             | 2010 | 256            | 6461 |       | YES   | YES |
|                             | 2020 | 256            | 2300 |       | YES   | YES |
|                             | 2030 | 292            | 949  |       | YES   | YES |

**PM2.5 Conformity Results Summary – Stanislaus**

| PM2.5<br>24-Hour<br>Standard |      | PM2.5          | NOx  |      | PM2.5 | NOx |
|------------------------------|------|----------------|------|------|-------|-----|
|                              |      | 2002 Base Year | 0.6  | 27.7 |       |     |
|                              |      |                |      |      |       |     |
|                              | 2010 | 0.4            | 13.2 |      | YES   | YES |
|                              | 2020 | 0.4            | 5.8  |      | YES   | YES |
|                              | 2030 | 0.5            | 2.8  |      | YES   | YES |

| PM2.5<br>Annual<br>Standard |      | PM2.5          | NOx  |       | PM2.5 | NOx |
|-----------------------------|------|----------------|------|-------|-------|-----|
|                             |      | 2002 Base Year | 219  | 10111 |       |     |
|                             |      |                |      |       |       |     |
|                             | 2010 | 146            | 4818 |       | YES   | YES |
|                             | 2020 | 146            | 2117 |       | YES   | YES |
|                             | 2030 | 183            | 1022 |       | YES   | YES |

**PM2.5 Conformity Results Summary – Tulare**

| PM2.5<br>24-Hour<br>Standard |      | PM2.5          | NOx  |      | PM2.5 | NOx |
|------------------------------|------|----------------|------|------|-------|-----|
|                              |      | 2002 Base Year | 0.6  | 30.0 |       |     |
|                              |      |                |      |      |       |     |
|                              | 2010 | 0.4            | 15.4 |      | YES   | YES |
|                              | 2020 | 0.4            | 5.8  |      | YES   | YES |
|                              | 2030 | 0.5            | 3.0  |      | YES   | YES |

| PM2.5<br>Annual<br>Standard |      | PM2.5          | NOx  |       | PM2.5 | NOx |
|-----------------------------|------|----------------|------|-------|-------|-----|
|                             |      | 2002 Base Year | 219  | 10950 |       |     |
|                             |      |                |      |       |       |     |
|                             | 2010 | 146            | 5621 |       | YES   | YES |
|                             | 2020 | 146            | 2117 |       | YES   | YES |
|                             | 2030 | 183            | 1095 |       | YES   | YES |

**APPENDIX E**

**TIMELY IMPLEMENTATION DOCUMENTATION FOR  
TRANSPORTATION CONTROL MEASURES**



## TIMELY IMPLEMENTATION OF TRANSPORTATION CONTROL MEASURES

| <u>RACM Commitment</u> | <u>Agency</u> | <u>Commitment Description</u>                   | <u>Commitment Schedule</u> | <u>Commitment Funding</u>       | <u>TIP</u> | <u>TIP Project ID</u> | <u>Project Description</u>  | <u>PM 2.5 Conformity Update</u><br>(as of 11/05)  | <u>2006 Conformity Update</u><br>(as of 5/06) |
|------------------------|---------------|---|----------------------------|---------------------------------|------------|-----------------------|---|---|---|
| KE 14.10               | KCOG          | Public Education Program                        | 02/03 - 04/05              | \$40,000 per year               | 2002       | KER020122             | IN KERN COUNTY: COUNTYWIDE WITH SPECIAL EMPHASIS ON SAN JOAQUIN PORTION OF KERN COUNTY, PUBLIC OUTREACH PROGRAM, AND SOME CAPITAL | Complete  |   |
| KE 1.1                 | Arvin         | New bus service to Ikea plant and business park | 2002                       | Not specified                   |            |                       |   | Complete  |   |
| KE 1.5                 | Arvin         | Construct transfer station                      | 2005                       | \$650,000 CMAQ (includes local) | 2002       | KER000503             | CONSTRUCT NEW TRANSIT TRANSFER STATION  | Delays due to city attorney clearance to allow contract engineer to do work. Caltrans approved clearance November 2005. Expected completion by the end of 2006. | Expected completion by the end of 2006.       |

| <u>RACM Commitment</u> | <u>Agency</u> | <u>Commitment Description</u>                               | <u>Commitment Schedule</u> | <u>Commitment Funding</u>   | <u>TIP</u> | <u>TIP Project ID</u> | <u>Project Description</u>   | <u>PM 2.5 Conformity Update</u><br>(as of 11/05) | <u>2006 Conformity Update</u><br>(as of 5/06) |
|------------------------|---------------|---|----------------------------|-----------------------------|------------|-----------------------|--|--|---|
| KE 9.3                 | Arvin         | Drive Approach Modification Project; Traffic Signal Project | 2003; 2003                 | \$395,000 Total             |            |                       |  | Complete   |   |
| KE 10.2                | Arvin         | Bike Racks on Buses   | 2002                       | Not specified               |            |                       |  | Complete   |   |
| KE 5.2 and 5.16        | Bakersfield   | Traffic signal interconnect projects                        | 2003                       | \$1 M CMAQ (includes local) |            |                       |  |  |   |
|                        |               |   |                            |                             | 1998       | KER960506             | TRAFFIC OPERATIONS CENTER: MANAGEMENT CENTER TO LINK ALL TRAFFIC SIGNALS TO CITY HALL- PURCHASE HARDWARE AND SOFTWARE - CONSTRUCTION OF CENTER (PHASE 2) | Complete   |   |
|                        |               |   |                            |                             | 2002       | KER000504             | SIGNALIZATION, COMMUNICATION / SYNCHRONIZATION OF SOUTH H STREET FROM WHITE LANE TO PANAMA LANE  | Complete   |   |
|                        |               |   |                            |                             | 2002       | KER000505             | SIGNALIZATION, COMMUNICATION / SYNCHRONIZATION OF STINE ROAD FROM WHITE LANE TO HARRIS ROAD  | Complete   |   |

| <u>RACM<br/>Commitment</u> | <u>Agency</u> | <u>Commitment<br/>Description</u> | <u>Commitment<br/>Schedule</u> | <u>Commitment<br/>Funding</u> | <u>TIP</u> | <u>TIP Project<br/>ID</u> | <u>Project Description</u>   | <u>PM 2.5 Conformity<br/>Update</u><br><br>(as of 11/05)  | <u>2006<br/>Conformity<br/>Update</u><br><br>(as of 5/06) |
|----------------------------|---------------|-----------------------------------|--------------------------------|-------------------------------|------------|---------------------------|--|---|---|
|                            |               |                                   |                                |                               | 2002       | KER000506                 | SIGNALIZATION,<br>COMMUNICATION /<br>SYNCHRONIZATION OF ASHE<br>ROAD FROM CLUB VIEW<br>DRIVE TO NORTH HALF MOON<br>BLVD. | Complete  |   |
|                            |               |                                   |                                |                               | 2002       | KER000507                 | SIGNALIZATION,<br>COMMUNICATION /<br>SYNCHRONIZATION OF MISC.<br>BRANCH COMMUNICATIONS<br>AT VARIOUS LOCATIONS           | Complete  |   |
|                            |               |                                   |                                |                               | 2002       | KER010502                 | SIGNALIZATION:<br>COMMUNICATION /<br>SYNCHRONIZATION OF<br>THREE IDENTIFIED SIGNAL<br>LOCATIONS                          | Construction<br>contract awarded<br>June 2005.<br>Contractor garnered<br>delay. Project<br>currently in<br>construction.<br>Expected<br>completion first<br>quarter 06. | Complete  |
|                            |               |                                   |                                |                               | 2002       | KER990512                 | IN BAKERSFIELD -TRAFFIC<br>SIGNAL WIRED<br>INTERCONNECT ON NILES ST.<br>FROM ALTA VISTA DR. TO<br>HALEY ST.              | Construction<br>contract awarded<br>June 2005.<br>Contractor garnered<br>delay. Project<br>currently in<br>construction.<br>Expected<br>completion first<br>quarter 06. | Complete  |

| <u>RACM Commitment</u> | <u>Agency</u> | <u>Commitment Description</u>                                       | <u>Commitment Schedule</u> | <u>Commitment Funding</u> | <u>TIP</u> | <u>TIP Project ID</u> | <u>Project Description</u>  | <u>PM 2.5 Conformity Update</u><br>(as of 11/05)   | <u>2006 Conformity Update</u><br>(as of 5/06) |
|------------------------|---------------|---|----------------------------|---------------------------|------------|-----------------------|---|--|---|
|                        |               |   |                            |                           | 2002       | KER990520             | IN BAKERSFIELD -(TRUNK LINE) TRAFFIC SIGNAL WIRED INTERCONNECT ON CHESTER AVENUE FROM 23RD ST. TO W. COLUMBUS ST. | Construction contract awarded June 2005. Contractor garnered delay. Project currently in construction. Expected completion first quarter 06. | Complete                                      |
|                        |               |   |                            |                           | 2002       | KER010503             | SIGNALIZATION: COMMUNICATION / SYNCHRONIZATION OF MISC. BRANCH COMMUNICATIONS AT VARIOUS LOCATIONS                | Construction contract awarded June 2005. Contractor garnered delay. Project currently in construction. Expected completion first quarter 06. | Complete                                      |
| KE 5.3                 | Bakersfield   | Intersection improvements at White and Wible Road; Westside Parkway | 2003; 2007 +               | Not specified             |            |                       |   |  |   |

| <u>RACM Commitment</u> | <u>Agency</u>   | <u>Commitment Description</u>  | <u>Commitment Schedule</u> | <u>Commitment Funding</u> | <u>TIP</u> | <u>TIP Project ID</u> | <u>Project Description</u> | <u>PM 2.5 Conformity Update</u><br>(as of 11/05)  | <u>2006 Conformity Update</u><br>(as of 5/06)  |   |
|------------------------|-----------------|--------------------------------|----------------------------|---------------------------|------------|-----------------------|----------------------------|---|--|---|
|                        |                 |                                |                            |                           |            | 2000                  | KER970508                  | SIGNALIZATION: TRUNK LINE COMMUNICATIONS/SYNCHRO. - WHITE LANE FROM WIBLE ROAD TO HUGHES LANE           | Complete   | Awaiting modifications to the existing traffic signals before construction of median islands can be done. Construction scheduled for fourth quarter 06. |
|                        |                 |                                |                            |                           |            | 2002                  | KER010501                  | SIGNALIZATION: COMMUNICATION / SYNCHRONIZATION OF GOSFORD ROAD FROM WHITE LANE TO STOCKDALE HWY.        | Complete   | Construction scheduled for fourth quarter 06.   |
|                        |                 |                                |                            |                           |            | 2002                  | KER020102                  | IN BAKERSFIELD: FROM STOCKDALE HWY TO TRUXTUN AVE AT ROUTE 99; CONSTRUCT 4-LANE AND 6-LANE NEW FACILITY | 2004 FTIP federally approved 10/4/04. Environmental and right of way phases in progress. | Environmental and right of way phases in progress.  |
| KE 9.5                 | California City | Expand bike lanes by about 75% | 2003                       | Not specified             |            |                       |                            | Complete  |  |   |

| <u>RACM Commitment</u> | <u>Agency</u> | <u>Commitment Description</u>   | <u>Commitment Schedule</u> | <u>Commitment Funding</u> | <u>TIP</u> | <u>TIP Project ID</u> | <u>Project Description</u>  | <u>PM 2.5 Conformity Update</u><br>(as of 11/05) | <u>2006 Conformity Update</u><br>(as of 5/06) |
|------------------------|---------------|---|----------------------------|---------------------------|------------|-----------------------|---|--|---|
| KE 1.5                 | Kern County   | Service to Shafter, Wasco, McFarland, Delano, Lost Hills, Lamont, Weedpatch, Ridgecrest, California City and Mojave | 2003                       | \$400,000 per year        |            |                       |   | Complete   |   |
| KE 5.2                 | County        | Six signal projects   | 2005                       | \$4,515,000 Total         |            |                       |   |  |   |
|                        |               |   |                            |                           | 2000       | KER000521             | SIGNALIZATION, SYNCHRONIZATION, CHANNELIZATION AND RELATED SAFETY MODIFICATIONS ON OLIVE DRIVE FROM FRUITVALE AVENUE TO COFFEE ROAD | Complete   |   |
|                        |               |   |                            |                           | 2000       | KER990519             | SIGNALIZATION, SIGNAL SYNCHRONIZATION, CHANNELIZATION AND RELATED SAFETY MODIFICATIONS - NILES ST. FROM VIRGINIA ST. TO MORNING DR. | Complete   |   |
|                        |               |   |                            |                           | 2000       | KER990518             | SIGNAL SYNCHRONIZATION, CHANNELIZATION AND RELATED SAFETY MODIFICATIONS - FAIRFAX RD. FROM BRUNDAGE LANE TO COLLEGE AVE.            | Complete   |   |

| <u>RACM Commitment</u> | <u>Agency</u> | <u>Commitment Description</u>              | <u>Commitment Schedule</u> | <u>Commitment Funding</u>      | <u>TIP</u> | <u>TIP Project ID</u> | <u>Project Description</u>  | <u>PM 2.5 Conformity Update</u><br>(as of 11/05)  | <u>2006 Conformity Update</u><br>(as of 5/06)               |
|------------------------|---------------|--|----------------------------|--------------------------------|------------|-----------------------|---|---|---|
|                        |               |  |                            |                                | 2000       | KER990523             | SIGNALIZATION, SIGNAL SYNCHRONIZATION, CHANNELIZATION AND RELATED SAFETY MODIFICATIONS - OSWELL ST. FROM BRUNDAGE LANE TO BERNARD ST. | Complete  |   |
|                        |               |  |                            |                                | 2000       | KER000533             | SYNCHRONIZATION CHANNELIZATION AND RELATED SAFETY MODIFICATIONS ON CALIFORNIA AVENUE FROM WASHINGTON STREET TO EDISON HIGHWAY         | Complete.   |   |
|                        |               |  |                            |                                |            |                       |   | Going out to bid for equipment. Expected purchase and installation within third quarter 06. | Expected purchase and installation within third quarter 06. |
| KE 10.2                | County        | Retrofit buses with bike racks             | 2005                       | \$80,000 CMAQ (includes local) | 2002       | KER000528             | INSTALL BIKE CYCLE RACKS ON BUS FLEET   | Complete  |   |
| KE 10.2                | Delano        | Bike racks on four full size transit buses | 2003                       | Not specified                  |            |                       |   | Complete  |   |

| <u>RACM Commitment</u> | <u>Agency</u> | <u>Commitment Description</u>  | <u>Commitment Schedule</u> | <u>Commitment Funding</u> | <u>TIP</u> | <u>TIP Project ID</u>  | <u>Project Description</u>                                       | <u>PM 2.5 Conformity Update</u><br>(as of 11/05)   | <u>2006 Conformity Update</u><br>(as of 5/06)  |
|------------------------|---------------|--|----------------------------|---------------------------|------------|------------------------|--|--|--|
| J 34                   | GET           | Develop and implement an area vehicle locator  |                            | \$2.2 million             | 2002       | KER990526<br>KER990527 | Area Vehicle Locator (Phase 1)<br>Area Vehicle Locator (Phase 2) | Complete   |  |
| KE 9.3                 | Ridgecrest    | Construct 1.5 miles of bicycle lane on existing streets and 2.67 miles of new bike lanes                     | 2003                       | \$165,000 TEA             | 2002       | KER990902              | IN RIDGECREST - CHELSEA STREET BICYCLE PATH EXTENSION PROJECT    | Complete   |  |
| KE 1.5                 | Shafter       | Analyze transit system for route expansion; construct a CNG facility; two CNG mini-vans for enhanced service | 2000; 2003                 | Not specified             |            |                        |  | Analysis is complete. Additional projects should be excluded since they are NA (fuel based) under the conformity rule. | Update given 9/16/04: Analysis is complete. The City of Shafter fleet has increased from two to five vans to accommodate both the expanded intracity service provided by the County and the expanded intercity |

| <u>RACM Commitment</u> | <u>Agency</u> | <u>Commitment Description</u>  | <u>Commitment Schedule</u> | <u>Commitment Funding</u> | <u>TIP</u> | <u>TIP Project ID</u> | <u>Project Description</u>                               | <u>PM 2.5 Conformity Update</u><br>(as of 11/05)   | <u>2006 Conformity Update</u><br>(as of 5/06) |
|------------------------|---------------|--|----------------------------|---------------------------|------------|-----------------------|--|--|---|
| KE 1.5                 | Taft          | Construct transit transfer station   | 2002                       | \$375,000 CMAQ            | 2002       | KER990550             | IN THE CITY OF TAFT - CONSTRUCT TRANSIT TRANSFER STATION | Complete   | service by the City.                          |
| KE 9.5 and 9.2         | Tehachapi     | 1.3 miles of Class I bike trails adjacent to several roadways in community | 2003                       | Not specified             |            |                       |  | Complete   |   |
| SJ 5.3                 | Wasco         | Traffic signal at Highway 46 and Griffith Avenue                           | Not specified              | \$221,000                 |            |                       |  | Project was delayed due to Caltrans requested design changes. Revisions submitted May 2005. The project is in progress. Expected completion by 07. | Expected completion by end of 2007.           |

| <u>RACM Commitment</u> | <u>Agency</u> | <u>Commitment Description</u>                       | <u>Commitment Schedule</u> | <u>Commitment Funding</u> | <u>TIP</u> | <u>TIP Project ID</u> | <u>Project Description</u>               | <u>PM 2.5 Conformity Update</u><br>(as of 11/05)  | <u>2006 Conformity Update</u><br>(as of 5/06) |
|------------------------|---------------|---|----------------------------|---------------------------|------------|-----------------------|--|---|---|
| KE 7.17                | Wasco         | Construct new transit transfer station              | design in 2002             | \$619,710 CMAQ            | 2002       | KER000520             | CONSTRUCT NEW TRANSIT TRANSFER STATION   | Project was delayed due to project redesign and delays in acquiring land from Railroad. Construction contract was awarded on November 2005. Expected completion by fourth qtr. of 06. | Expected completion by fourth qtr. of 06.     |
| KE 9.1                 | Wasco         | Convert two mid-block alleys to pedestrian walkways | 2002                       | TEA                       | 2002       | KER001001             | DOWNTOWN STREETSCAPE IMPROVEMENT PROJECT | Complete  |   |

**TIMELY IMPLEMENTATION DOCUMENTATION FOR  
TRANSPORTATION CONTROL MEASURES**

| <u>RACM Commitment</u> | <u>Agency</u>  | <u>Measure Title</u>                                 | <u>Measure Description (not verbatim)</u>   | <u>2006 Conformity Update</u>   |
|------------------------|----------------|--|---|---|
| -                      | -              | -  | -   | <b>(as of 5/06)</b>   |
| -                      | -              | -  | -   |   |
| 14.9                   | KCOG           | Business, Industry and Governmental Outreach Program | Implement multi-agency outreach program and promote incentives for 2002-03 through 2004-05  | Commitment Complete. Program was implemented through KER020122 (see Project TID Table).   |
| KE5.4                  | Bakersfield    | Site-Specific Transportation Control Measures        | Encourage implementation...include various channelization and signal modification projects identified by special traffic studies or development for the next 5 years (2007) | Projects prior to 2007 complete (see Project TID Table).  |
| KE1.1                  | County of Kern | Regional Express Bus Program                         | Purchase buses to operate regional express bus service  | Yes, buses have been purchased. Regional express bus service on schedule.   |
| KE1.7                  | County of Kern | Free transit during special events                   | Offer one day of free travel from Bakersfield to Kernville Whisky Flat Days and Frazier Park Lilac Festival   | The County of Kern has offered free transit for these events and will continue to do so.  |
| KE9.2                  | County of Kern | Encouragement of Pedestrian Travel                   | Implement Bikeway Master Plan   | Ongoing program underway since 1996 - Bike lanes and easements being dedicated as new tract maps are recorded consistent with the plan (Complete) - Kern River Trails Plan completed - Metropolitan Bakersfield Update will review and update plan to ensure integration between City and County. |
| KE14.4                 | County of Kern | Voluntary No Drive Day Programs                      | Conduct voluntary employee no-drive day programs during the ozone season through media and employer based public awareness activities in 2002                               | Commitment complete - Email alerts on-going during the smog season. Staff reorganization temporarily delayed PSA production and distribution. However PSA will be employed beginning in 2006 season.  |
| KE5.1                  | Taft           | Develop Intelligent Transportation Systems           | Provide areas for pedestrian and bicyclist in vicinity of commercial development and promote use of such areas.   | Rails to Trails projects listed are complete.   |
| KE9.3                  | Taft           | Bicycle/Pedestrian Program                           | Provide facilities for only pedestrian and bicycle use.   | Rails to Trails projects listed are complete.   |

| <u>RACM Commitment</u> | <u>Agency</u> | <u>Measure Title</u>   | <u>Measure Description (not verbatim)</u>  | <u>2006 Conformity Update</u>  |
|------------------------|---------------|--|--|--|
| -                      | -             | -  | -  | <b>(as of 5/06)</b>  |
| KE9.5                  | Taft          | Encouragement of Bicycle Travel  | Provide funding for bikeway system.<br>Provide education materials   | Yes, funding and education materials have been provided. Projects complete as of 2004.   |
| KE1.7                  | Wasco         | Free transit during special events   | Provide free transit between Saturday's events during the Wasco Rose Festival beginning in 2002 through 2005                                       | Commitment Complete, free transit was provided.  |
| KE3.9                  | Wasco         | Encourage merchants and employers to subsidize the cost of transit for employees | Offer free transportation to full time, permanent City of Wasco, School District and High School District employees beginning in 2002 through 2005 | Commitment Complete, free transportation was provided.   |
| KE9.8                  | Wasco         | Close streets for special events for use by bikes and pedestrians                | Close streets to vehicles for the annual Wasco Festival of Roses   | Yes, the parade route was closed. Poplar Ave. by Barker Park at 11th & Poso was closed off from vehicle traffic, open to foot traffic only. This activity will continue. |

## **APPENDIX F**

### **PUBLIC HEARING PROCESS DOCUMENTATION**

The adopted Kern COG Public Involvement Policy and Procedure requires the regional conformity analysis 30-day public review period to be advertised with display ads at the beginning of the 30-day public review and prior to the Public Hearing. In addition, a legal notice is published 10-20 days prior to the Public Hearing. A public workshop/booth was advertised held in conjunction with the Cinco de Mayo Festival in Shafter on April 29, 2006 and was attend by 140 people. The public review period began May 16, 2006. The Public Hearing was held on June 15, 2006 with final adoption scheduled for July 20, 2006 after a response to comments received during the public review period has been prepared and coordinated for the eight San Joaquin Valley Metropolitan Planning Organizations.

Public Workshop Notices

Sunday, May 7, 2006

THE BAKERSFIELD CALIFORNIAN **A23**

# Air Quality Notice



**Kern Council  
of Governments**

For information,  
please call  
661-861-2191

Are tax dollars being spent on transportation projects where you live? Will building more roads make air quality worse? Come find answers to these and other questions about the Draft 2006 Federal Transportation Improvement Program (FTIP) and Draft Air Quality Conformity Analysis. Documents are available for review at all Kern County libraries and on the Kern COG Web site, [www.kerncog.org](http://www.kerncog.org), from May 16 to June 15.

**Come Find Information & Provide Input On:**

- Transportation Project Funding
- Air quality programs & processes

**What:** Draft 2006 FTIP & Air Quality Conformity Public Review Period  
**When:** May 16 through June 15  
**Where:** **Public Workshop** — 6 p.m. Thursday, May 18  
Kern COG booth at the Bakersfield Street Fair, corner of 20th Street and Chester Avenue.  
**Public Hearing** — 7 p.m. Thursday, June 18 at Kern COG, 1401 19th St. #300, in Bakersfield. Adoption July 20.

## PROGRAM

### AVAILABLE

& \$1,000 grants  
**DEADLINE 6/23/06**

Application forms are available  
at the Superintendent of Schools  
office or by calling  
661-861-7411

Grants that feed onto these school districts:

District  
Mool District



22667

Thursday / Jueves May 11, 2006 El MexiCalo 5

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## Noticia Sobre la Calidad del Aire



Kern Council  
of Governments

Para Información  
por favor llamar  
661-861-2191

¿El dinero de los impuestos está siendo gastado en proyectos de transportación en donde usted vive? ¿La construcción de nuevos caminos empeorará la calidad del aire? Venga a encontrar respuesta a éstas y otras preguntas acerca del Anteproyecto del programa Federal de Mejoras de Transportación 2006 (FTIP) y el Anteproyecto del Análisis de Conformidad de Calidad del Aire. Los documentos están disponibles para revisión en todas las bibliotecas del Condado de Kern y en la página de Internet del Kern COG [www.kerncog.org](http://www.kerncog.org) desde el 16 de mayo al 15 de junio.

Venga a Encontrar Información & Dar sus Opiniones sobre:

- Financiamiento de Proyectos de Transportación
- Programas de calidad del aire & procesos

**Que:** Anteproyecto FTIP 2006 & Conformidad de Calidad del Aire. Periodo de Revisión Pública

**Cuando:** 16 de mayo hasta el 15 de junio

**Donde:** Taller de Trabajo Público Jueves 18 de mayo a las 6 p.m. en la caseta del Kern COG en la esquina de la Calle 20a. y Avenida Chester en la Feria popular en Bakersfield.

**Audiencia Pública:** Jueves 15 de junio a las 7 p.m. en Kern COG, 1401 19th St. #300, en Bakersfield.  
Adopción julio 20.

123  
**SESAME STREET LIVE**  
A VEE CORPORATION PRODUCTION  
SUPER GROVER READY FOR ACTION  
[sesamestreetlive.com](http://sesamestreetlive.com)

# 16 & 17 de MAYO



**Rabobank**  
THEATER

Boletos:  
**ticketmaster**  
[ticketmaster.com](http://ticketmaster.com)  
661-322-2525

(Air Quality Conformity Flyer for board workshop - adoption)

## **KERN COUNCIL OF GOVERNMENTS WORKSHOP**

# **An Overview of Transportation/Air Quality Issues**

**Thursday, July 20, 2005  
6:35 PM to 6:55 PM  
at the KCOG Board Room**

*This workshop will be presented prior to the regularly scheduled Board meeting of the Kern Council of Governments where the Air Quality Conformity Analysis for the 2006 list of near term transportation projects will be considered..*

**The workshop will cover the following areas:**

*Sources of Air Pollution in Kern*

**Conformity: Building Roads While Cleaning the Air**

*Controlling Transportation Related Sources*

*Conclusions / Questions*

**APPENDIX G**  
**RESPONSE TO PUBLIC COMMENTS**

## RESPONSE TO PUBLIC COMMENTS

**All 8 MPOs in the San Joaquin Valley nonattainment area had a 30-day public review period and conducted a public hearing on their own Draft 2007 TIP and corresponding Conformity Analyses, which included a nonattainment area demonstration for PM2.5.**

It is important to note that no other verbal or written comments were received from the public or inter-agency consultation partners, including: the California Air Resources Board, California Department of Transportation, and Federal Transit Administration.

General Comments:

COMMENT FROM STEVE LUXENBERG, FHWA  
(via e-mail, dated June 9, 2006)

Comment: I suggest correcting the sentence on page 9 that states "the SJV is currently designated nonattainment for the NAAQS for carbon monoxide . . .", since only half of the SJV's counties are designated at all under the CO standard, and those that are, including StanCOG, are maintenance areas.

Response: The following change has been made:

The San Joaquin Valley is currently designated as nonattainment for the National Ambient Air Quality Standards (NAAQS) for 8-hour ozone and particulate matter under ten and 2.5 microns in diameter (PM-10 and PM2.5); 4 of the 8 counties are also maintenance areas for carbon monoxide (CO). State Implementation Plans have been prepared to address carbon monoxide, ozone, and PM-10:

In addition, a similar change has been made to page 1:

The conformity rule 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 is designated as nonattainment areas with respect to federal air quality standards for ozone and particulate matter under ten and 2.5 microns in diameter (PM-10 and PM2.5); 4 of the 8 counties are also maintenance for carbon monoxide (CO). Therefore, transportation plans and programs for the nonattainment areas for the Kern County area must satisfy the requirements of the federal transportation conformity rule.

Comment: I would also suggest removing the sentence on page 10 or 11 that states that the SJV "is currently designated as an extreme nonattainment area for the one-hour ozone standard." While there is an extreme ozone SIP currently in place for the SJV, there are no current designations for the one hour ozone standard, which as of June 15, 2005 no longer applies.

Response: The following change has been made:

The applicable scenario in the Conformity Rule for the San Joaquin Valley is Scenario 1: Areas where the 8-hour ozone area boundary is exactly the same as the 1-hour ozone boundary. The SJV has been designated as a Serious nonattainment area for the 8-hour ozone standard.

Comment: I would caution the MPOs to note that current guidance recommends planning assumptions not older than five years be used if at all possible; SJV MPOs are treading very near that five-year threshold in a few cases.

Response: Nonattainment and maintenance areas must use the most recent planning assumptions that are available in their conformity determinations. FHWA and EPA guidance encourages regular 5-year updates of planning assumptions, especially population, employment, and vehicle registration assumptions; however, these updates are not required by the transportation conformity rule. In most cases, the SJV MPOs have made and continue to make significant efforts to update the models within this time frame. Some of the smaller MPOs do not have the resources or the need for frequent updates. Conformity determinations that are based on assumptions that are older than 5 years include written justification for not using more recent information. The MPOs use the consultation process to ensure that the latest available planning assumptions are used in conformity determinations and SIP development.

Comment: In the future, more detailed page references on the conformity checklist in Appendix A, along with any MPO comments, would assist in USDOT's ability to conduct a timely review.

Response: More detailed page references will be included in the next conformity analysis. It was our understanding that the comment column was for Federal review purposes.

Comment: When the TID table is referenced from the general measure table, please indicate which measure (by district and number) is being referenced.

Response: The Project TID table contains a separate section labeled "Additional Projects Identified" for projects that are referenced in the RACM TID table. Each additional project contains documentation of both the RACM Commitment as well as the Agency.

COMMENT FROM LAUREN DAWSON, AIR DISTRICT  
(via e-mail, dated June 14, 2006)

Comment: Minor editorial comments were received from the San Joaquin Valley Air Pollution Control District for a number of the documents.

Response: The final documents address and/or incorporate those editorial comments as appropriate. All of the supporting spreadsheets contained in Appendix C will be updated to reflect units in the next conformity analysis. However, all emission estimates are in tons/day with the exception of PM<sub>2.5</sub> annual results which are tons/year.

COMMENT FROM DAVID WAMPLER, EPA  
(via telephone, dated June 12, 2006)

Comment: Please explain how the RACM table will be updated in the future.

Response: Similar to the approach used for the Project TID table, the RACM TID table will include the previously approved implementation status and then a new update corresponding to the next conformity analysis.

Comment: On the *RACM table*, please clarify RACM commitment complete vs. project complete. This is important because a project can be complete but the commitment may not be complete.

Response: The tables have been updated accordingly.

Specific Comments (Kern COG):

COMMENT FROM DAVE JONES, KERN  
(via e-mail, dated June 6, 2006)

Comment: Page 10, paragraph 3 refers to parts of the SJV as nonattainment for CO NAAQS. There are some maintenance areas for CO but no nonattainment areas for the CO NAAQS in the San Joaquin Valley.

Response: Please refer to the general comments received from FHWA and corresponding responses.

COMMENT FROM DAVID WAMPLER, EPA  
(via telephone, dated June 13, 2006)

Comment: RACM Table – KCOG 14.9, County 14.4, Wasco 1.7 and Wasco 3.9 should indicate Commitment Complete.

Response: The tables have been updated accordingly.