

**CONFORMITY ANALYSIS FOR
THE 2011 FEDERAL TRANSPORTATION
IMPROVEMENT PROGRAM AMENDMENT 4
AND
2011 REGIONAL TRANSPORTATION PLAN
AMENDMENT 1**

MAY 2011



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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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Attention: Federal Resources Office, M.S. 82
For Rachel Falsetti, Division of Transportation Programming

Dear Mr. Brummett and Mr. Dougherty:

SUBJECT: Kern Council of Government's (KCOG) Amendment No. 4 to the 2010/2011 – 2013/14 Federal Transportation Improvement Program (FTIP) and Amendment No. 1 to the 2011 Regional Transportation Plan (RTP) and the Associated Air Quality Conformity Determination

The Federal Highway Administration (FHWA) and the Federal Transit Administration (FTA) have completed the review of KCOG's Amendment No. 4 to the 2010/2011 – 2013/14 FTIP and Amendment No. 1 to the 2011 RTP and the Associated Air Quality Conformity Determination that was submitted by your letter dated May 23, 2011. KCOG approved Amendment No. 4 to the 2010/2011 – 2013/14 FTIP and Amendment No. 1 to the 2011 RTP and the Associated Air Quality Conformity Determination on May 19, 2011. This amendment to KCOG's FTIP and RTP:

- Modifies 19 projects from various funding sources in Kern County. It includes individual and grouped project listings with funding from the State Highway Operation and Protection Program, the State Transportation Improvement Program, State Bonds and local funds.

Pursuant to the July 15, 2004, *Memorandum of Understanding between the Federal Highway Administration, California Division, and the Federal Transit Administration, Region IX*, we accept the modifications to the 2010/11 – 2013/14 Federal Statewide Transportation Improvement Program (FSTIP) and the 2011 RTP for the KCOG region in accordance with the



Final Rule on Statewide and Metropolitan Transportation Planning published in the February 14, 2007 Federal Register. We find that KCOG's 2010/11-2013/14 FTIP through Amendment No. 4 and the 2011 RTP through Amendment No. 1 were developed through a continuing, cooperative and comprehensive transportation planning process carried out in accordance with the metropolitan planning provisions of 23 U.S.C. 134, and 49 U.S.C. Chapter 53 as amended by Section 6001 of Public Law 109-59, the Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users (SAFETEA-LU).

This amendment acceptance is pursuant to a joint FHWA and FTA air quality conformity determination for the amended KCOG FY 2010/11 – 2013/14 FTIP and RTP. This joint FHWA/FTA air quality conformity determination for the amended KCOG FY 2010/11 - 2013/14 FTIP and the 2011 RTP is required by the Environmental Protection Agency's (EPA) Transportation Conformity Rule, 40 CFR Parts 51 and 93, and the FHWA/FTA Metropolitan Planning Regulations, 23 CFR Part 450.

This finding has been coordinated with the Environmental Protection Agency (EPA) Region 9 in accordance with the procedures outlined in the *National Memorandum of Understanding between DOT and EPA on Transportation Conformity*, dated April 25, 2000. Therefore, we find that KCOG's 2010/11-2013/14 FTIP through Amendment No. 4 and 2011 RTP through Amendment No. 1 conform to the applicable State Implementation Plan (SIP).

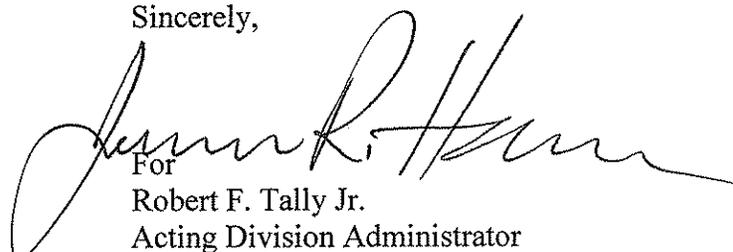
This approval is provided with the understanding that the FTA funding approval on the individual projects contained in the FSTIP are subject to grantees meeting all necessary FTA administrative requirements, and that approval of this programming action does not provide a federal eligibility determination for CMAQ projects or any other project funding source included in this amendment.

If you have questions or need additional information concerning our approval for this KCOG amendment, please contact Joseph Vaughn (joseph.vaughn@dot.gov) of the FHWA California Division office at (916) 498-5346.

Sincerely,

/s/ *Leslie T. Rogers*

Leslie T. Rogers
Regional Administrator
Federal Transit Administration


For
Robert F. Tally Jr.
Acting Division Administrator
Federal Highway Administration

cc: (e-mail)

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KCOG FTIP Binder

JVaughn/km

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EXECUTIVE SUMMARY

This report presents the Conformity Analysis for the 2011 Federal Transportation Improvement Program Amendment 4 (FTIP Amendment 4) and the 2011 Regional Transportation Plan Amendment 1 (RTP Amendment 1). 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 Section 176(c) (42 U.S.C. 7506(c)) and U.S. Environmental Protection Agency (EPA) transportation conformity regulations (40 CFR 93 Subpart A) require that each new RTP and TIP be demonstrated to conform to the State Implementation Plan (SIP) before the RTP and TIP are approved by the MPO or accepted by the U.S. Department of Transportation (DOT). This analysis demonstrates that the criteria specified in the transportation conformity regulations for a conformity determination are satisfied by the 2011 FTIP Amendment 4 and 2011 RTP Amendment 1; a finding of conformity is therefore supported. The 2011 FTIP Amendment 4 and 2011 RTP Amendment 1 and corresponding Conformity Analysis were approved by the Kern Council of Governments Policy Board on May 19, 2011. FHWA/FTA last issued a finding of conformity for the 2011 TIP and 2011 RTP on December 14, 2010.

The 2011 TIP Amendment 4 and 2011 RTP Amendment 1 have been financially constrained in accordance with the requirements of 40 CFR 93.108 and consistent with the U.S. DOT metropolitan planning regulations (23 CFR Part 450). A discussion of financial constraint and funding sources is included in the appropriate documents.

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

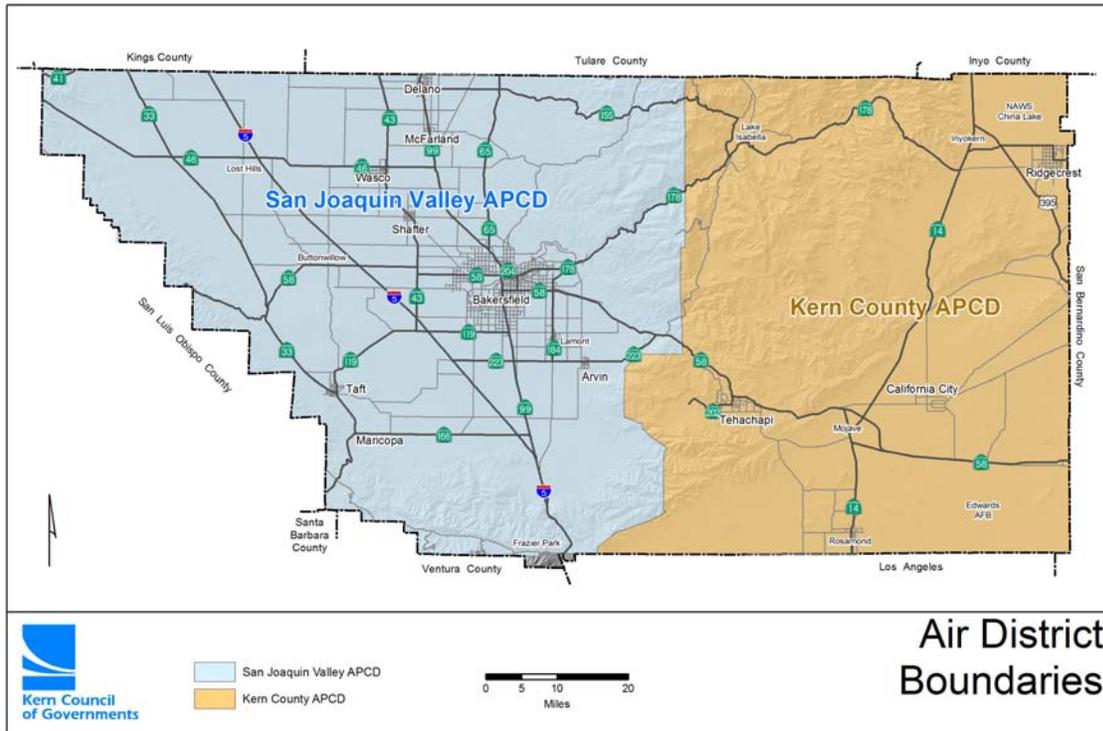
CONFORMITY REQUIREMENTS

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

The conformity regulation applies nationwide to “all nonattainment and maintenance areas for transportation-related criteria pollutants for which the area is designated nonattainment or has a maintenance plan” (40 CFR 93.102). Currently, the San Joaquin Valley (or portions thereof) is designated as nonattainment with respect to Federal air quality standards for ozone, and

particulate matter under 2.5 microns in diameter (PM2.5); and has a maintenance plan for

Figure 1– Air Pollution Control Districts in the Kern Region



particulate matter under 10 microns in diameter (PM-10), as well as a maintenance plan for carbon monoxide (CO) for the urbanized/metropolitan areas of Kern, Fresno, Stanislaus and San Joaquin Counties. Therefore, transportation plans and programs for the nonattainment areas for the

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

Kern COG is also located in the federally designated Mojave Desert, portions of the Indian Wells Valley Planning Area, and the portion of the San Joaquin Valley (SJV) PM-10 nonattainment area that lies within the Kern County Air Pollution Control District (this area is not included in the SJV 2007 PM-10 Maintenance Plan and has been labeled the East Kern PM-10 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 Valley Planning area is designated as a maintenance area for PM-10. The Kern COG transportation plans and programs also satisfy the requirements of the transportation conformity regulation for these nonattainment areas.

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

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

Figure 2 – Ozone/Carbon Monoxide Planning Areas

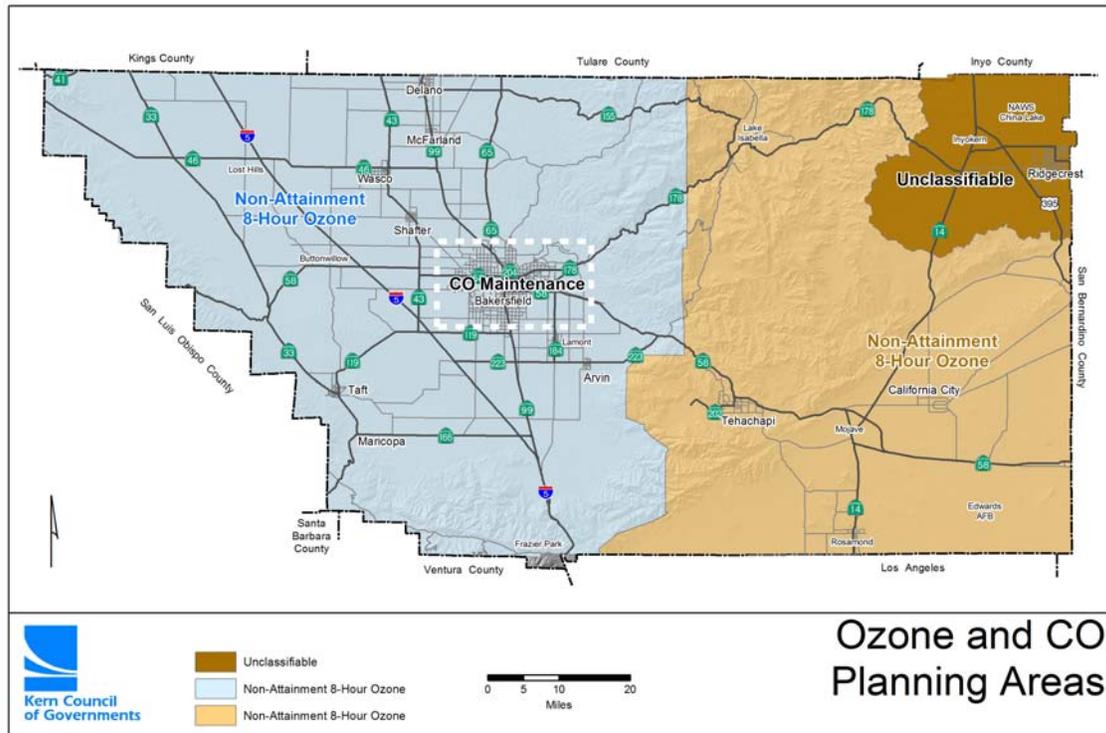
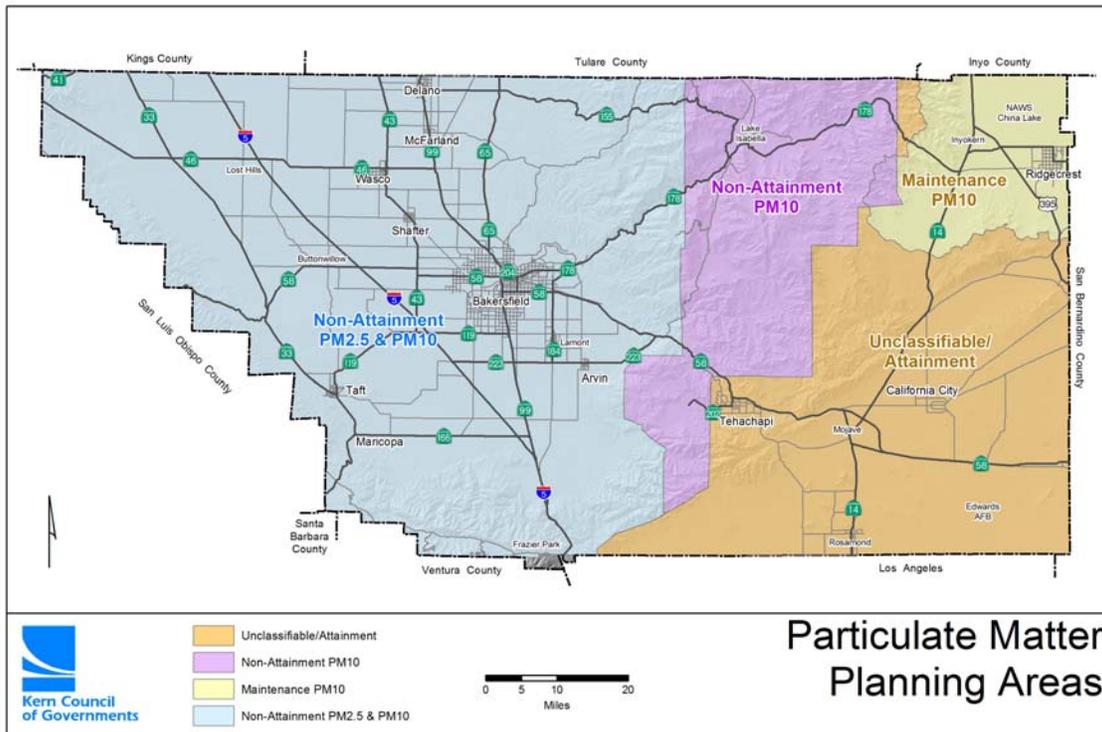


Figure 3 – Particulate Matter Planning Areas



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

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

CONFORMITY TESTS

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

RESULTS OF THE CONFORMITY ANALYSIS

A regional emissions analysis was conducted for the years 2011, 2012, 2014, 2017, 2018 (via interpolation), 2020, 2023, 2025 and 2035 for each applicable pollutant. All analyses were conducted using the latest planning assumptions and emissions models. The major conclusions of the Kern Council of Governments Conformity Analysis are:

- For carbon monoxide, the total regional on-road vehicle-related emissions associated with implementation of the 2011 FTIP Amendment 4 and the 2011 RTP Amendment 1 for the analysis years are projected to be less than the approved emissions budget established in the *2004 Revision to the California State Implementation Plan for Carbon Monoxide*. The applicable conformity test for carbon monoxide is therefore satisfied.

-
- For ozone, the total regional on-road vehicle-related emissions (ROG and NOx) associated with implementation of the 2011 FTIP Amendment 4 and the 2011 RTP Amendment 1 for all years tested are projected to be less than the adequate emissions budgets specified in the *2007 Ozone Plan*. The conformity tests for ozone are therefore satisfied.
 - For PM-10, the total regional vehicle-related emissions (PM-10 and NOx) associated with implementation of the 2011 FTIP Amendment 4 and the 2011 RTP Amendment 1 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 NOx trading mechanism for transportation conformity purposes from the *2007 PM-10 Maintenance Plan*. The conformity tests for PM-10 are therefore satisfied.
 - For PM2.5, the total regional on-road vehicle-related emissions associated with implementation of the 2011 FTIP Amendment 4 and the 2011 RTP Amendment 1 for the analysis years are projected to be less than the adequate emission budgets specified in the *2008 PM2.5 Plan*. The conformity tests for PM2.5 for both the 1997 and 2006 standards are therefore satisfied.
 - The 2011 FTIP Amendment 4 and the 2011 RTP Amendment 1 will not impede and will support timely implementation of the TCMs that have been adopted as part of applicable air quality implementation plans. The current status of TCM implementation is documented in Chapter 4 of this report.
 - Since the local SJV procedures (e.g., Air District Rule 9120 Transportation Conformity) have not been approved by EPA, consultation has been conducted in accordance with Federal requirements.

Regional emissions analyses were also conducted for 2011 (for interpolation only), 2013 (via interpolation), 2015, 2025, and 2035 for the Eastern Kern ozone area and the Indian Wells Valley PM-10 area; other years have been determined by interpolating between the years for which the regional emissions analysis is performed in accordance with the Federal conformity transportation regulation. No emissions analysis was completed for the portion of the SJV PM-10 nonattainment area that is under Kern County Air Pollution Control District jurisdiction (East Kern PM-10 Area).

- For Mojave Desert ozone, the total regional on-road vehicle-related emissions (ROG and NOx) associated with implementation of the 2011 FTIP Amendment 4 and the 2011 RTP Amendment 1 for all years tested are projected to be less than the adequate emissions budgets specified in the 8-Hour Ozone Early Progress Plan. The conformity tests for ozone are therefore satisfied.
- For Indian Wells Valley PM-10, the total regional vehicle-related emissions associated with implementation of the 2011 FTIP Amendment 4 and the 2011 RTP Amendment 1 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.

- For the portion of the SJV PM-10 nonattainment area that is under the jurisdiction of the Kern County APCD (East Kern PM-10 Area), the interim emissions test is satisfied for all years since the transportation projects and planning assumptions in both the “action” and “baseline” scenarios are exactly the same. In accordance with Section 93.119(g)(2), the emissions predicted in the “action” scenario are not greater than the emissions predicted in the “Baseline” scenario for such analysis years. 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 regulations and requirements, air quality implementation plans, and conformity test requirements. Chapter 2 contains a discussion of the latest planning assumptions and transportation modeling. Chapter 3 describes the air quality modeling used to estimate emission factors and mobile source emissions. Chapter 4 contains the documentation required under the Federal transportation conformity regulation for transportation control measures. Chapter 5 provides an overview of the interagency requirements and the general approach to compliance used by the San Joaquin Valley MPOs. The results of the conformity analysis for the TIP/RTP are provided in Chapter 6.

Appendix F includes public hearing documentation conducted on the 2011 FTIP Amendment 4 and 2011 RTP Amendment 1 and corresponding Conformity Analysis on April 21, 2011 . 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 regulation (40 CFR Parts 51 and 93) and the applicable conformity tests for the San Joaquin Valley nonattainment areas are summarized in this section. The Conformity Analysis for the 2011 Federal Transportation Improvement Program Amendment 4 (TIP) and the 2011 Regional Transportation Plan Amendment 1 (RTP) was prepared based on these criteria and tests. Presented first is a review of the development of the applicable conformity regulation and guidance procedures, followed by summaries of conformity regulation requirements, air quality designation status, conformity test requirements, and analysis years for the Conformity Analysis.

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 five year programming document for the preservation, expansion, and management of the transportation system. The 2011 RTP has a 2035 horizon that provides the long term direction for the continued implementation of the freeway/expressway plan, as well as improvements to arterial streets, transit, and travel demand management programs. The TIP and RTP include capacity enhancements to the freeway/expressway system commensurate with available funding.

A. FEDERAL AND STATE CONFORMITY REGULATIONS

CLEAN AIR ACT AMENDMENTS

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

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

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

FEDERAL RULE

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

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

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

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

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

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

MULTI-JURISDICTIONAL GUIDANCE

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

Part 3 of the guidance applies to nonattainment areas that have adequate or approved conformity budgets addressing a particular air quality standard. This Part currently applies to the San Joaquin Valley for carbon monoxide, ozone and PM-10. The guidance allows MPOs to make independent conformity determinations for their plans and TIPs as long as all of the other subareas in the nonattainment area have conforming transportation plans and TIPs in place at the time of each MPO and the Department of Transportation (DOT) conformity determination. With respect to PM_{2.5}, the Transportation Conformity Rule PM_{2.5} and PM₁₀ Amendments published on March 24, 2010 effectively incorporates the “multi-jurisdictional” guidance directly into the rule.

EPA published a budget adequacy determination for the 2012 conformity budget contained in the 2008 PM_{2.5} Plan May 12, 2010, effective May 27, 2010. The Rule allows MPOs to make independent conformity determinations for their plans and TIPs as long as all of the other subareas in the nonattainment area have conforming transportation plans and TIPs in place at the time of each MPO and DOT conformity determination.

DISTRICT RULE

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

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

B. CONFORMITY REGULATION REQUIREMENTS

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

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

- 2) *Methods / Modeling:*

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

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

- 3) *Timely Implementation of TCMs* — Section 93.113 provides a detailed description of the steps necessary to demonstrate that the new TIP/RTP are providing for the timely implementation of TCMs, as well as demonstrate that the plan and/or program is not interfering with this implementation. TCM documentation is included in Chapter 4 of the Conformity Analysis.
- 4) *Consultation* — Section 93.105 requires that the conformity determination be made in accordance with the consultation procedures outlined in the Federal regulations. These include:
 - MPOs are required to provide reasonable opportunity for consultation with State air agencies, local air quality and transportation agencies, the USDOT and EPA (Section 93.105(a)(1)).
 - MPOs are required to establish a proactive public involvement process, which provides opportunity for public review and comment prior to taking formal action on a conformity determination (Section 93.105(e)).

The TIP, RTP, and corresponding conformity determinations are prepared by each MPO. Copies of the Draft documents are provided to member agencies and others, including FHWA, Federal Transit Administration (FTA), EPA, Caltrans, CARB, and the Air District for review. Both the TIP and RTP are required to be publicly available and an opportunity for public review and comment is provided. The consultation process for the conformity analysis includes a 30-day comment period including a public hearing. However, the comment period for this conformity analysis was 45 days concurrent with the Draft 2011 TIP Amendment 4 and RTP Amendment 1, and associated California Environmental Quality Act (CEQA) documents (e.g., Addendum to the Subsequent EIR).

C. AIR QUALITY DESIGNATIONS APPLICABLE TO THE SAN JOAQUIN VALLEY

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

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 2011 FTIP Amendment 4 and RTP Amendment 1 includes analysis of existing and future air quality impacts for each applicable pollutant.

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

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

EPA published a budget adequacy determination for the 2014 conformity budget contained in the 2008 PM_{2.5} Plan on May 12, 2010, effective May 27, 2010.

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

D. CONFORMITY TEST REQUIREMENTS

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

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

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

CARBON MONOXIDE

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

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

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

County	2003 Emissions (winter tons/day)	2010 Emissions (winter tons/day)	2018 Emissions (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 regulation, regional emissions analyses for ozone areas must address nitrogen oxides (NOx) and volatile organic compounds (VOC) precursors. It is important to note that in California, reactive organic gases (ROG) are considered equivalent to and are used in place of volatile organic compounds (VOC). The motor vehicle emission budgets for ozone are specified in the 2007 Ozone Plan in tons per average summer day. EPA published the notice of adequacy determination for the 2011, 2014, and 2017 budgets in the Federal Register on January 22, 2009, effective February 6, 2009.

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

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

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

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

PM-10

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

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

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

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

^(a) Kern County subarea includes only the portion of Kern County within the San Joaquin Valley Air Basin

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

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

PM2.5

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

The 2008 PM2.5 Plan contains motor vehicle emission budgets for PM2.5 and NOx established based on average annual daily emissions. The motor vehicle emissions budget for PM2.5

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

The Clean Air Act requires all states to attain the 1997 PM2.5 standards as expeditiously as practicable beginning in 2010, but by no later than April 5, 2015. States must identify their attainment dates based on the rate of reductions from their control strategies and the severity of the PM2.5 problem. Modeling must be used to verify that the control strategy is as expeditious as practicable. The 2008 PM2.5 Plan shows that the San Joaquin Valley PM2.5 nonattainment area can attain the annual PM2.5 NAAQS in 2014. The SIP has identified subarea budgets for each MPO in the nonattainment area. For this Conformity Analysis, the SJV will continue to conduct determinations for subarea emission budgets as established in the applicable implementation plan.

Table 1-4:
On-Road Motor Vehicle PM2.5 Emissions Budgets
(tons per average annual day)

County	2009		2012		2014	
	PM2.5	NOx	PM2.5	NOx	PM2.5	NOx
Fresno	2.2	56.5	1.9	44.2	1.1	26.0
Kern (SJV)	3.4	87.7	3.0	74.2	1.4	41.6
Kings	0.7	17.9	0.6	14.6	0.3	8.1
Madera	0.6	14.1	0.5	11.4	0.3	6.7
Merced	1.5	33.6	1.2	26.7	0.6	14.8
San Joaquin	1.6	39.1	1.4	32.8	0.9	20.3
Stanislaus	1.0	25.8	0.9	20.8	0.5	12.4
Tulare	0.9	23.3	0.8	19.5	0.5	12.2

As noted above, the Transportation Conformity Rule PM2.5 and PM10 Amendments published on March 24, 2010 (effective April 23, 2010) allows 2006 PM2.5 areas with adequate or approved 1997 PM2.5 budgets to determine conformity for both of the NAAQS at the same time, using the budget test.

E. ANALYSIS YEARS

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

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

Section 93.118(b)(2) clarifies that when a maintenance plan has been submitted, conformity must be demonstrated for the last year of the maintenance plan and any other years for which the maintenance plan establishes budgets in the time frame of the transportation plan. Section 93.118(d)(2) indicates that a regional emissions analysis may be performed for any years, the attainment year, and the last year of the plan's forecast. Other years may be determined by interpolating between the years for which the regional emissions analysis is performed.

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

Pollutant	Budget Years¹	Attainment/ Maintenance Year	Intermediate Years	RTP Horizon Year
CO	NA	2018	2017/2025	2035
Ozone	2011/2014/2017	2023 ²	2025	2035
PM-10	NA	2020	2025	2035
PM2.5	2012	2014	2017/2025	2035

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

² The attainment year for Serious 8-hour Ozone areas is 2013; however, the 2007 Ozone Plan requests reclassification to Extreme which has an attainment year of 2023.

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

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

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

F. AIR QUALITY DESIGNATIONS APPLICABLE TO THE OTHER AREAS OF KERN COUNTY

In addition to the San Joaquin Valley planning area, Kern County also includes the federally designated Mojave Desert, portions of the Indian Wells Valley Planning Area, and the portion of the San Joaquin Valley PM-10 nonattainment area that lies within the Kern County Air Pollution Control District (this area is not included in the SJV 2007 PM-10 Maintenance Plan) and has been

labeled the East Kern PM-10 Area. Conformity for the 2011 FTIP and RTP, as amended, 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; whereas the Indian Wells Valley Planning area is designated as a maintenance area for PM-10; and there is an additional East Kern PM-10 Area. 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 8-hour ozone in the Mojave Desert, and PM-10 in the Indian Wells:

- EPA published a Notice of Adequacy for the 8-hour ozone Early Progress Plans for Eastern Kern County on November 25, 2008 (effective December 10, 2008).
- The PM-10 Attainment demonstration, Maintenance Plan, and Redesignation Request was approved by EPA on May 7, 2003 (effective June 6, 2003).

While there is a 2007 PM-10 Maintenance Plan for the San Joaquin Valley, it does not address the portion of the nonattainment area under the jurisdiction of Kern County APCD (East Kern PM-10 Area). It is important to note that EPA has not designated any area beyond the San Joaquin Valley portion of Kern County as nonattainment for the 1997 PM_{2.5} standards or the 2006 24-hour PM_{2.5} standard.

G. CONFORMITY TEST REQUIREMENTS

OZONE

Under the existing conformity regulation, regional emissions analyses for ozone areas must address nitrogen oxides (NO_x) and volatile organic compounds (VOC) precursors. The motor vehicle emission budgets for ozone are specified in the Early Progress Plans for the California State Implementation Plan in tons per average summer day. EPA published the notice of adequacy determination in the Federal Register on November 25, 2008 (effective December 10, 2008). The 2008 motor vehicle emission budgets for ROG and NO_x are provided in the table below.

**Table 1-6: Mojave Desert (Eastern Kern County)
Ozone Emissions Budgets
(summer tons / day)**

County	ROG	NOx
Kern – Eastern	5	18

PM-10

The Indian Wells Valley planning area, which includes a portion of Kern County, 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.

**Table 1-7: 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

In addition, the San Joaquin Valley PM-10 nonattainment area includes a portion of Kern County that is not addressed in the 2007 PM-10 Maintenance Plan. This area is now under the jurisdiction of the Kern County APCD and has been labeled the East Kern PM-10 Area. This area currently has no PM-10 air quality plan. Under this scenario, the conformity regulation requires that the PM-10 nonattainment area use the interim emissions tests, which include either the “Action” scenario less than the “Baseline” scenario (Build vs. No-Build) or the “Action” scenario less than baseline emissions (Build vs. 1990). The regional emissions analysis must only address

PM-10, since neither VOC nor NOx precursors have been found to be a significant contributor to the PM-10 nonattainment problem in this area. Analysis year requirements are addressed under Section 93.119(g)(1) of the conformity regulation, 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., 2015);
- The last year of the transportation plan's forecast period (e.g., 2035); 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., 2025).

Section 93.119(g)(2) of the conformity regulation indicates that a regional emissions analysis would not be required for analysis years in which the transportation projects and planning assumptions in the "Action" and "Baseline" scenarios are exactly the same. In such case, the interim test can be satisfied by documenting that the transportation projects and planning assumptions in both scenarios are exactly the same, and consequently, the emission predicted in the "action" scenario are not greater than the emissions predicted in the "Baseline" scenario for such analysis years.

H. ANALYSIS YEARS

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

**Table 1-8: Other Portions of Kern County
Conformity Analysis Years**

Pollutant	Budget Years	Attainment/ Maintenance Year	Intermediate Years	RTP Horizon Year
E. Kern Ozone	NA	¹	2015/2025	2035
Indian Wells Valley PM-10	NA	2013 ²	2015/2025	2035
East Kern PM-10	NA	NA	2015/2025	2035

¹ Since the attainment year is currently 2008 for ozone and 2010 for PM-10, which are NOT in the time span of the transportation plan, it is not included as an analysis year, although the ozone budget itself will be used to demonstrate conformity.

² It is anticipated that conformity for the 2013 maintenance year will be demonstrated via interpolation (with 2011 SJV analysis year) as allowed by the rule.

CHAPTER 2

LATEST PLANNING ASSUMPTIONS AND TRANSPORTATION MODELING

A. LATEST PLANNING ASSUMPTIONS

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

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

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.

Kern COG uses the TP+/CUBE transportation model. The model was validated in 2009 using a 2006 base year. The validation of the new model includes validation test of the existing model's ability to forecast to the new 2006 traffic counts. The validated model, used for this conformity analysis, predicted 2006 traffic within 1 percent of HPMS VMT, well within the tolerance required by federal conformity guidelines. The latest planning assumptions used in the transportation model validation and Conformity Analysis is summarized in Table 2-1.

Table 2-1

Summary of Latest Planning Assumptions for the Kern COG Conformity Analysis

Assumption	Year and Source of Data (MPO action)	Modeling	Next Scheduled Update
Population	Base Year: 2006 Projections: 2006 The 2006 base year population was based on the DOF estimates from 2006. In October 2009, 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 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 2006 base for future year projections.	The Kern COG Board has established a policy to revisit the regional growth forecast every 3-5 years. The most recent re-used DOF and Kern estimates from 2006. The next countywide target update will be after the revised DOF forecast scheduled for some time after the 2010 census data is available. Disaggregation to the TAZs for use by the model normally takes 6 to 9 months to develop after approval of the new forecast by the Kern COG Board.

Assumption	Year and Source of Data (MPO action)	Modeling	Next Scheduled Update
Employment	<p>Base Year: 2006</p> <p>Projections: 2006</p> <p>The 2006 base year employment was based on EDD estimates from 2006. Projections are based on 2nd Quarter 2006 employer locations derived from 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 2006 to 1.15JPH in 2030 as the population ages.</p>	<p>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 2006 base year, and extrapolated using the JPH ratio for all forecast years.</p>	<p>The next countywide target update for employment may occur with the release of the next update to the DOF forecast.</p>
Traffic Counts	<p>2006 traffic counts collected by Kern COG, its member agencies and Caltrans. A test validation was performed using 2006 counts and found that the screenlines averaged within 10% of the observed counts.</p>	<p>TP+/CUBE was validated using these traffic counts.</p>	<p>Kern COG maintains a regional traffic count program that counts over 1000 locations per year. The next full re-validation may occur as early as 2011.</p>

Assumption	Year and Source of Data (MPO action)	Modeling	Next Scheduled Update
<p>Cont. next page</p> <p>Vehicle Mile of Travel</p>	<p>The transportation model was validated in 2009 to the 2006 base year. The validation came within 1 percent of Caltrans HPMS VMT estimate.</p>	<p>TP+/CUBE is the transportation model used to estimate VMT in KERN County.</p>	<p>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.</p>
<p>Speeds</p>	<p>The 2006 transportation model validation was based on survey data free flow speeds collected in 2006 by the cities, County, Caltrans, and Kern COG.</p> <p>Speed distributions were updated in EMFAC 2007, using methodology approved by ARB and with information from the transportation model.</p>	<p>TP+/CUBE transportation model includes a feedback loop that assures congested speeds are consistent with travel speeds.</p> <p>EMFAC 2007</p>	<p>Speed studies are conducted by the cities and the County on Caltrans functionally classified routes on an on-going basis for setting/enforcing speed limits. This information is gathered and incorporated into each new model validation. Updated speed data will be incorporated in the next model validation.</p>
<p>Vehicle Registrations</p>	<p>EMFAC 2007 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.</p>	<p>EMFAC 2007</p>	<p>ARB has incorporated new vehicle registration with the release of EMFAC 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).</p>

Assumption	Year and Source of Data (MPO action)	Modeling	Next Scheduled Update
State Implementation Plan Measures	Latest implementation status of commitments in prior SIPs.	Emission reduction credits consistent with the SIPs are post-processed via spreadsheets as documented in Ch. 4.	Updated for every conformity analysis.

B. SOCIOECONOMIC DATA

POPULATION, EMPLOYMENT AND LAND USE

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

Supporting Documentation:

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.

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 by geocoding using ArcGIG software 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. Validation in the region shows a strong correlation between vehicle availability and income. 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 requested by local agencies.

C. TRANSPORTATION MODELING

The San Joaquin Valley Metropolitan Planning Organizations (MPOs) utilize the TP+/Viper (Cube) traffic modeling software. The Valley TPA regional traffic models consist of traditional four-step traffic forecasting models. They use land use, socioeconomic, and road network data to estimate facility-specific roadway traffic volumes. Each TPA model covers the appropriate county area, which is then divided into hundreds or thousands of individual traffic analysis zones (TAZs). In addition the model roadway networks include thousands of nodes and links. Link types include freeway, freeway ramp, other State route, expressway, arterial, collector, and local collector. Current and future-year road networks were developed considering local agency circulation elements of their general plans, traffic impact studies, capital improvement programs, and the State Transportation Improvement Program. The models use equilibrium, a capacity sensitive assignment methodology, and the data from the model for the emission estimates differentiates between peak and off-peak volumes and speeds. In addition, the model is reasonably sensitive to changes in time and other factors affecting travel choices. The results

from model validation/calibration were analyzed for reasonableness and compared to historical trends.

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

Supporting Documentation:

The Kern COG regional travel demand model contains a congestion feedback loop with a fully integrated transit mode choice module. The model uses socio-economic data for 1984 TAZs and is integrated with ArcGIS software to manage both network and land use inputs.

TRAFFIC COUNTS

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

Supporting Documentation:

The Kern COG regional travel demand model was validated in 2009 to 2006 observed counts at more than 2000 locations. The validation incorporated data for Kern County from the most recent available California household travel. 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 12 percent of observed counts in the 2006 base year. 67 percent of all the links greater than the daily count of 500 meet the maximum desirable deviation.

The 2006 validation model performed well and averaged within 10% of observed counts along screenlines. The percent difference of 3% is well within the allowable 5% difference for all links. The validation also meets the maximum allowable deviation criteria for the percent difference for all the different volume ranges.

SPEEDS

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

Supporting Documentation:

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. The observed speeds were also compared to the speeds from the traffic assignment and are shown in the appendix table of the model documentation.

TRANSIT

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

Supporting Documentation:

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

Supporting Documentation:

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. The modeled trip lengths were also reasonable compared to the observed trip lengths in minutes.

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 2006 estimate of VMT in Kern County was 22,400,280. The 2006 model base year estimated 22,652,969 VMT. The 2006 model estimate is 1 percent higher than the Caltrans 2006 HPMS VMT and within the validation of plus or minus 3 percent desirable target range.

FUTURE NETWORKS

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

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

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

§93.126, §93.127, §93.128 require that all projects in the TIP/RTP that are exempt from conformity requirements or exempt from the regional emissions analysis be documented. In addition, the reason for the exemption (Table 2, Table 3, traffic signal synchronization) must also be documented (see Appendix B). It is important to note that the CTIPs exemption code is provided in response to FHWA direction.

Supporting Documentation:

The build highway networks include qualifying projects based on the 2011 Federal Transportation Improvement Program Amendment 4 (2011 FTIP Amendment 4) and 2011 Regional Transportation Plan Amendment 1 (2011 RTP Amendment 1). 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.

Kern COG surveys its member jurisdictions twice a year for updates to the transportation model network on regionally significant routes. The latest changes are reflected in Appendix B.

D. 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 (SJV)**

Horizon Year	Total Population (thousands)	Employment (thousands)	Average Weekday VMT (millions)	Total Lane Miles
2011	724.6	264.4	19.8	N/A
2012	739.3	268.7	20.2	N/A
2014	768.7	277.6	21.2	N/A
2017	813.4	292.0	22.7	N/A
2020	858.3	306.7	24.3	5664
2023	906.4	321.7	25.8	N/A
2025	938.5	331.6	26.9	5752
2035	1127.8	382.2	32.9	6824

*Not applicable for years lane miles not used in analysis.

**Traffic Network Comparison for Horizon Years Evaluated in Conformity Analysis
for Mojave Desert (Eastern Kern)**

Horizon Year	Total Population (thousands)	Employment (thousands)	Average Weekday VMT (millions)	Total Lane Miles
2011	99.8	35.4	4.2	1802
2015	103.9	38.4	4.6	1819

2025	126.7	47.2	5.8	1827
2035	151.0	55.8	7.6	2199

*Not applicable for years lane miles not used in analysis.

**Traffic Network Comparison for Horizon Years Evaluated in Conformity Analysis
for Indian Wells Valley (Kern County Portion)**

Horizon Year	Total Population (thousands)	Employment (thousands)	Average Weekday VMT (millions)	Total Lane Miles
2011	36.5	14.1	0.6	358
2025	39.5	18.3	0.8	412
2035	41.8	22.6	1.2	439

**Traffic Network Comparison for Horizon Years Evaluated in Conformity Analysis
for San Joaquin Valley PM-10 (Kern APCD Portion)**

Horizon Year	Total Population (thousands)		Employment (thousands)		Average Weekday VMT (millions)		Total Lane Miles	
	<u>Build</u>	<u>NO-Build</u>	<u>Build</u>	<u>No-Build</u>	<u>Build</u>	<u>No-Build</u>	<u>Build</u>	<u>No-Build</u>
2011	35.7	35.7	6.5	6.5	0.9	0.9	423	423
2025	40.6	40.6	8.3	8.3	1.1	1.1	423	423
2035	41.8	41.8	9.6	9.6	1.7	1.7	423	423

E. 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 EMFAC2007 model. EMFAC2007 is the most recent model for use in California conformity analyses (http://www.arb.ca.gov/msei/onroad/latest_version.htm). Vehicle registrations, age distribution and fleet mix are developed and included in the model by CARB and cannot be updated by the user.

F. STATE IMPLEMENTATION PLAN MEASURES

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

CARBON MONOXIDE

No committed control measures are included in the conformity demonstration.

OZONE

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

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

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

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

PM-10

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

Table 2-4

2007 PM-10 Maintenance Plan Measures Assumed in the Conformity Analysis

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

PM2.5

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

Table 2-5

2008 PM2.5 Plan Measures Assumed in the Conformity Analysis

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

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

G. STATE IMPLEMENTATION PLAN MEASURES APPLICABLE TO THE OTHER 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 any area beyond the San Joaquin Valley portion of Kern County as nonattainment for the 1997 PM2.5 standards.

CHAPTER 3: AIR QUALITY MODELING

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

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

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

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

A. EMFAC2007

The EMFAC model (short for EMISSION FACTOR) is a computer model that can estimate emission rates for motor vehicles for calendar years from 1970 to 2040 operating in California. Pollutant emissions for hydrocarbons, carbon monoxide, nitrogen oxides, particulate matter, lead, sulfur oxides, and carbon dioxide are output from the model. Emissions are calculated for passenger cars, eight different classes of trucks, motorcycles, urban and school buses and motor homes.

EMFAC is used to calculate current and future inventories of motor vehicle emissions at the state, county, air district, air basin, or county within air basin level. EMFAC contains default vehicle activity data that can be used to estimate a motor vehicle emission inventory in tons/day for a specific day, month, or season, and as a function of ambient temperature, relative humidity, vehicle population, mileage accrual, miles of travel and speeds.

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

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

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

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

B. ADDITIONAL PM-10 ESTIMATES

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

CALCULATION OF REENTRAINED DUST FROM PAVED ROAD TRAVEL

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

On January 13, 2011 EPA released a new method for estimating re-entrained road dust emissions from cars, trucks, buses, and motorcycles on paved roads. On February 4, 2011, EPA published the *Official Release of the January 2011 AP-42 Method for Estimating Re-Entrained Road Dust from Paved Roads* approving the January 2011 method for use in regional emissions analysis and beginning a two year conformity grace period, after which use of the January 2011 AP-42 method is required (e.g. February 4, 2013) in regional conformity analyses.

The emissions analysis for 2011 RTP Amendment #1 and 2011 FTIP Amendment #3 was begun on December 9, 2011 prior to the grace period for the January 2011 AP-42 method, and therefore continues to utilize the EPA approved AP-42 method for conformity determinations in the SJV.

CALCULATION OF REENTRAINED DUST FROM UNPAVED ROAD TRAVEL

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

CALCULATION OF PM-10 FROM ROADWAY CONSTRUCTION

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

PM-10 TRADING MECHANISM

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

C. PM2.5 APPROACH

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

EPA issued guidance for creating annual on-road mobile source emission inventories for PM2.5 in August 2005 (EPA, 2005b). The guidance indicates that all areas currently designated nonattainment for PM2.5 are violating the annual standard for the pollutant. Therefore, in

order to be consistent with the standard, PM2.5 nonattainment areas must develop annual emission inventories for the purpose of developing SIP budgets and demonstrating transportation conformity.

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

The following PM2.5 approach addresses both the 1997 standards and the 2006 24-hour standard

EMFAC2007 includes data for temperature, relative humidity, and characteristics for gasoline fuel sold that vary by geographic area, calendar year, and month and season. The annual average represents an average of all the monthly inventories. As a result, EMFAC will be run to estimate direct PM2.5 and NOx from motor vehicles for an annual average day that will provide the information for both the annual and 24-hour PM2.5 standards.

EPA guidance indicates that State and local agencies need to consider whether VMT varies during the year enough to affect PM2.5 annual emission estimates. The availability of seasonal or monthly VMT data and the corresponding variability of that data need to be evaluated.

PM2.5 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 PM2.5 emission estimates.

The SJV MPOs all use network based travel models. However, the models only estimate average weekday VMT. The SJV MPOs do not have the data or ability to estimate seasonal variation at this time. Data collection and analysis for some studies are in the preliminary phases and cannot be relied upon for other analyses. Some statewide data for the seasonal variation of

VMT on freeways does exist. However, traffic patterns on freeways do not necessarily represent the typical traffic pattern for local streets and arterials.

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

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

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

It is important to note that the San Joaquin Valley 2008 PM2.5 Plan has been developed and submitted to EPA. The annual inventory methodology contained in the plan and used to establish emissions budgets is consistent with the methodology used herein. The regional emissions analyses in 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 EMFAC2007. As indicated under the Conformity Test Requirements, re-entrained road dust and construction-related fugitive dust from highway or transit projects is not included at this time. In addition, NOx emissions are included; however, VOC, SOx, and ammonia emissions are not.

1997 Standard – The 2008 PM2.5 Plan contains motor vehicle emission budgets for PM2.5 and NOx established based on average annual daily emissions. The motor vehicle emissions budget for PM2.5 includes directly emitted PM2.5 motor vehicle emissions from tailpipe, brake wear and tire wear. VOC, SOx, ammonia, and dust (from paved roads, unpaved roads, and road construction) were found to be insignificant and not included in the motor vehicle emission budgets for conformity purposes.

2006 Standard – In accordance with Transportation Conformity Rule PM2.5 and PM10 Amendments published on March 24, 2010 (effective April 23, 2010) for 2006 PM2.5 NAAQS Nonattainment areas, if a 2006 PM2.5 area has adequate or approved SIP budgets that address the 1997 standards, it must use the budget test to determine conformity for both of the NAAQS at the same time.

D. AIR QUALITY MODELING APPLICABLE TO THE OTHER AREAS OF KERN COUNTY

For Mojave Desert (Eastern Kern), the model used to estimate emissions for ozone precursors is EMFAC2007 using the methodology described above.

For Indian Wells Valley (Kern County Portion), PM-10 onroad exhaust is not significant and not included in the emissions budgets or the conformity estimates. CARB 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 TIP or RTP are consistent with the applicable SIPs, which include:

- EPA published a Notice of Adequacy for the 8-hour ozone Early Progress Plans for Eastern Kern County on November 25, 2008 (effective December 10, 2008).
- The PM-10 Attainment demonstration, Maintenance Plan, and Redesignation Request was approved by EPA on May 7, 2003 (effective June 6, 2003).

The conformity regulation requirements for the selection of the horizon years are summarized in Chapter 1; regional emissions have been estimated for the horizon years summarized under “Other Portions of Kern County Conformity Analysis Years”.

No air quality modeling is being conducted for the portion of the San Joaquin Valley PM-10 nonattainment area that lies within the Kern County APCD (East Kern PM-10 Area). As discussed in Section 1, this area currently has no PM-10 air quality plan and must use the interim emissions test for PM-10. However, as illustrated in Section 2 and Appendix B, the transportation projects and planning assumptions in the “Action” and “Baseline” scenarios are exactly the same.

E. SUMMARY OF PROCEDURES FOR REGIONAL EMISSIONS ESTIMATES

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

- 2011 adjust_vmt Spreadsheet
- 2011 Conformity EMFAC Spreadsheet
- 2011 Conformity Paved Road Spreadsheet
- 2011 Conformity Unpaved Road Dust Spreadsheet
- 2011 Conformity Construction Spreadsheet
- 2011 Conformity Trading Spreadsheet
- 2011 Conformity Totals Spreadsheet

CHAPTER 4: TRANSPORTATION CONTROL MEASURES

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

A. TRANSPORTATION CONFORMITY REGULATION REQUIREMENTS FOR TCMs

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

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

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

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

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

- (i) programs for improved public transit;
- (ii) restriction of certain roads or lanes to, or construction of such roads or lanes for use by, passenger buses or high occupancy vehicles;
- (iii) employer-based transportation management plans, including incentives;

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

TCM REQUIREMENTS FOR A TRANSPORTATION PLAN

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

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

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

TCM REQUIREMENTS FOR A TRANSPORTATION IMPROVEMENT PROGRAM

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

“(1) An examination of the specific steps and funding source(s) needed to fully implement each TCM indicates that TCMs which are eligible for funding under title 23 U.S.C. or the Federal Transit Laws are on or ahead of the schedule established in the applicable implementation plan, or, if such TCMs are behind the schedule established in the applicable implementation plan, the MPO and DOT have determined that past obstacles to implementation of the TCMs have been identified and have been or are being overcome, and that all State and local agencies with influence over approvals or funding for TCMs are giving maximum priority to approval or funding of TCMs over other projects within their control, including projects in locations outside the nonattainment or maintenance area;

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

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

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

B. APPLICABLE AIR QUALITY IMPLEMENTATION PLANS

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

APPLICABLE IMPLEMENTATION PLAN FOR CARBON MONOXIDE

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

APPLICABLE IMPLEMENTATION PLAN FOR OZONE

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

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

TCM1 – Traffic Flow Improvements

TCM2 – Public Transit

TCM3 – Rideshare Programs (Rule 9001)

TCM4 – Bicycle Programs

TCM5 – Alternative Fuels Program

Most of the TCMs in the plans were implemented in the short term, and have been fully implemented. As a result, any resulting creditable emission reduction benefits have been incorporated into the traffic forecasts for the region. However, the TIP/RTP provides continued funding for transportation projects that support TCM programs (e.g., traffic flow improvements,

public transit, rideshare programs, and bicycle programs). In addition, voluntary implementation of Rule 9001 (Employee Commute Options) is ongoing even though the Rule was not approved by EPA and cannot be implemented as a mandatory program under SB437.

APPLICABLE IMPLEMENTATION PLAN FOR PM-10

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

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

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

Other Portions of Kern: No TCMs are included in the air quality plans for the Mojave Desert (Eastern Kern) or Indian Wells Valley (Kern County portion) and there is no air quality plan for the San Joaquin Valley PM-10 nonattainment area that lies within the jurisdiction of the Kern County APCD (East Kern PM-10 Area).

C. IDENTIFICATION OF 2002 RACM THAT REQUIRE TIMELY IMPLEMENTATION DOCUMENTATION

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

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

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

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

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

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

The Project TID table that was prepared at the request of FHWA for the 2004 Conformity Analysis has been updated in each subsequent conformity analysis (e.g., 8-hour, PM2.5, 2007

and 2009 TIP). This documentation has been updated as part of this Conformity Analysis. A summary of this information is provided in Appendix 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 were applied to the 2002 RACM Commitments approved by reference as part of the Amended 2003 PM-10 Plan. In April 2006, EPA transmitted final tables that identified the approved RACM commitments that require timely implementation documentation for the Conformity Analysis. Subsequently, an approach to provide timely implementation documentation was developed in consultation with FHWA.

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

D. TCM FINDINGS FOR THE TIP AND REGIONAL TRANSPORTATION PLAN

Based on a review of the transportation control measures contained in the applicable air quality plans, as documented in the two tables contained in Appendix 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.

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

In May 2003, the San Joaquin Valley MPO Executive Directors committed to conduct feasibility analyses as part of each new RTP in support of the 2003 PM-10 Plan. This commitment was retained in the 2007 PM-10 Maintenance Plan. In accordance with this commitment, Kern

Council of Governments undertook a process to identify and evaluate potential control measures that could be included in the 2011 RTP. The analysis of additional measures included verification of the feasibility of the measures in the PM-10 Plan BACM analysis, as well as an analysis of new PM-10 commitments from other PM-10 nonattainment areas.

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

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

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

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

With the adoption of each new RTP, the MPOs will consider the feasibility of these measures, as well as identify any other new PM-10 measures that would be relevant to the San Joaquin Valley. Kern Council of Governments also considered PM-10 commitments from other PM-10 nonattainment areas that had been developed since the previous RTP was approved. Federal websites were reviewed for any PM-10 plans that have been adopted since 2007. New PM-10 plans were developed for Imperial County and Owens Valley (California), Maricopa County and Miami (Arizona), and the Municipality of Guaynabo (Puerto Rico).

Only the Maricopa County PM-10 plan contained any new measures for possible inclusion in the 2011 RTP. In December 2007, the Maricopa Association of Governments (MAG) developed the "Five Percent Plan for PM-10 for the Maricopa County Nonattainment Area," which contained commitments to reduce PM-10 emissions. The MAG PM-10 Plan contains one new commitment applicable to the San Joaquin Valley, which indicates that the Arizona Department of Transportation (ADOT) would commit to repaving or overlaying paved roads with rubberized asphalt that reduces PM-10 emissions by reducing vehicle tire wear. Overlaying freeways with

rubberized asphalt is part of ADOT's "Quiet Pavement" program to mitigate highway noise. Rubberized asphalt also affects PM-10 emissions, as PM-10 emissions rates from tire wear on rubberized asphalt are 30 to 50 percent lower than on Portland Cement Concrete. Therefore, the ADOT program continues with multiple purposes, which are to reduce PM-10 emissions and to mitigate noise. Therefore, as part of the 2011 RTP, Kern Council of Governments will also consider a commitment to "Repave or overlay paved roads with rubberized asphalt".

Based on consultation with CARB and the Air District, The County of Kern, and Caltrans District 6, Kern Council of Governments considered priority funding allocations in the 2011 RTPs for PM-10 and NOx emission reduction projects in the post-attainment year timeframe that go beyond the emission reduction commitments made for the attainment year 2010 for the following four measures:

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

Kern COG and its member jurisdictions consider both short- and long-term PM-10 emission reductions to be a priority as part of adopted policy. Every two to three years, Kern COG conducts a Congestion Mitigation and Air Quality (CMAQ) "Call for Projects" that includes funding for PM-10 projects by five categories including one for PM mitigating projects listed in measures 1-3 above. Funding levels and goals are set by Kern COG as part of each funding cycle, including a commitment to cost effectiveness. Reliable long-term funding estimates and a list of eligible projects for the PM-10 portion of the "Call for Projects" process are not available and therefore, not included in the RTP. Currently, Caltrans has incorporated rubberized asphalt as general policy to meet recycled content requirements on high volume state highway facilities. In 2003, Caltrans established a goal of using at least 15 percent rubberized asphalt concrete compared to all flexible pavement by weight; Caltrans has exceeded this goal each year. In 2005, AB 338 was passed and requires Caltrans to gradually phase in the use of crumb rubber, which is used to make rubberized-asphalt concrete, on state highway construction and repair projects, to the extent feasible. Kern COG will consider member agency project proposals for use of rubberized asphalt in accordance with adopted program policies including, cost-effectiveness

policies.

There is no “new” RTP development with 2011 FTIP Amendment 4/RTP Amendment 1. As a result, there is no update to the 2011 conformity analysis with respect to inclusion of additional long-range local government control measures.

CHAPTER 5: INTERAGENCY CONSULTATION

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

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

A. INTERAGENCY CONSULTATION

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

Caltrans (Headquarters, District 6, and District 10) are all represented. The IAC Group meets approximately quarterly.

The interagency consultation process for the 2011 TIP Amendment 4, RTP Amendment 1, Addendum to the Subsequent EIR, and corresponding Conformity Analysis began on the December 9, 2010 IAC conference call with a discussion of the timeline and approach.

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

The Draft 2011 TIP Amendment 4, RTP Amendment 1, Addendum to the Subsequent EIR, and corresponding Conformity Analysis were released on March 8, 2011 for a 45-day public comment period, followed by Board adoption in May 2011.

Interagency consultation also includes the local transportation providers in the MPO region (e.g., cities, transit districts). Kern Council of Governments worked with these providers through the Kern Regional Transportation Modeling Committee, Transportation Technical Advisory Committee, The Transportation Planning Policy Committee and the Kern COG Board to develop the TIP/RTP, approve the TIP/RTP and the corresponding conformity analysis. In addition to the eleven incorporated cities and the count, many of these committees included representatives from the Kern Air Pollution Control District, the Golden Empire Transit District, Military Joint Planning Policy Board District, and Caltrans District 6.

B. PUBLIC CONSULTATION

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

All MPOs in the San Joaquin Valley have standard public involvement procedures. In general, the TIP/RTP amendments and corresponding conformity analysis are the subject of a public notice and 30 day review period prior to adoption. However, the comment period for this conformity analysis was 45 days concurrent with the public review of the Draft Addendum to the Subsequent EIR. 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 transportation conformity regulation for TIP/RTP assessments are: (1) the TIP and RTP must pass an emissions budget test with a budget that has been found to be adequate by EPA for transportation conformity purposes, or an interim emission test; (2) the latest planning assumptions and emission models must be employed; (3) the TIP and RTP must provide for the timely implementation of transportation control measures (TCMs) specified in the applicable air quality implementation plans; and (4) consultation. The final determination of conformity for the TIP/RTP is the responsibility of the Federal Highway Administration and the Federal Transit Administration.

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

This chapter presents the results of the conformity tests, satisfying the remaining requirement of the transportation conformity regulation. Separate tests were conducted for carbon monoxide (CO), 8-hour ozone (ROG and NO_x), PM-10 and PM_{2.5}. The applicable conformity tests were reviewed in Chapter 1. For each test, the required emissions estimates were developed using the transportation and emission modeling approaches required under the transportation conformity regulation and summarized in Chapters 2 and 3. The results are summarized below, followed by a more detailed discussion of the findings for each pollutant. Table 6-1 presents results for CO, ozone (ROG/NO_x), PM-10 (PM-10/NO_x), and PM_{2.5} (PM_{2.5}/NO_x) respectively, in tons per day for each of the horizon years tested.

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

For ozone, the applicable conformity test is the emissions budget test, using the 2007 Ozone Plan budgets established for ROG and NO_x for an average summer (ozone) season day. EPA published a budget adequacy determination for the 2011, 2014, and 2017 conformity budgets in the Federal Register on January 22, 2009, effective February 6, 2009. The modeling results for

all analysis years indicate that the on-road vehicle ROG and NOx emissions predicted for each of the “Build” scenarios are less than the emissions budgets. The TIP/RTP, as amended, therefore satisfy the conformity emissions test for volatile organic compounds and nitrogen oxides.

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

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

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

In addition to the San Joaquin Valley planning area, Kern County also includes the federally designated Mojave Desert, portions of the Indian Wells Valley Planning Area, and the portion of the San Joaquin Valley PM-10 nonattainment area that lies within the Kern County Air Pollution Control District (East Kern PM-10 Area).

For Mojave Desert ozone area, the applicable conformity test is the emissions budget test, using the 8-hour ozone Early Progress Plans for the California State Implementation Plan budgets

established for ROG and NOx for an average summer (ozone) season day. EPA published the notice of adequacy determination in the Federal Register on November 25, 2008, effective December 10, 2008. The modeling results for all analysis years indicate that the on-road vehicle ROG and NOx emissions predicted for each of the “Build” scenarios are less than the emissions budgets for 2008. The TIP/RTP, as amended, therefore satisfy the conformity emissions test for volatile organic compounds and nitrogen oxides.

For Indian Wells Valley PM-10, the applicable conformity test is the emissions budget test, using the PM-10 Attainment demonstration, Maintenance Plan, and Redesignation Request budgets for PM-10 and NOx. This Plan was approved by EPA on May 7, 2003 (effective June 6, 2003). 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 2001 and 2013. The TIP/RTP, as amended, therefore satisfy the conformity emissions tests for PM-10.

For the portion of the SJV PM-10 nonattainment area that is under the jurisdiction of the Kern County APCD, the interim emissions test is satisfied for all years since the transportation projects and planning assumptions in both the “action” and “baseline” scenarios are exactly the same. In accordance with Section 93.119(g)(2), the emission predicted in the “action” scenario are not greater than the emissions predicted in the “Baseline” scenario for such analysis years. The TIP/RTP, as amended, therefore satisfy the conformity emissions tests for PM-10.

As all requirements of the Transportation Conformity regulation have been satisfied, a finding of conformity for the 2011 Federal Transportation Improvement Program Amendment 4 and the 2011 Regional Transportation Plan Amendment 1 is supported.

**Table 6-1:
Conformity Results Summary
2011 Conformity Results Summary -- KERN**

Pollutant	Scenario	Emissions Total	DID YOU PASS?
Carbon Monoxide		CO (tons/day)	CO
	2010 Budget	180	
	2017	77	YES
	2018 Budget	180	
	2018	75	YES
	2025	57	YES
	2035	56	YES

		ROG (tons/day)	NOx (tons/day)	ROG	NOx
		2011 Budget	15.7	79.4	
Ozone	2011	14.1	72.4	YES	YES
	2014 Budget	13.5	64.1		
	2014	12.0	57.2	YES	YES
	2017 Budget	11.6	49.5		
	2017	10.2	43.5	YES	YES
	2023	8.2	27.7	YES	YES
	2025	7.9	25.4	YES	YES

	2035	7.5	23.3	YES	YES
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PM-10		PM-10 (tons/day)	NOx (tons/day)	PM-10	NOx
	2020 Budget	14.7	39.5		
	2020	12.7	34.1	YES	YES
	2020 Budget	14.7	39.5		
	2025	12.9	25.6	YES	YES
	Adjusted 2020 Budget	16.6	36.7		
	2035	16.6	23.4	YES	YES

1997 PM2.5 24-Hour & Annual Standards and 2006 24- Hour Standard		PM2.5 (tons/day)	NOx (tons/day)		PM2.5	NOx
	2012 Budget	3.0	74.2			
	2012	2.7	67.7		YES	YES
	2014	2.4	57.4		YES	YES
	2017	1.9	43.1		YES	YES
	2025	1.4	24.1		YES	YES
	2035	1.4	21.9		YES	YES

2011 Conformity Results Summary -- KERN (Mojave Desert)

Pollutant	Scenario	Emissions Total		DID YOU PASS?	
		ROG (tons/day)	NOx (tons/day)	ROG	NOx
Ozone	2008 Budget	5	18		
	2011	3	13	YES	YES
	2015	2	9	YES	YES
	2025	2	5	YES	YES
	2035	2	5	YES	YES

2011 Conformity Results Summary -- KERN (Indian Wells Valley)

Pollutant	Scenario	Emissions Total	DID YOU PASS?
		PM-10 (tons/day)	
PM-10	2001 Budget	1.6	
	2011	1.2	YES
	2013 Budget	1.7	
	2013	1.0	YES
	2015	0.9	YES
	2025	1.1	YES
	2035	1.3	YES

REFERENCES

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

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

EPA. 2004a. 40 CFR Part 93. *Transportation Conformity Rule Amendments for the New 8-hour Ozone and PM2.5 National Ambient Air Quality Standards and Miscellaneous Revisions for Existing Areas; Transportation Conformity Rule Amendments – Response to Court Decision and Additional Rule Changes*. U.S. Environmental Protection Agency. Federal Register, July 1, 2004, Vol. 69, No. 126, p. 40004.

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

EPA. 2005a. *Transportation Conformity Rule Amendments for the New PM2.5 National Ambient Air Quality Standards: PM2.5 Precursors; Final Rule*. U.S. Environmental Protection Agency. Federal Register, May 6, 2005, Vol. 70, No. 87, p. 24280.

EPA. 2005b. *Guidance for Creating Annual On-Road Mobile Source Emission Inventories for PM2.5 Nonattainment Areas for Use in SIPs and Conformity*. U.S. Environmental Protection Agency. EPA420-B-05-008. August 2005

EPA, 2008. 40 CFR Parts 51 and 93. *Transportation Conformity Rule Amendments To Implement Provisions Contained in the 2005 Safe, Accountable, Flexible, Efficient Transportation Equity*

Act: A Legacy for Users (SAFETEA-LU); Final Rule. Federal Register, January 24, 2008, Vol. 73, No. 16, p. 4420.

EPA, 2010a. 40 CFR Part 93..*Transportation Conformity Rule PM2.5 and PM10 Amendments; Final Rule.* Federal Register, March 24, 2010, Vol. 75, No. 56, p. 14260.

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

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

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

APPENDIX A

CONFORMITY CHECKLIST

CONFORMITY ANALYSIS DOCUMENTATION

FHWA Checklist for MPO TIPs/RTPs

June 27, 2005

40 CFR	Criteria	Page	Comments
§93.102	Document the applicable pollutants and precursors for which EPA designates the area as nonattainment or maintenance. Describe the nonattainment or maintenance area and its boundaries.	Ch. 1, p.7	
§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., p. 1	
§93.104 (e)	If the conformity determination is being made to meet the timelines included in this section, document when the new motor vehicle emissions budget was approved or found adequate.	N/A	
§93.106 (a)(2)ii	Describe the regionally significant additions or modifications to the existing transportation network that are expected to be open to traffic in each analysis year. Document that the design concept and scope of projects allows adequate model representation to determine intersections with regionally significant facilities, route options, travel times, transit ridership and land use.	Ch. 2, p. 22; App. B, p. 70	
§93.108	Document that the TIP/RTP is financially constrained (23 CFR 450).	E.S., p.1	
§93.109 (a, b)	Document that the TIP/RTP complies with any applicable conformity requirements of air quality implementation plans (SIPs) and court orders.	Ch. 1, 2, 3, 4, 5, 6, pp. 7ff	
§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, p. 7	
§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	Ch. 2, pp. 21ff	

40 CFR	Criteria	Page	Comments
	which the conformity analysis was begun.		
USDOT/EP A guidance	Document the use of planning assumptions less than five years old. If unable, include written justification for the use of older data. (1/18/02)	Ch. 2, pp. 21ff	
§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, p. 26	
§93.111	Document the use of the latest emissions model approved by EPA.	Ch. 3, p. 42	
§93.112	Document fulfillment of the interagency and public consultation requirements outlined in a specific implementation plan according to §51.390 or, if a SIP revision has not been completed, according to §93.105 and 23 CFR 450. Include documentation of consultation on conformity tests and methodologies as well as responses to written comments.	Ch. 5, p. 56; App. E, p. 115	
§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, p. 44; App. D, p. 104	
§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) ⁱ	<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	Ch. 6, pp. 55- 57	

40 CFR	Criteria	Page	Comments
	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.		
§93.118 (b)	Document for which years consistency with motor vehicle emissions budgets must be shown.	Ch. 1, pp. 13ff	
§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, pp. 55-59	
§93.119 ¹	<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.	N/A	
§93.119 (g)	Document the use of the appropriate analysis years in the regional emissions analysis for areas without applicable SIP budgets.	N/A	
§93.119 (h,i)	Document how the baseline and action scenarios are defined for each analysis year.	N/A	
§93.122 (a)(1)	Document that all regionally significant federal and non-Federal projects in the 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, 22ff; App B, 70ff	
§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	Ch. 2, p. 34	

40 CFR	Criteria	Page	Comments
	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.		
§93.122 (a)(4,5,6)	For nonregulatory measures that are not included in the STIP, include written commitments from appropriate agencies. Document that assumptions for measures outside the transportation system (e.g. fuels measures) are the same for baseline and action scenarios. Document that factors such as ambient temperature are consistent with those used in the SIP unless modified through interagency consultation.	N/A	
§93.122 (b)(1)(i) ⁱⁱ	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, pp. 23ff	
§93.122 (b)(1)(ii) ²	Document the land use, population, employment, and other network-based travel model assumptions.	Ch. 2, pp. 23ff	
§93.122 (b)(1)(iii) ²	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, pp. 23ff	
§93.122 (b)(1)(iv) ²	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	Ch. 2, pp. 23ff	

40 CFR	Criteria	Page	Comments
	final assigned volumes.		
§93.122 (b)(1)(v) ²	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, pp. 23ff	
§93.122 (b)(1)(vi) ²	Document how travel models are reasonably sensitive to changes in time, cost, and other factors affecting travel choices.	Ch. 2, pp. 23ff	
§93.122 (b)(2) ²	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, pp. 23ff	
§93.122 (b)(3) ²	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, pp. 26- 28	
§93.122 (d)	In areas not subject to §93.122(b), document the continued use of modeling techniques or the use of appropriate alternative techniques to estimate vehicle miles traveled	N/A	
§93.122 (e, f)	Document, in areas where a SIP identifies construction-related PM10 or PM2.5 as significant pollutants, the inclusion of PM10 and/or PM2.5 construction emissions in the conformity analysis.	Ch. 3, p.395	
§93.122 (g)	If appropriate, document that the conformity determination relies on a previous regional emissions analysis and is consistent with that analysis.	N/A	
§93.126, §93.127, §93.128	Document all projects in the TIP/RTP that are exempt from conformity requirements or exempt from the regional emissions analysis. Indicate the reason for the exemption (Table 2, Table 3, traffic signal synchronization) and that the interagency consultation process found these projects to have	Ch. 2, p. 31; App B, pp. 70ff	

40 CFR	Criteria	Page	Comments
	no potentially adverse emissions impacts.		

ⁱ Note that some areas are required to complete both interim emissions tests.

ⁱⁱ 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

Notes on How to Read These Tables:

Project listings are by road segment represented in the regional transportation model. Kern COG surveys its members bi-annually to update this table. The table is used to ensure that the projects are accurately represented in the model. A project that spans multiple segments has separate, duplicative listings for each segment of the project. The segments listed are only for regionally significant routes. Kern COG defines regionally significant routes as state functionally classified urban arterials, expressways, state routes and freeways. The model contains other roadways and projects on those roads, but they are not included in this project listing because they are not regionally significant routes. Construction start dates for projects listed in the RTP or FTIP may not coincide with the year shown in this project listing. This project listing shows the year the facility is anticipated to be open to traffic.

The table indicates the number of through lanes modeled in each direction. A 3 indicates a roadway with 3 lanes in each direction or a 6 lane facility. A 3/2 indicates a roadway with three lanes in one direction and 2 in the other. The table only shows through lanes in the segment modeled. An auxiliary lane or other capacity increasing project improvement that does not span the entire segment may not show up in the lane count for that segment. To accurately model the capacity of a segment, the lanes coded must be based on the minimum number of lanes or bottleneck in that segment. For example, ramps with 2 lanes are often coded as one lane because the two lanes merge into one at the ramp exit or entrance.

Kern models multiple air quality planning areas each with different State Implementation Plans (SIP). The planning areas are indicated in the Air Basin column. The blacked out columns indicate a segment is in a planning area without a SIP attainment date in that year. The segment was included in that model for that year, however, the segment's lanes are not reported because it is not affecting that SIP attainment demonstration for that planning area.

A separate exempt project table listing is also included. These are projects that are not required to be modeled for air quality conformity because they do not negatively affect air quality.

Appendix B - Highway Project Listing on Regionally Significant Route Segments and Year Number of Lanes Modeled

SORT KEY	AGENCY	AIR BASIN	PM10 BASIN	STREET	BEGIN	END	Type of Imprvmt.	RTP PROJECT ID/Other ID	COST (RTP, Other)	Year number of lanes modeled (each direction)											
										11	12	14	15	17	20	23	25	35			
1	Bakersfield																				
2	Bakersfield	SJV		AIRPORT	ROBERTS LN	SR99	Add Lanes	Local		2	2	2		2	3	3	3	3	3		
3	Bakersfield	SJV		ALFRED HARRELL	MT VERNON	CHINA GRADE LOOP				2	2	2		2	2	2	2	2	2		
4	Bakersfield	SJV		ALFRED HARRELL	CHINA GRADE LOOP	FAIRFAX				2	2	2		2	2	2	2	2	2	3	
5	Bakersfield	SJV		ALFRED HARRELL	FAIRFAX	WEST END HARTPARK	Add Lanes	Local		2	2	2		2	2	2	2	2	2		
6	Bakersfield	SJV		ALFRED HARRELL	WEST END HARTPARK	LAKE MING	Add Lanes	Local		1	1	1		1	1	1	1	1	2		
7	Bakersfield	SJV		ALFRED HARRELL	LAKE MING	PALADINO	Add Lanes	Local		1	1	1		1	1	1	1	1	2		
8	Bakersfield	SJV		ALFRED HARRELL	PALADINO	SR178	Add Lanes	Local		1	1	1		1	1	1	1	1	2		
9	Bakersfield	SJV		ALLEN	SR58	BRIMHALL	Add Lanes	Local		2	2	2		3	3	3	3	3	3		
10	Bakersfield	SJV		ALLEN	BRIMHALL	WESTSIDE PARKWAY	Add Lanes		\$7,000,000	1	0	2		2	2	2	2	2	2		
11	Bakersfield	SJV		ALLEN	WESTSIDE PARKWAY	STOCKDALE	Add Lanes		\$7,000,000	1	1	2		2	2	2	2	2	2		
12	Bakersfield	SJV		ALLEN	STOCKDALE	MING AVE			\$124,972	1	1	1		1	1	1	1	1	1		
13	Bakersfield	SJV		ALLEN	MING AVE	CAMPUS PARK				1	1	1		1	1	1	1	1	2		
14	Bakersfield	SJV		ALLEN	CAMPUS PARK	Panama Lane				0	0	0		0	0	1	1	1	2		
15	Bakersfield	SJV		ALLEN	Panama Lane	SR 119/Taft Highway				0	0	0		0	0	1	1	1	1		
16	Bakersfield	SJV		CALLOWAY	SNOW	NORRIS				2	2	2		2	2	2	3	3	3		
17	Bakersfield	SJV		CALLOWAY	NORRIS	OLIVE				2	3	3		3	3	3	3	3	3		
18	Bakersfield	SJV		CALLOWAY	OLIVE	NORIEGA				3	3	3		3	3	3	3	3	3		
19	Bakersfield	SJV		CALLOWAY	NORIEGA	HAGEMAN				3	3	3		3	3	3	3	3	3		
20	Bakersfield	SJV		CALLOWAY	HAGEMAN	MEACHAM				3	3	3		3	3	3	3	3	3		
21	Bakersfield	SJV		CALLOWAY	MEACHAM	SR58				3	3	3		3	3	3	3	3	3		
22	Bakersfield	SJV		CALLOWAY	SR58	HOLLAND ST				2	2	2		3	3	3	3	3	3		
23	Bakersfield	SJV		CALLOWAY	BRIMHALL	WESTSIDE PARKWAY	Add Lanes	Local		3	3	3		3	3	3	3	3	3		
24	Bakersfield	SJV		CALLOWAY	WESTSIDE PARKWAY	STOCKDALE				3	3	3		3	3	3	3	3	3		
25	Bakersfield	SJV		CALIFORNIA	STOCKDALE	MOHAWK				3	3	3		3	3	3	3	3	3		
26	Bakersfield	SJV		CALIFORNIA	MOHAWK	REAL				3	3	3		3	3	3	3	3	3		
27	Bakersfield	SJV		CALIFORNIA	REAL	SR99				3	3	3		3	3	3	3	3	3		
28	Bakersfield	SJV		CALIFORNIA	SR99	OAK				3	3	3		3	3	3	3	3	3		
29	Bakersfield	SJV		CALIFORNIA	OAK	A ST				3/2	3/2	3/2		3/2	3/2	3/2	3/2	3/2	3		
30	Bakersfield	SJV		CALIFORNIA	A ST	H ST				3	3	3		3	3	3	3	3	3		
31	Bakersfield	SJV		CALIFORNIA	H ST	CHESTER				3	3	3		3	3	3	3	3	3		
32	Bakersfield	SJV		CALIFORNIA	CHESTER	L ST				3	3	3		3	3	3	3	3	3		
33	Bakersfield	SJV		CALIFORNIA	L ST	N ST				3	3	3		3	3	3	3	3	3		
34	Bakersfield	SJV		CALIFORNIA	N ST	Q ST				3	3	3		3	3	3	3	3	3		
35	Bakersfield	SJV		CALIFORNIA	Q ST	UNION				3	3	3		3	3	3	3	3	3		
36	Bakersfield	SJV		CALIFORNIA	UNION	BAKER				3	3	3		3	3	3	3	3	3		
37	Bakersfield	SJV		CALIFORNIA	BAKER	KING				3	3	3		3	3	3	3	3	3		
38	Bakersfield	SJV		CALIFORNIA	KING	BEALE				3	3	3		3	3	3	3	3	3		
39	Bakersfield	SJV		CALIFORNIA	BEALE	HALEY				3	3	3		3	3	3	3	3	3		
40	Bakersfield	SJV		CALIFORNIA	HALEY	WASHINGTON				2	2	2		2	2	2	2	2	2		
41	Bakersfield	SJV		CASA LOMA	UNION	MADISON				1	1	2		2	2	2	2	2	2		
42	Bakersfield	SJV		CASA LOMA	MADISON	COTTONWOOD				1	1	2		2	2	2	2	2	2		
43	Bakersfield	SJV		CASA LOMA	COTTONWOOD	WASHINGTON				1	1	1		1	1	2	2	2	2		
44	Bakersfield	SJV		CASA LOMA	WASHINGTON	FAIRFAX				0	0	0		0	0	0	0	0	2		

Appendix B - Highway Project Listing on Regionally Significant Route Segments and Year Number of Lanes Modeled																		
SORT KEY	AGENCY	AIR BASIN	PM10 BASIN	STREET	BEGIN	END	Type of Imprvmt.	RTP PROJECT ID/Other ID	COST (RTP, Other)	Year number of lanes modeled (each direction)								
										11	12	14	15	17	20	23	25	35
Note: blacked out cells indicate segment in air basin without attainment dates in those years																		
46	Bakersfield	SJV		CHESTER	34TH ST	COLUMBUS				2	2	2		2	2	2	2	2
46	Bakersfield	SJV		CHESTER	30TH ST	34TH ST				2	2	2		2	2	2	2	2
47	Bakersfield	SJV		CHESTER	SR178	30TH ST				2	2	2		2	2	2	2	2
48	Bakersfield	SJV		COFFEE	NORRIS	OLIVE	Add Lanes	Local		2	2	2		2	2	2	2	3
49	Bakersfield	SJV		COFFEE	OLIVE	HAGEMAN				3	3	3		3	3	3	3	3
50	Bakersfield	SJV		COFFEE	HAGEMAN	MEANY				3	3	3		3	3	3	3	3
51	Bakersfield	SJV		COFFEE	MEANY	DOWNING				3	3	3		3	3	3	3	3
52	Bakersfield	SJV		COFFEE	DOWNING	GRANITE FALLS				3	3	3		3	3	3	3	3
53	Bakersfield	SJV		COFFEE	GRANITE FALLS	SR58				3	3	3		3	3	3	3	3
54	Bakersfield	SJV		COFFEE	SR58	BRIMHALL				3	3	3		3	3	3	3	3
55	Bakersfield	SJV		COFFEE	BRIMHALL	WESTSIDE PARKWAY				3	3	3		3	3	3	3	3
56	Bakersfield	SJV		COFFEE	WESTSIDE PARKWAY	TRUXTUN				3	3	3		3	3	3	3	3
57	Bakersfield	SJV		COFFEE	TRUXTUN	STOCKDALE				3	3	3		3	3	3	3	3
58	Bakersfield	SJV		CENTENNIAL CORRIDO	SR 58	WESTSIDE PARKWAY	New Freeway	KER08RTP020	\$645,000,000	0	0	0		0	3	3	3	3
59	Bakersfield	SJV		GOSFORD	CURNOW	SR119				1	1	1		1	1	1	1	2
60	Bakersfield	SJV		GOSFORD	SR 119	MC KEE	Add Lanes	Local		1	1	1		1	2	2	2	2
61	Bakersfield	SJV		GOSFORD	MC KEE	MC CUTCHEN	Add Lanes	Local		1	1	1		1	2	2	2	2
62	Bakersfield	SJV		GOSFORD	MC CUTCHEN	PANAMA LN	Add Lanes	Local		1	1	1		1	2	2	2	2
63	Bakersfield	SJV		GOSFORD	PANAMA LN	HARRIS				3	3	3		3	3	3	3	3
64	Bakersfield	SJV		GOSFORD	HARRIS	PACHECO				3	3	3		3	3	3	3	3
65	Bakersfield	SJV		GOSFORD	PACHECO	DISTRICT				3	3	3		3	3	3	3	3
66	Bakersfield	SJV		GOSFORD	DISTRICT	WHITE LN				3	3	3		3	3	3	3	3
67	Bakersfield	SJV		GOSFORD	WHITE LN	S LAURELGLEN				3	3	3		3	3	3	3	3
68	Bakersfield	SJV		GOSFORD	S LAURELGLEN	N LAURELGLEN				3	3	3		3	3	3	3	3
69	Bakersfield	SJV		GOSFORD	N LAURELGLEN	MING				3	3	3		3	3	3	3	3
70	Bakersfield	SJV		GOSFORD	MING	CAMINO MEDIA				3	3	3		3	3	3	3	3
71	Bakersfield	SJV		GOSFORD	CAMINO MEDIA	STOCKDALE				3	3	3		3	3	3	3	3
72	Bakersfield	SJV		HAGEMAN	Nord Road	Wegis Avenue				1	1	1		1	1	2	2	2
73	Bakersfield	SJV		HAGEMAN	Wegis Avenue	Heath Road				1	1	1		1	1	1	1	2
74	Bakersfield	SJV		HAGEMAN	Heath Road	RUDD				1	1	1		1	1	1	1	2
75	Bakersfield	SJV		HAGEMAN	RUDD	JENKINS				1	1	1		1	1	1	1	2
76	Bakersfield	SJV		HAGEMAN	JENKINS	SANTA FE				1	3/2	3/2		3/2	3/2	3/2	3/2	3/2
77	Bakersfield	SJV		HAGEMAN	SANTA FE	ALLEN				1	3	3		3	3	3	3	3
78	Bakersfield	SJV		HAGEMAN	ALLEN	OLD FARM				1	3	3		3	3	3	3	3
79	Bakersfield	SJV		HAGEMAN	OLD FARM	JEWETTA				3	3	3		3	3	3	3	3
80	Bakersfield	SJV		HAGEMAN	JEWETTA	VERDUGO				2	3	3		3	3	3	3	3
81	Bakersfield	SJV		HAGEMAN	VERDUGO	CALLOWAY				3	3	3		3	3	3	3	3
82	Bakersfield	SJV		HAGEMAN	CALLOWAY	MAIN PLAZA				3	3	3		3	3	3	3	3
83	Bakersfield	SJV		HAGEMAN	MAIN PLAZA	RIVERLAKES				3	3	3		3	3	3	3	3
84	Bakersfield	SJV		HAGEMAN	RIVERLAKES	COFFEE				3	3	3		3	3	3	3	3
85	Bakersfield	SJV		HAGEMAN	COFFEE	PATTON				3	3	3		3	3	3	3	3
86	Bakersfield	SJV		HAGEMAN	PATTON	FRUITVALE				3	3	3		3	3	3	3	3
87	Bakersfield	SJV		HAGEMAN	FRUITVALE	MOHAWK				3	3	3		3	3	3	3	3
88	Bakersfield	SJV		HAGEMAN	MOHAWK	KNUDSEN DR				2	2	2		2	2	2	2	3

Appendix B - Highway Project Listing on Regionally Significant Route Segments and Year Number of Lanes Modeled																				
SORT KEY	AGENCY	AIR BASIN	PM10 BASIN	STREET	BEGIN	END	Type of Imprvmt.	RTP PROJECT ID/Other ID	COST (RTP, Other)	Year number of lanes modeled (each direction)										
										11	12	14	15	17	20	23	25	35		
Note: blacked out cells indicate segment in air basin without attainment dates in those years																				
89	Bakersfield	SJV		HAGEMAN	KNUDSEN DR	SR 99	New Ramps	KER08RTP013	\$68,900,000	0	0	0		2	2	2	2	2	3	
90	Bakersfield	SJV		MANOR	ROBERTS LN	UNION				2	2	2		2	2	2	2	2	2	
91	Bakersfield	SJV		MING_AVE	WEST BELTWAY	S ALLEN				0	0	0		0	2	2	2	2	2	
92	Bakersfield	SJV		MING_AVE	S ALLEN	BUENA VISTA				2	2	2		2	2	2	2	2	2	
93	Bakersfield	SJV		MING_AVE	BUENA VISTA	GRAND LAKES				3	3	3		3	3	3	3	3	3	
94	Bakersfield	SJV		MING_AVE	GRAND LAKES	OLD RIVER RD				3	3	3		3	3	3	3	3	3	
95	Bakersfield	SJV		MING_AVE	OLD RIVER RD	HAGGIN OAKS				3	3	3		3	3	3	3	3	3	
96	Bakersfield	SJV		MING_AVE	HAGGIN OAKS	GOSFORD				3	3	3		3	3	3	3	3	3	
97	Bakersfield	SJV		MING_AVE	GOSFORD	EL PORTAL				3	3	3		3	3	3	3	3	3	
98	Bakersfield	SJV		MING_AVE	EL PORTAL	ASHE				3	3	3		3	3	3	3	3	3	
99	Bakersfield	SJV		MING_AVE	ASHE	NEW STINE				3	3	3		3	3	3	3	3	3	
100	Bakersfield	SJV		MING_AVE	NEW STINE	STINE RD				3	3	3		3	3	3	3	3	3	
101	Bakersfield	SJV		MING_AVE	STINE	AKERS				3	3	3		3	3	3	3	3	3	
102	Bakersfield	SJV		MING_AVE	AKERS	REAL				3	3	3		3	3	3	3	3	3	
103	Bakersfield	SJV		MING_AVE	REAL	WIBLE				3	3	3		3	3	3	3	3	3	
104	Bakersfield	SJV		MING_AVE	WIBLE	HUGHES LN				3	3	3		3	3	3	3	3	3	
105	Bakersfield	SJV		MING_AVE	HUGHES LN	H ST				2	2	2		2	2	2	2	2	2	
106	Bakersfield	SJV		MING_AVE	H ST	CHESTER				2	2	2		2	2	2	2	2	2	
107	Bakersfield	SJV		MING_AVE	CHESTER	P ST				2	2	2		2	2	2	2	2	2	
108	Bakersfield	SJV		MOHAWK	HAGEMAN	DOWNING				3	3	3		3	3	3	3	3	3	
109	Bakersfield	SJV		MOHAWK	ROSEDALE	TRUXTUN	New Arterial	KER08RTP004	\$377,000,000	3	3	3		3	3	3	3	3	3	
110	Bakersfield	SJV		MOHAWK	SR 58	SR 58/Rosedale Highway 0.5 mi s/o				3	3	3		3	3	3	3	3	3	
111	Bakersfield	SJV		MOHAWK	SR 58	HAGEMAN				0	0	0		0	3	3	3	3	3	
112	Bakersfield	SJV		MONTEREY	UNION	ALTA VISTA				3	3	3		3	3	3	3	3	3	
113	Bakersfield	SJV		MONTEREY	ALTA VISTA	BAKER				3	3	3		3	3	3	3	3	3	
114	Bakersfield	SJV		MONTEREY	BAKER	BEALE				3	3	3		3	3	3	3	3	3	
115	Bakersfield	SJV		MONTEREY	BEALE	HALEY				3	3	3		3	3	3	3	3	3	
116	Bakersfield	SJV		MONTEREY	HALEY	NILES				3	3	3		3	3	3	3	3	3	
117	Bakersfield	SJV		MT VERNON	COLUMBUS	SR178				2	2	2		2	2	2	2	2	2	
118	Bakersfield	SJV		MT VERNON	SR178	BERNARD				2	2	2		2	2	2	2	2	2	
119	Bakersfield	SJV		MT VERNON	BERNARD	SR58				2	2	2		2	2	2	2	2	2	
120	Bakersfield	SJV		MT VERNON	SR58	BELLE TERRACE				2	2	2		2	2	2	2	2	2	
121	Bakersfield	SJV		MT VERNON	BELLE TERRACE	CASA LOMA DR				1	1	2		2	2	2	2	2	2	
122	Bakersfield	SJV		N CHESTER	COLUMBUS	BEARDSLEY				2	2	2		2	2	2	2	2	2	
123	Bakersfield	SJV		New Stine Rd	WILSON	MING				3	3	3		3	3	3	3	3	3	
124	Bakersfield	SJV		New Stine Rd	MING	SUNDALE				3	3	3		3	3	3	3	3	3	
125	Bakersfield	SJV		New Stine Rd	SUNDALE	BELLE TERRACE				3	3	3		3	3	3	3	3	3	
126	Bakersfield	SJV		New Stine Rd	BELLE TERRACE	STOCKDALE				3	3	3		3	3	3	3	3	3	
127	Bakersfield	SJV		NILES	UNION	ALTA VISTA				3	3	3		3	3	3	3	3	3	
128	Bakersfield	SJV		NILES	ALTA VISTA	BAKER				3	3	3		3	3	3	3	3	3	
129	Bakersfield	SJV		NILES	BAKER	BEALE				3	3	3		3	3	3	3	3	3	
130	Bakersfield	SJV		NILES	BEALE	HALEY				3	3	3		3	3	3	3	3	3	
131	Bakersfield	SJV		NILES	HALEY	MONTEREY				3	3	3		3	3	3	3	3	3	
132	Bakersfield	SJV		OLD_RIVER	PANAMA LN	HARRIS	Add Lanes	Local		1	2	2		2	2	2	2	2	2	

Appendix B - Highway Project Listing on Regionally Significant Route Segments and Year Number of Lanes Modeled																		
SORT KEY	AGENCY	AIR BASIN	PM10 BASIN	STREET	BEGIN	END	Type of Imprvmt.	RTP PROJECT ID/Other ID	COST (RTP, Other)	Year number of lanes modeled (each direction)								
										11	12	14	15	17	20	23	25	35
133	Bakersfield	SJV		OLD_RIVER	HARRIS	PACHECO	Add Lanes	Local		3/1	3	3		3	3	3	3	3
134	Bakersfield	SJV		OLD_RIVER	PACHECO	CAMPUS PARK	Add Lanes	Local		3	3	3		3	3	3	3	3
135	Bakersfield	SJV		OLD_RIVER	CAMPUS PARK	WHITE LN	Add Lanes	Local		3	3	3		3	3	3	3	3
136	Bakersfield	SJV		OLD_RIVER	WHITE LN	MING				3	3	3		3	3	3	3	3
137	Bakersfield	SJV		OLD_RIVER	MING	CAMINO MEDIA				3	3	3		3	3	3	3	3
138	Bakersfield	SJV		OLD_RIVER	CAMINO MEDIA	STOCKDALE				3	3	3		3	3	3	3	3
139	Bakersfield	SJV		OSWELL	SR178	BERNARD	Add Lanes	Local		3	3	3		3	3	3	3	3
140	Bakersfield	SJV		OSWELL	BERNARD	SR58				2	2	2		2	2	2	2	2
141	Bakersfield	SJV		PANAMA_LN	SR43/ENOS LANE	ALLEN				1	1	1		2	2	2	2	2
142	Bakersfield	SJV		PANAMA_LN	ALLEN	BARLOW	Add Lanes	Local		2	2	2		2	2	2	3	3
143	Bakersfield	SJV		PANAMA_LN	BARLOW	BUENA VISTA BLVD	Add Lanes	Local		2	2	2		2	2	2	3	3
144	Bakersfield	SJV		PANAMA_LN	BUENA VISTA	MOUNTAIN VISTA	Add Lanes	Local		2	2	2		2	2	2	3	3
145	Bakersfield	SJV		PANAMA_LN	MOUNTAIN VISTA	OLD RIVER RD	Add Lanes	Local		2	2	2		2	2	2	3	3
146	Bakersfield	SJV		PANAMA_LN	OLD RIVER RD	PROGRESS	Add Lanes	Local		2	2	2		2	2	2	3	3
147	Bakersfield	SJV		PANAMA_LN	PROGRESS	GOSFORD	Add Lanes	Local		2	2	2		2	2	2	3	3
148	Bakersfield	SJV		PANAMA_LN	GOSFORD	RELIANCE	Add Lanes	Local		1/2	1/2	1/2		1/2	1/2	2	3	3
149	Bakersfield	SJV		PANAMA_LN	RELIANCE	ASHE	Add Lanes	Local		1/2	1/2	1/2		1/2	1/2	2	3	3
150	Bakersfield	SJV		PANAMA_LN	ASHE	GOLDEN GATE	Add Lanes	Local		3/2	3/2	3/2		3/2	3/2	3/2	3	3
151	Bakersfield	SJV		PANAMA_LN	GOLDEN GATE	STINE RD	Add Lanes	Local		3/2	3/2	3/2		3/2	3/2	3/2	3	3
152	Bakersfield	SJV		PANAMA_LN	STINE RD	AKERS	Add Lanes	Local		3	3	3		3	3	3	3	3
153	Bakersfield	SJV		PANAMA_LN	AKERS	WIBLE	Add Lanes	Local		3	3	3		3	3	3	3	3
154	Bakersfield	SJV		PANAMA_LN	WIBLE	SR99				3	3	3		3	3	3	3	3
155	Bakersfield	SJV		PANAMA_LN	SR99	H ST				3	3	3		3	3	3	3	3
156	Bakersfield	SJV		PANAMA_LN	H ST	MONITOR	Add Lanes	Local		2	2	2		2	2	2	2	3
157	Bakersfield	SJV		PANAMA_LN	MONITOR	UNION	Add Lanes	Local		2	2	2		2	2	2	2	3
158	Bakersfield	SJV		PANAMA_LN	UNION	COTTONWOOD				1	1	1		1	2	2	2	2
159	Bakersfield	SJV		PANAMA_LN	COTTONWOOD	SR184				1	1	1		1	1	1	1	2
160	Bakersfield	SJV		PANORAMA_DR	1700 FEET N COLUMBU	UNION				2	2	2		2	2	2	2	2
161	Bakersfield	SJV		REAL_RD	STOCKDALE	SR58				2	2	2		2	2	2	2	2
162	Bakersfield	SJV		SO.CHESTER	UNION	PLANZ RD				2	2	2		2	2	2	2	2
163	Bakersfield	SJV		SO.CHESTER	PLANZ RD	WILSON				2	2	2		2	2	2	2	2
164	Bakersfield	SJV		SO.CHESTER	MING	BELLE TERRACE				2	2	2		2	2	2	2	2
165	Bakersfield	SJV		SO.CHESTER	BELLE TERRACE	SR58				2	2	2		2	2	2	2	2
166	Bakersfield	SJV		SO.CHESTER	SR58	BRUNDAGE				2	2	2		2	2	2	2	2
167	Bakersfield	SJV		SO.CHESTER	BRUNDAGE	4TH ST				2	2	2		2	2	2	2	2
168	Bakersfield	SJV		SO.CHESTER	4TH ST	CALIFORNIA				2	2	2		2	2	2	2	2
169	Bakersfield	SJV		SO.CHESTER	CALIFORNIA	TRUXTUN				2	2	2		2	2	2	2	2
170	Bakersfield	SJV		SO.CHESTER	TRUXTUN	18TH ST				2	2	2		2	2	2	2	2
171	Bakersfield	SJV		SO.CHESTER	18TH ST	21ST ST				2	2	2		2	2	2	2	2
172	Bakersfield	SJV		SO.CHESTER	21ST ST	SR178				2	2	2		2	2	2	2	2
173	Bakersfield	SJV		STINE_RD	SR119	MC KEE				1	1	1		2	2	2	2	2
174	Bakersfield	SJV		STINE_RD	MC KEE	HOSKING				1	1	1		2	2	2	2	2
175	Bakersfield	SJV		STINE_RD	HOSKING	BERKSHIRE				1	1	1		2	2	2	2	2
176	Bakersfield	SJV		STINE_RD	BERKSHIRE	PANAMA LN				1	1	1		2	2	2	2	2

Appendix B - Highway Project Listing on Regionally Significant Route Segments and Year Number of Lanes Modeled																		
SORT KEY	AGENCY	AIR BASIN	PM10 BASIN	STREET	BEGIN	END	Type of Imprvmt.	RTP PROJECT ID/Other ID	COST (RTP, Other)	Year number of lanes modeled (each direction)								
										11	12	14	15	17	20	23	25	35
177	Bakersfield	SJV		STINE_RD	PANAMA LN	HARRIS				3	3	3		3	3	3	3	3
178	Bakersfield	SJV		STINE_RD	HARRIS	PACHECO				3	3	3		3	3	3	3	3
179	Bakersfield	SJV		STINE_RD	PACHECO	DISTRICT				3	3	3		3	3	3	3	3
180	Bakersfield	SJV		STINE_RD	DISTRICT	WHITE LN				3	3	3		3	3	3	3	3
181	Bakersfield	SJV		STINE_RD	WHITE LN	PLANZ RD				3	3	3		3	3	3	3	3
182	Bakersfield	SJV		STINE_RD	PLANZ RD	WILSON				3	3	3		3	3	3	3	3
183	Bakersfield	SJV		STOCKDALE	RENFRO	ALLEN				3	3	3		3	3	3	3	3
184	Bakersfield	SJV		STOCKDALE	ALLEN	JEWETTA				3	3	3		3	3	3	3	3
185	Bakersfield	SJV		STOCKDALE	JEWETTA	BUENA VISTA BLVD				3	3	3		3	3	3	3	3
186	Bakersfield	SJV		STOCKDALE	BUENA VISTA	CALLOWAY				3	3	3		3	3	3	3	3
187	Bakersfield	SJV		STOCKDALE	CALLOWAY	COFFEE				3	3	3		3	3	3	3	3
188	Bakersfield	SJV		STOCKDALE	COFFEE	ASHE				3	3	3		3	3	3	3	3
189	Bakersfield	SJV		STOCKDALE	ASHE	CALIFORNIA				3	3	3		3	3	3	3	3
190	Bakersfield	SJV		STOCKDALE	CALIFORNIA	MONTCLAIR				3	3	3		3	3	3	3	3
191	Bakersfield	SJV		STOCKDALE	MONTCLAIR	STINE RD				3	3	3		3	3	3	3	3
192	Bakersfield	SJV		STOCKDALE	STINE	REAL				3	3	3		3	3	3	3	3
193	Bakersfield	SJV		STOCKDALE	REAL	SR99				3	3	3		3	3	3	3	3
194	Bakersfield	SJV		STOCKDALE	SR99	OAK				3	3	3		3	3	3	3	3
195	Bakersfield	SJV		TRUXTUN_AVE	OAK	BEECH				2	2	2		2	2	2	2	2
196	Bakersfield	SJV		TRUXTUN_AVE	BEECH	PINE ST				2	2	2		2	2	2	2	2
197	Bakersfield	SJV		TRUXTUN_AVE	PINE	B ST				2	2	2		2	2	2	2	2
198	Bakersfield	SJV		TRUXTUN_AVE	B ST	F ST				2	2	2		2	2	2	2	2
199	Bakersfield	SJV		TRUXTUN_AVE	F ST	H ST				2	2	2		2	2	2	2	2
200	Bakersfield	SJV		TRUXTUN_AVE	H ST	CHESTER				2	2	2		2	2	2	2	2
201	Bakersfield	SJV		TRUXTUN_AVE	CHESTER	M ST				3	3	3		3	3	3	3	3
202	Bakersfield	SJV		TRUXTUN_AVE	M ST	N ST				3	3	3		3	3	3	3	3
203	Bakersfield	SJV		TRUXTUN_AVE	N ST	Q ST				3	3	3		3	3	3	3	3
204	Bakersfield	SJV		TRUXTUN_AVE	Q ST	UNION				3	3	3		3	3	3	3	3
205	Bakersfield	SJV		UNION	MANOR	COLUMBUS	Add Lanes	Local		3	3	3		3	3	3	3	3
206	Bakersfield	SJV		UNION	COLUMBUS	34TH ST				3	3	3		3	3	3	3	3
207	Bakersfield	SJV		UNION	34TH ST	30TH ST				3	3	3		3	3	3	3	3
208	Bakersfield	SJV		UNION	30TH ST	NILES				3	3	3		3	3	3	3	3
209	Bakersfield	SJV		UNION	NILES	MONTEREY				3	3	3		3	3	3	3	3
210	Bakersfield	SJV		UNION	MONTEREY	KENTUCKY				3	3	3		3	3	3	3	3
211	Bakersfield	SJV		UNION	KENTUCKY	SR204				3	3	3		3	3	3	3	3
212	Bakersfield	SJV		UNION	SR204	21ST ST				3	3	3		3	3	3	3	3
213	Bakersfield	SJV		UNION	21ST ST	18TH ST				3	3	3		3	3	3	3	3
214	Bakersfield	SJV		UNION	18TH ST	TRUXTUN				3	3	3		3	3	3	3	3
215	Bakersfield	SJV		UNION	TRUXTUN	CALIFORNIA				3	3	3		3	3	3	3	3
216	Bakersfield	SJV		UNION	CALIFORNIA	4TH ST				3	3	3		3	3	3	3	3
217	Bakersfield	SJV		UNION	4TH ST	BRUNDAGE				3	3	3		3	3	3	3	3
218	Bakersfield	SJV		UNION	BRUNDAGE	SR58				3	3	3		3	3	3	3	3
219	Bakersfield	SJV		UNION	SR58	BELLE TERRACE	Add Lanes	Local		3	3	3		3	3	3	3	3
220	Bakersfield	SJV		UNION	MING	WILSON	Add Lanes	Local		2	2	2		2	2	2	3	3

Appendix B - Highway Project Listing on Regionally Significant Route Segments and Year Number of Lanes Modeled																			
SORT KEY	AGENCY	AIR BASIN	PM10 BASIN	STREET	BEGIN	END	Type of Imprvmt.	RTP PROJECT ID/Other ID	COST (RTP, Other)	Year number of lanes modeled (each direction)									
										11	12	14	15	17	20	23	25	35	
221	Bakersfield	SJV		UNION	WILSON	PLANZ	Add Lanes	Local		2	2	2		2	2	2	3	3	
222	Bakersfield	SJV		UNION	PLANZ	CHESTER	Add Lanes	Local		2	2	2		2	2	2	3	3	
223	Bakersfield	SJV		UNION	CHESTER	WHITE LN	Add Lanes	Local		2	2	2		2	2	2	3	3	
224	Bakersfield	SJV		WHITE LN	BUENA VISTA	MOUNTAIN VISTA				3/2	3/2	3		3	3	3	3	3	
225	Bakersfield	SJV		WHITE LN	MOUNTAIN VISTA	OLD RIVER RD				3	3	3		3	3	3	3	3	
226	Bakersfield	SJV		WHITE LN	OLD RIVER RD	PARK VIEW				3	3	3		3	3	3	3	3	
227	Bakersfield	SJV		WHITE LN	PARK VIEW	PIN OAK PARK				3	3	3		3	3	3	3	3	
228	Bakersfield	SJV		WHITE LN	PIN OAK PARK	GOSFORD				3	3	3		3	3	3	3	3	
229	Bakersfield	SJV		WHITE LN	GOSFORD	LILY				3	3	3		3	3	3	3	3	
230	Bakersfield	SJV		WHITE LN	LILY	ASHE				3	3	3		3	3	3	3	3	
231	Bakersfield	SJV		WHITE LN	ASHE	WILSON				3	3	3		3	3	3	3	3	
232	Bakersfield	SJV		WHITE LN	WILSON	CLOVE				3	3	3		3	3	3	3	3	
233	Bakersfield	SJV		WHITE LN	CLOVE	STINE RD				3	3	3		3	3	3	3	3	
234	Bakersfield	SJV		WHITE LN	STINE RD	AKERS				3	3	3		3	3	3	3	3	
235	Bakersfield	SJV		WHITE LN	AKERS	WIBLE RD				3	3	3		3	3	3	3	3	
236	Bakersfield	SJV		WHITE LN	WIBLE RD	SR99				3	3	3		3	3	3	3	3	
237	Bakersfield	SJV		WHITE LN	SR99	HUGHES LN				3	3	3		3	3	3	3	3	
238	Bakersfield	SJV		WHITE LN	HUGHES LN	H ST				3/2	3/2	3/2		3/2	3/2	3/2	3/2	3/2	
239	Bakersfield	SJV		WHITE LN	H ST	MONITOR				2	2	2		2	2	2	2	2	
240	Bakersfield	SJV		WHITE LN	MONITOR	UNION				2	2	2		2	2	2	2	2	
241	Bakersfield	SJV		WESTSIDE PARKWAY	HEATH	WEST BELTEWAY	New Freeway	KER08RTP004	\$377,000,000	0	0	2		2	2	2	2	2	
242	Bakersfield	SJV		WESTSIDE PARKWAY	WEST BELTEWAY	ALLEN	New Freeway	KER08RTP005	\$377,000,000	0	0	2		2	2	2	2	3	
243	Bakersfield	SJV		WESTSIDE PARKWAY	ALLEN	JEWETTA	New Freeway	KER08RTP004	\$377,000,000	0	3	3		3	3	3	3	3	
244	Bakersfield	SJV		WESTSIDE PARKWAY	JEWETTA	CALLOWAY	New Freeway	KER08RTP004	\$377,000,000	0	3	3		3	3	3	3	3	
245	Bakersfield	SJV		WESTSIDE PARKWAY	CALLOWAY	COFFEE	New Freeway	KER08RTP004	\$377,000,000	0	3	3		3	3	3	3	3	
246	Bakersfield	SJV		WESTSIDE PARKWAY	COFFEE	MOHAWK	New Freeway/Arts	KER08RTP004	\$377,000,000	0	3/4	3/4		3/4	4	4	4	4	
247	Bakersfield	SJV		WESTSIDE PARKWAY	MOHAWK	TRUXTUN	New Freeway/Arts	KER08RTP004	\$377,000,000	0	2	2		2	2	2	2	2	
248	Bakersfield	SJV		WESTSIDE PARKWAY(P	Mohawk Street	SR 99/SR 58				0	3	3		3	3	3	3	3	
249	Bakersfield	SJV		WEST BELTWAY	7th Standard Road	SR 58/Rosedale Highway		KER08RTP102		0	0	0		0	0	0	0	2	
250	Bakersfield	SJV		WEST BELTWAY	SR58	Westside Parkway	New Freeway	KER08RTP016	\$170,000,000	0	0	0		0	0	0	0	3	
251	Bakersfield	SJV		WEST BELTWAY	Westside Parkway	PACHECO		KER08RTP016		0	0	0		0	0	0	0	2	
252	Bakersfield	SJV		WEST BELTWAY	PACHECO	Panama Lane		KER08RTP097		0	0	0		0	0	0	0	2	
253	Bakersfield	SJV		WEST BELTWAY	Panama Lane	SR 119/Taft Highway		KER08RTP097		0	0	0		0	0	0	0	2	
254	Caltrans																		
255	Caltrans	SJV		ELLINGTON	11TH AVE	SR155				1	1	1		1	1	1	1	1	
256	Caltrans	SJV		I-5	LAVAL	LAVAL	Interchange	KER08RTP002	\$11,300,000	x	x	x		x	x	x	x	x	
257	Caltrans	SJV		I-5	COUNTY LINE	LAVAL				4	4	4		4	4	4	4	4	
258	Caltrans	SJV		I-5	LAVAL	SR99				4	4	4		4	4	4	4	4	
259	Caltrans	SJV		I-5	LAVAL	SR166				2	2	2		2	2	2	2	2	
260	Caltrans	SJV		I-5	SR166	OLD RIVER RD				2	2	2		2	2	2	2	2	
261	Caltrans	SJV		I-5	OLD RIVER RD	SR223				2	2	2		2	2	2	2	2	
262	Caltrans	SJV		I-5	SR223	SR119				2	2	2		2	2	2	2	2	
263	Caltrans	SJV		I-5	SR119	SR43				2	2	2		2	2	2	2	2	
264	Caltrans	SJV		I-5	SR43	STOCKDALE				2	2	2		2	2	2	2	2	

Appendix B - Highway Project Listing on Regionally Significant Route Segments and Year Number of Lanes Modeled																			
SORT KEY	AGENCY	AIR BASIN	PM10 BASIN	STREET	BEGIN	END	Type of Imprvmt.	RTP PROJECT ID/Other ID	COST (RTP, Other)	Year number of lanes modeled (each direction)									
										11	12	14	15	17	20	23	25	35	
265	Caltrans	SJV		I-5	STOCKDALE	SR58				2	2	2		2	2	2	2	2	2
266	Caltrans	SJV		I-5	SR58	7TH STANDARD				2	2	2		2	2	2	2	2	2
267	Caltrans	SJV		I-5	7TH STANDARD	ROWLEE				2	2	2		2	2	2	2	2	2
268	Caltrans	SJV		I-5	ROWLEE	LERDO HWY				2	2	2		2	2	2	2	2	2
269	Caltrans	SJV		I-5	LERDO HWY	SR46				2	2	2		2	2	2	2	2	2
270	Caltrans	SJV		I-5	SR46	TWISSELMAN				2	2	2		2	2	2	2	2	2
271	Caltrans	SJV		I-5	TWISSELMAN	COUNTY LINE				2	2	2		2	2	2	2	2	2
272	Caltrans	IWV		SR14	SR395	POOLE							2						2
273	Caltrans	IWV		SR14	POOLE	INYOKERN	Add Lanes	KER08RTP006	\$42,000,000					1					2
274	Caltrans	IWV		SR14	INYOKERN	SR178	Add Lanes	KER08RTP006	\$42,000,000					1					2
275	Caltrans	IWV		SR14	SR178	6 mile s of 178	Add Lanes	KER08RTP017	\$42,000,000					1					2
276	Caltrans	IWV		SR14	6 mile s of 178	REDROCK RANDSBURG	Add Lanes	KER08RTP024	\$32,000,000					1					2
277	Caltrans	MD		SR14	REDROCK RANDSBURG	JAWBONE CANYON								2					2
278	Caltrans	MD		SR14	JAWBONE CANYON	CALIFORNIA CITY								2					2
279	Caltrans	MD		SR14	CALIFORNIA CITY	SR58BYPASS								2					2
280	Caltrans	MD		SR14	SR58BYPASS	DEAVER								2					2
281	Caltrans	MD		SR14	DEAVER	SR58								2					2
282	Caltrans	MD		SR14	ALTUS	SR58								2					2
283	Caltrans	MD		SR14	CAMELOT	ALTUS								2					2
284	Caltrans	MD		SR14	PURDY	CAMELOT								2					2
285	Caltrans	MD		SR14	SILVER QUEEN	PURDY								2					2
286	Caltrans	MD		SR14	BACKUS	SILVER QUEEN								2					2
287	Caltrans	MD		SR14	DAWN	BACKUS								2					2
288	Caltrans	MD		SR14	ROSAMOND	DAWN								2					2
289	Caltrans	MD		SR14	A AVE	ROSAMOND								2					2
290	Caltrans	SJV		SR119	SR33	GARDENER FIELD				1	1	1							1
291	Caltrans	SJV		SR119	GARDENER FIELD	2ND ST				1	1	1							1
292	Caltrans	SJV		SR119	2ND ST	ASH				1	1	1							1
293	Caltrans	SJV		SR119	ASH	HARRISON				1	1	1							1
294	Caltrans	SJV		SR119	HARRISON	MIDWAY				1	1	1							1
295	Caltrans	SJV		SR119	MIDWAY	ELK HILLS				1	1	1							1
296	Caltrans	SJV		SR119	ELK HILLS	CHERRY AVE				1	1	1							1
297	Caltrans	SJV		SR119	CHERRY AVE	TUPMAN	Add Lanes	KER08RTP022	\$115,000,000	1	1	1							2
298	Caltrans	SJV		SR119	TUPMAN	SR43				1	1	1							1
299	Caltrans	SJV		SR119	SR43	I-5				1	1	1							1
300	Caltrans	SJV		SR119	I-5	NORD	Add Lanes	KER08RTP099		1	1	1							2
301	Caltrans	SJV		SR119	NORD	HEATH	Add Lanes	KER08RTP099		1	1	1							2
302	Caltrans	SJV		SR119	HEATH	RENFRO	Add Lanes	KER08RTP099		1	1	1							2
303	Caltrans	SJV		SR119	RENFRO	ALLEN	Add Lanes	KER08RTP099		1	1	1							2
304	Caltrans	SJV		SR119	ALLEN	BARLOW	Add Lanes	KER08RTP099		1	1	1							2
305	Caltrans	SJV		SR119	BARLOW	BUENA VISTA BLVD	Add Lanes	KER08RTP099		1	1	1							2
306	Caltrans	SJV		SR119	BUENA VISTA BLVD	GREEN	Add Lanes	Local		1	1	1							2
307	Caltrans	SJV		SR119	GREEN	OLD RIVER RD	Add Lanes	Local		1	1	1							2
308	Caltrans	SJV		SR119	OLD RIVER RD	PROGRESS	Add Lanes	Local		1	1	1							2

Appendix B - Highway Project Listing on Regionally Significant Route Segments and Year Number of Lanes Modeled																				
SORT KEY	AGENCY	AIR BASIN	PM10 BASIN	STREET	BEGIN	END	Type of Imprvmt.	RTP PROJECT ID/Other ID	COST (RTP, Other)	Year number of lanes modeled (each direction)										
										11	12	14	15	17	20	23	25	35		
Note: blacked out cells indicate segment in air basin without attainment dates in those years																				
309	Caltrans	SJV		SR119	PROGRESS	GOSFORD	Add Lanes	Local		1	1	1		1	1	1	1	2		
310	Caltrans	SJV		SR119	GOSFORD	ASHE	Add Lanes	Local		1	1	1		1	1	1	1	2		
311	Caltrans	SJV		SR119	ASHE	STINE RD	Add Lanes	Local		1	1	1		1	1	1	1	2		
312	Caltrans	SJV		SR119	STINE RD	VAN HORN	Add Lanes	Local		1	1	1		1	1	1	1	2		
313	Caltrans	SJV		SR119	VAN HORN	WIBLE RD	Add Lanes	Local		1	1	1		1	1	1	1	2		
314	Caltrans	SJV		SR119	WIBLE RD	SR99	Add Lanes	Local		1	1	1		1	1	1	1	2		
315	Caltrans	SJV		SR119	SR99	HUGHES LN	Add Lanes	Local		1	1	1		1	2	2	2	2		
316	Caltrans	SJV		SR119	HUGHES LN	UNION				1	1	1		1	2	2	2	2		
317	Caltrans	SJV		SR119	UNION	SR184				1	1	1		1	1	1	1	2		
318	Caltrans	SJV		SR155	SR99	FREMONT				1	1	1		1	1	1	1	1		
319	Caltrans	SJV		SR155	FREMONT	HIGH				1	1	1		1	1	1	1	1		
320	Caltrans	SJV		SR155	HIGH	LEXINGTON				1	1	1		1	1	1	1	1		
321	Caltrans	SJV		SR155	LEXINGTON	MAST AVE				1	1	1		1	1	1	1	1		
322	Caltrans	SJV		SR155	MAST AVE	BROWNING				1	1	1		1	1	1	1	1		
323	Caltrans	SJV		SR155	BROWNING	BOWMAN RD	Add Lanes	Local		1	1	1		1	1	1	1	2		
324	Caltrans	SJV		SR155	BOWMAN RD	FAMOSO PORTERVILLE	Add Lanes	Local		1	1	1		1	1	1	1	2		
325	Caltrans	SJV		SR155	FAMOSO PORTERVILLE	SR85				1	1	1		1	1	1	1	1		
326	Caltrans	SJV		SR155	SR85	WOODY GRANITE				1	1	1		1	1	1	1	1		
327	Caltrans	SJV		SR155	WOODY GRANITE	GRANITE				1	1	1		1	1	1	1	1		
328	Caltrans	SJV		SR155	GRANITE	JACK RANCH				1	1	1		1	1	1	1	1		
329	Caltrans	SJV	Y/5	SR155	JACK RANCH	RANCHERIA RD							1		1		1	1		
330	Caltrans	MD	Y	SR155	RANCHERIA	WOFFORD							1		1		1	1		
331	Caltrans	MD	Y	SR155	WOFFORD	SAWMILL							2		2		2	2		
332	Caltrans	MD	Y	SR155	SAWMILL	SR178							1		1		1	1		
333	Caltrans	SJV		SR166	SR33	OLD RIVER RD				1	1	1		1	1	1	1	1		
334	Caltrans	SJV		SR166	OLD RIVER RD	I-5				1	1	1		1	1	1	1	1		
335	Caltrans	SJV		SR166	I-5	SR99				1	1	1		1	1	1	1	1		
336	Caltrans	SJV		SR178	SR58/SR99	BUCK OWENS		KER08RTP014	\$34,000,000	3	3	3		3	3	3	3	3		
337	Caltrans	SJV		SR178	BUCK OWENS	OAK		KER08RTP014	\$34,000,000	3	3	4		4	4	4	4	4		
338	Caltrans	SJV		SR178	OAK	OAK	Intersection	KER08RTP012	\$19,100,000	2	2	4		4	4	4	4	4		
339	Caltrans	SJV		SR178	OAK	BEECH	Add Lanes	KER08RTP014	\$34,000,000	2	2	3		3	3	3	3	3		
340	Caltrans	SJV		SR178	BEECH	PINE ST	Add Lanes	KER08RTP014	\$34,000,000	2	2	3		3	3	3	3	3		
341	Caltrans	SJV		SR178	PINE ST	BAY ST	Add Lanes	KER08RTP014	\$34,000,000	2	2	3		3	3	3	3	3		
342	Caltrans	SJV		SR178	BAY ST	D ST	Add Lanes	KER08RTP014	\$34,000,000	2	2	3		3	3	3	3	3		
343	Caltrans	SJV		SR178	D ST	F ST	Add Lanes	KER08RTP014	\$34,000,000	3	3	4		4	4	4	4	4		
344	Caltrans	SJV		SR178	F ST	H ST	Add Lanes	KER08RTP014	\$34,000,000	3	3	4		4	4	4	4	4		
345	Caltrans	SJV		SR178	H ST	CHESTER	Add Lanes	KER08RTP014	\$34,000,000	3	3	4		4	4	4	4	4		
346	Caltrans	SJV		SR178	CHESTER	M ST	Add Lanes	KER08RTP014	\$34,000,000	3	3	4		4	4	4	4	4		
347	Caltrans	SJV		SR178	M ST	SR204				3	3	3		3	3	3	3	3		
348	Caltrans	SJV		SR178	SR204	ALTA VISTA				3	3	3		3	3	3	3	3		
349	Caltrans	SJV		SR178	ALTA VISTA	BEALE	Add Lanes	KER08RTP026	\$81,000,000	3	3	3		3	3	3	3	4		
350	Caltrans	SJV		SR178	BEALE	HALEY	Add Lanes	KER08RTP026	\$81,000,000	3	3	3		3	3	3	3	4		
351	Caltrans	SJV		SR178	HALEY	MT VERNON	Add Lanes	KER08RTP026	\$81,000,000	3	3	3		3	3	3	3	4		
352	Caltrans	SJV		SR178	MT VERNON	OSWELL	Add Lanes	KER08RTP026	\$81,000,000	3	3	3		3	3	3	3	4		

Appendix B - Highway Project Listing on Regionally Significant Route Segments and Year Number of Lanes Modeled																			
SORT KEY	AGENCY	AIR BASIN	PM10 BASIN	STREET	BEGIN	END	Type of Imprvmt.	RTP PROJECT ID/Other ID	COST (RTP, Other)	Year number of lanes modeled (each direction)									
										11	12	14	15	17	20	23	25	35	
353	Caltrans	SJV		SR178	OSWELL	FAIRFAX				2	2	2		2	2	2	2	2	2
354	Caltrans	SJV		SR178	FAIRFAX	MORNING DR		KER08RTP111		2	2	2		3	3	3	3	3	3
355	Caltrans	SJV		SR178	MORNING DR	VINELAND	Add Lanes	KER08RTP010 KER08RTP112	\$58,800,000	1	1	1		2	2	2	2	3	
356	Caltrans	SJV		SR178	VINELAND	SR184	Add Lanes	KER08RTP011 KER08RTP025	\$36,800,000 \$231,500,000	1	1	1		3	3	3	3	3	
357	Caltrans	SJV		SR179	SR184	MASTERSON Street	Add Lanes	KER08RTP011 KER08RTP025	\$36,800,000 \$231,500,000	1	1	1		3	3	3	3	3	
358	Caltrans	SJV		SR178	MASTERSON Street	COMANCHE	Add Lanes	KER08RTP011 KER08RTP025	\$36,800,000 \$231,500,000	1	1	1		2	2	2	2	3	
359	Caltrans	SJV		SR178	COMANCHE	MIRAMONTE	Add Lanes	KER08RTP011 KER08RTP025	\$36,800,000 \$231,500,000	1	1	1		2	2	2	2	3	
360	Caltrans	SJV		SR178	MIRAMONTE	RANCHERIA RD		KER08RTP084		1	1	1		1	1	1	1	2	
361	Caltrans	SJV/MD	Y/3	SR178	RANCHERIA RD	SR155				2	2	2		2	2	2	2	2	
362	Caltrans	MD	Y	SR178	SR155	LAKE ISABELLA BLVD							1				1	1	1
363	Caltrans	MD	Y	SR178	LAKE ISABELLA BLVD	SIERRA WY							1				1	1	1
364	Caltrans	MD	Y	SR178	SIERRA WY	KELSO VALLEY							1				1	1	1
365	Caltrans	MD/IWV	Y/2	SR178	KELSO VALLEY	SR14							1				1	1	1
366	Caltrans	IWV		SR178	SR14	SR395							1					1	1
367	Caltrans	IWV		SR178	SR395	JACKS RANCH							2					2	2
368	Caltrans	IWV		SR178	JACKS RANCH	BRADY							2					2	2
369	Caltrans	IWV		SR178	BRADY	MAHAN							2					2	2
370	Caltrans	IWV		SR178	MAHAN	DOWNNS							2					2	2
371	Caltrans	IWV		SR178	DOWNNS	NORMA							2					2	2
372	Caltrans	IWV		SR178	NORMA	CHINA LAKE							2					2	2
373	Caltrans	IWV		SR178	INYOKERN	WARD							2					2	2
374	Caltrans	IWV		SR178	WARD	DRUMMOND							2					2	2
375	Caltrans	IWV		SR178	DRUMMOND	LAS FLORES							2					2	2
376	Caltrans	IWV		SR178	LAS FLORES	RIDGECREST BLVD							2					2	2
377	Caltrans	IWV		SR178	CHINA LAKE	GATEWAY							2					2	2
378	Caltrans	IWV		SR178	GATEWAY	RICHMOND							2					2	2
379	Caltrans	IWV		SR178	RICHMOND	COUNTY LINE							1					1	1
380	Caltrans	SJV		SR184	MESA MARIN DR	SR178	Add Lanes	KER08RTP101		1	1	1		1	1	1	1	2	
381	Caltrans	SJV		SR184	VINELAND	MESA MARIN DR	Add Lanes	KER08RTP101		1	1	1		1	1	1	1	2	
382	Caltrans	SJV		SR184	MONICA ST	VINELAND	Add Lanes	KER08RTP101		1	1	1		1	1	1	1	2	
383	Caltrans	SJV		SR184	SHALANE	MONICA ST	Add Lanes	KER08RTP101		1	1	1		1	1	1	1	2	
384	Caltrans	SJV		SR184	MORNING DR	SHALANE	Add Lanes	KER08RTP101		1	1	1		1	1	1	1	2	
385	Caltrans	SJV		SR184	NILES	PIONEER				1	1	1		1	1	1	1	3	
386	Caltrans	SJV		SR184	PIONEER	MILLS				1	1	1		1	1	1	1	3	
387	Caltrans	SJV		SR184	MILLS	EDISON				1	1	1		1	1	1	1	3	
388	Caltrans	SJV		SR184	EDISON	BRUNDAGE				2	2	2		2	2	2	2	3	
389	Caltrans	SJV		SR184	BRUNDAGE	SR58				2	2	2		2	2	2	2	3	

Appendix B - Highway Project Listing on Regionally Significant Route Segments and Year Number of Lanes Modeled																		
SORT KEY	AGENCY	AIR BASIN	PM10 BASIN	STREET	BEGIN	END	Type of Imprvmt.	RTP PROJECT ID/Other ID	COST (RTP, Other)	Year number of lanes modeled (each direction)								
										11	12	14	15	17	20	23	25	35
Note: blacked out cells indicate segment in air basin without attainment dates in those years																		
390	Caltrans	SJV		SR184	SR58	KERRNITA		KER08RTP100		2	2	2		2	2	2	2	2
391	Caltrans	SJV		SR184	KERRNITA	REDBANK		KER08RTP100		1	1	1		1	1	1	1	2
392	Caltrans	SJV		SR184	REDBANK	WILSON		KER08RTP100		1	1	1		1	1	1	1	2
393	Caltrans	SJV		SR184	WILSON	MULLER		KER08RTP100		1	1	1		1	1	1	1	2
394	Caltrans	SJV		SR184	MULLER	WHITE LN		KER08RTP100		1	1	1		1	1	1	1	2
395	Caltrans	SJV		SR184	WHITE LN	HERMOSA		KER08RTP100		1	1	1		1	1	1	1	2
396	Caltrans	SJV		SR184	HERMOSA	FAIRVIEW RD		KER08RTP100		1	1	1		1	1	1	1	2
397	Caltrans	SJV		SR184	FAIRVIEW RD	PANAMA LN		KER08RTP100		1	1	1		1	1	1	1	2
398	Caltrans	SJV		SR184	PANAMA LN	KAM AVE		KER08RTP100		1	1	1		1	1	1	1	2
399	Caltrans	SJV		SR184	KAM AVE	MOUNTAIN VIEW		KER08RTP100		1	1	1		1	1	1	1	2
400	Caltrans	SJV		SR184	MOUNTAIN VIEW	MC KEE		KER08RTP100		1	1	1		1	1	1	1	2
401	Caltrans	SJV		SR184	MC KEE	SR119/PANAMA RD		KER08RTP100		1	1	1		1	1	1	1	2
402	Caltrans	SJV		SR184	SR119/PANAMA RD	HALL				2	2	2		2	2	2	2	2
403	Caltrans	SJV		SR184	HALL	DI GIORGIO				2	2	2		2	2	2	2	2
404	Caltrans	SJV		SR184	DI GIORGIO	TRI DUNCON				1	1	1		1	1	1	1	2
405	Caltrans	SJV		SR184	TRI DUNCON	BUENA VISTA BLVD				1	1	1		1	1	1	1	2
406	Caltrans	SJV		SR184	BUENA VISTA BLVD	SUNSET BLVD				1	1	1		1	1	1	1	2
407	Caltrans	SJV		SR184	SUNSET BLVD	SR223				1	1	1		1	1	1	1	2
408	Caltrans	MD		SR202	SR58	TEHACHAPI BLVD							2					2
409	Caltrans	MD		SR202	TEHACHAPI BLVD	RED APPLE							2					2
410	Caltrans	MD		SR202	RED APPLE	VALLEY BLVD							2					2
411	Caltrans	MD		SR202	VALLEY BLVD	GOLDEN HILLS							1					1
412	Caltrans	MD		SR202	GOLDEN HILLS	WOODFORD TEHACHAPI							1					1
413	Caltrans	MD		SR202	WOODFORD TEHACHAPI	SCHOUT							1					1
414	Caltrans	MD		SR202	SCHOUT	BANDUCCI							1					1
415	Caltrans	MD	Y	SR202	BANDUCCI	CUMMINGS VALLEY							1		1			1
416	Caltrans	MD	Y	SR202	CUMMINGS VALLEY	BEAR VALLEY							1		1			1
417	Caltrans	MD	Y	SR202	BEAR VALLEY	GIRAUDO							1		1			1
418	Caltrans	SJV		SR204	UNION	Q ST				3	3	3		3	3	3	3	3
419	Caltrans	SJV		SR204	Q ST	M ST				3	3	3		3	3	3	3	3
420	Caltrans	SJV		SR204	M ST	CHESTER				3	3	3		3	3	3	3	3
421	Caltrans	SJV		SR204	CHESTER	F ST				2	2	2		2/3	2/3	2/3	2/3	2/3
422	Caltrans	SJV		SR204	F ST	SR99				2	2	2		2	2	2	2	3
423	Caltrans	SJV		SR223	I-5	OLD RIVER RD				1	1	1		1	1	1	1	1
424	Caltrans	SJV		SR223	OLD RIVER RD	WIBLE RD				1	1	1		1	1	1	1	1
425	Caltrans	SJV		SR223	WIBLE RD	SR99				1	1	1		1	1	1	1	1
426	Caltrans	SJV		SR223	SR99	UNION				1	1	1		1	1	1	1	1
427	Caltrans	SJV		SR223	UNION	FAIRFAX				1	1	1		1	1	1	1	1
428	Caltrans	SJV		SR223	FAIRFAX	SR184				1	1	1		1	1	1	1	1
429	Caltrans	SJV		SR223	SR184	VINELAND				1	1	1		1	1	1	1	1
430	Caltrans	SJV		SR223	VINELAND	EDISON				1	1	1		1	1	1	1	1
431	Caltrans	SJV		SR223	EDISON	MALAGA				1	1	1		1	1	1	1	1
432	Caltrans	SJV		SR223	MALAGA	COMANCHE				1	1	1		1	1	1	1	1
433	Caltrans	SJV		SR223	COMANCHE	CAMPUS				2	2	2		2	2	2	2	2

Appendix B - Highway Project Listing on Regionally Significant Route Segments and Year Number of Lanes Modeled																			
SORT KEY	AGENCY	AIR BASIN	PM10 BASIN	STREET	BEGIN	END	Type of Imprvmt.	RTP PROJECT ID/Other ID	COST (RTP, Other)	Year number of lanes modeled (each direction)									
										11	12	14	15	17	20	23	25	35	
434	Caltrans	SJV		SR223	CAMPUS	TEJON				2	2	2		2	2	2	2	2	
435	Caltrans	SJV		SR223	TEJON	TOWER LINE				1	1	1		1	1	1	1	1	
436	Caltrans	SJV		SR223	TOWER LINE	GENERAL BEALE				1	1	1		1	1	1	1	1	
437	Caltrans	SJV		SR223	GENERAL BEALE	SR58				1	1	1		1	1	1	1	1	
438	Caltrans	SJV		SR33	BARKER	TWISSELMAN				1	1	1		1	1	1	1	1	
439	Caltrans	SJV		SR33	TWISSELMAN	SR46				1	1	1		1	1	1	1	1	
440	Caltrans	SJV		SR33	SR46	LERDO HWY				1	1	1		1	1	1	1	1	
441	Caltrans	SJV		SR33	LERDO HWY	LOST HILLS				1	1	1		1	1	1	1	1	
442	Caltrans	SJV		SR33	LOST HILLS	LOKERN				1	1	1		1	1	1	1	1	
443	Caltrans	SJV		SR33	LOKERN	SR58				1	1	1		1	1	1	1	1	
444	Caltrans	SJV		SR33	SR58	SR58				1	1	1		1	1	1	1	1	
445	Caltrans	SJV		SR33	SR58	BILL KIRBY				1	1	1		1	1	1	1	1	
446	Caltrans	SJV		SR33	BILL KIRBY	MIDWAY				1	1	1		1	1	1	1	1	
447	Caltrans	SJV		SR33	MIDWAY	ASH				1	1	1		1	1	1	1	1	
448	Caltrans	SJV		SR33	ASH	HILLARD				1	1	1		1	1	1	1	1	
449	Caltrans	SJV		SR33	HILLARD	10TH ST				2	2	2		2	2	2	2	2	
450	Caltrans	SJV		SR33	10TH ST	6TH ST				2	2	2		2	2	2	2	2	
451	Caltrans	SJV		SR33	6TH ST	2ND ST				2	2	2		2	2	2	2	2	
452	Caltrans	SJV		SR33	2ND ST	MAIN ST				1	1	1		1	1	1	1	1	
453	Caltrans	SJV		SR33	MAIN ST	SR119				1	1	1		1	1	1	1	1	
454	Caltrans	SJV		SR33	SR119	WOOD				1	1	1		1	1	1	1	1	
455	Caltrans	SJV		SR33	WOOD	CADET				1	1	1		1	1	1	1	1	
456	Caltrans	SJV		SR33	CADET	BUSH				1	1	1		1	1	1	1	1	
457	Caltrans	SJV		SR33	BUSH	SR166				1	1	1		1	1	1	1	1	
458	Caltrans	SJV		SR33	SR166	CERRO NOROESTE				1	1	1		1	1	1	1	1	
459	Caltrans	SJV		SR33	CERRO NOROESTE	COUNTY LINE				1	1	1		1	1	1	1	1	
460	Caltrans	IWV		SR395	COUNTY LINE	SR14							2					2	2
461	Caltrans	IWV		SR395	SR14	INYOKERN							1					1	2
462	Caltrans	IWV		SR395	INYOKERN	BOWMAN RD	Passing Lanes	KER08RTP089	\$20,000,000				1					2	2
463	Caltrans	IWV		SR395	BOWMAN RD	CHINA LAKE	Passing Lanes	KER08RTP089	\$20,000,000				1					2	2
464	Caltrans	IWV		SR395	CHINA LAKE	SEARLES							1					1	2
465	Caltrans	MD		SR395	SEARLES	GARLOCK							1					1	2
466	Caltrans	MD		SR395	GARLOCK	JOBERG							1					1	2
467	Caltrans	MD		SR395	JOBERG	COUNTY LINE							1					1	2
468	Caltrans	SJV		SR43	COUNTY LINE	CECIL AVE				1	1	1		1	1	1	1	1	1
469	Caltrans	SJV		SR43	CECIL AVE	SR155				1	1	1		1	1	1	1	1	1
470	Caltrans	SJV		SR43	SR155	POND				1	1	1		1	1	1	1	1	1
471	Caltrans	SJV		SR43	POND	SHERWOOD				1	1	1		1	1	1	1	1	1
472	Caltrans	SJV		SR43	SHERWOOD	SR46				1	1	1		1	1	1	1	1	1
473	Caltrans	SJV		SR43	SR46	5TH ST				1	1	1		1	1	1	1	1	1
474	Caltrans	SJV		SR43	5TH ST	6TH ST				1	1	1		1	1	1	1	1	1
475	Caltrans	SJV		SR43	6TH ST	7TH ST				1	1	1		1	1	1	1	1	1
476	Caltrans	SJV		SR43	7TH ST	POSO DR				1	1	1		1	1	1	1	1	1
477	Caltrans	SJV		SR43	POSO DR	FILBURN				2	2	2		2	2	2	2	2	2

Appendix B - Highway Project Listing on Regionally Significant Route Segments and Year Number of Lanes Modeled																			
SORT KEY	AGENCY	AIR BASIN	PM10 BASIN	STREET	BEGIN	END	Type of Imprvmt.	RTP PROJECT ID/Other ID	COST (RTP, Other)	Year number of lanes modeled (each direction)									
										11	12	14	15	17	20	23	25	35	
Note: blacked out cells indicate segment in air basin without attainment dates in those years																			
478	Caltrans	SJV	SR43	FILBURN	JACKSON					2	2	2		2	2	2	2	2	2
479	Caltrans	SJV	SR43	JACKSON	KIMBERLINA RD					2	2	2		2	2	2	2	2	2
480	Caltrans	SJV	SR43	KIMBERLINA	POPLAR					2	2	2		2	2	2	2	2	2
481	Caltrans	SJV	SR43	POPLAR	SHAFTER					2	2	2		2	2	2	2	2	2
482	Caltrans	SJV	SR43	SHAFTER	CENTRAL					2	2	2		2	2	2	2	2	2
483	Caltrans	SJV	SR43	CENTRAL	LERDO HWY					2	2	2		2	2	2	2	2	2
484	Caltrans	SJV	SR43	LERDO HWY	LOS ANGELES					1	1	1		1	1	1	1	1	1
485	Caltrans	SJV	SR43	LOS ANGELES	7TH STANDARD					1	1	1		1	1	1	1	1	1
486	Caltrans	SJV	SR43	7TH STANDARD	BAKER					1	1	1		1	1	1	1	1	1
487	Caltrans	SJV	SR43	BAKER	SNOW					1	1	1		1	1	1	1	1	1
488	Caltrans	SJV	SR43	SNOW	KRATZMEYER					1	1	1		1	1	1	1	1	1
489	Caltrans	SJV	SR43	KRATZMEYER	REINA					1	1	1		1	1	1	1	1	1
490	Caltrans	SJV	SR43	REINA	HAGEMAN					1	1	1		1	1	1	1	1	1
491	Caltrans	SJV	SR43	HAGEMAN	SR58					1	1	1		1	1	1	1	1	1
492	Caltrans	SJV	SR43	SR58	PALM					1	1	1		1	1	1	1	1	1
493	Caltrans	SJV	SR43	PALM	BRIMHALL					1	1	1		1	1	1	1	1	1
494	Caltrans	SJV	SR43	BRIMHALL	STOCKDALE					1	1	1		1	1	1	1	1	1
495	Caltrans	SJV	SR43	STOCKDALE	PANAMA LN					1	1	1		1	1	1	1	1	1
496	Caltrans	SJV	SR43	PANAMA LN	I-5					1	1	1		1	1	1	1	1	1
497	Caltrans	SJV	SR43	I-5	SR119					1	1	1		1	1	1	1	1	1
498	Caltrans	SJV	SR46	COUNTY LINE	KECKS	Add Lanes	KER08RTP003	\$232,000,000		2	2	2		2	2	2	2	2	2
499	Caltrans	SJV	SR46	KECKS	BITTERWATER VALLEY	Add Lanes	KER08RTP003	\$232,000,000		2	2	2		2	2	2	2	2	2
500	Caltrans	SJV	SR46	BITTERWATER VALLEY	SR33	Add Lanes	KER08RTP003	\$232,000,000		2	2	2		2	2	2	2	2	2
501	Caltrans	SJV	SR46	SR33	BROWN MATERIAL RD	Add Lanes	KER08RTP003	\$232,000,000		2	2	2		2	2	2	2	2	2
502	Caltrans	SJV	SR46	BROWN MATERIAL RD	I-5	Add Lanes	KER08RTP018	\$97,000,000		1	1	1		1	1	1	1	1	2
503	Caltrans	SJV	SR46	I-5	CORCORAN					1	1	1		1	1	1	1	1	1
504	Caltrans	SJV	SR46	CORCORAN	ROWLEE					1	1	1		1	1	1	1	1	1
505	Caltrans	SJV	SR46	ROWLEE	WILDWOOD					1	1	1		1	1	1	1	1	1
506	Caltrans	SJV	SR46	WILDWOOD	SCOFIELD					1	1	1		1	1	1	1	1	1
507	Caltrans	SJV	SR46	SCOFIELD	LEONARD					1	1	1		1	1	1	1	1	1
508	Caltrans	SJV	SR46	LEONARD	WESTERN					1	1	1		1	1	1	1	1	1
509	Caltrans	SJV	SR46	WESTERN	MAGNOLIA					1	1	1		1	1	1	1	1	1
510	Caltrans	SJV	SR46	MAGNOLIA	CENTRAL					1	1	1		1	1	1	1	1	1
511	Caltrans	SJV	SR46	CENTRAL	PALM					1	1	1		1	1	1	1	1	1
512	Caltrans	SJV	SR46	PALM	GRIFFITH					1	1	1		1	1	1	1	1	1
513	Caltrans	SJV	SR46	GRIFFITH	F ST					1	1	1		1	1	1	1	1	1
514	Caltrans	SJV	SR46	F ST	SR43					1	1	1		1	1	1	1	1	1
515	Caltrans	SJV	SR46	SR43	ROOT					1	1	1		1	1	1	1	1	1
516	Caltrans	SJV	SR46	ROOT	SR99					1	1	1		1	1	1	1	1	1
517	Caltrans	SJV	SR58	COUNTY LINE	SR33					1	1	1		1	1	1	1	1	1
518	Caltrans	SJV	SR58	SR33	LOKERN					1	1	1		1	1	1	1	1	1
519	Caltrans	SJV	SR58	LOKERN	BUTTONWILLOW					1	1	1		1	1	1	1	1	1
520	Caltrans	SJV	SR58	BUTTONWILLOW	I-5					1	1	1		1	1	1	1	1	1
521	Caltrans	SJV	SR58	I-5	BRANDT					1	1	1		1	1	1	1	1	1

Appendix B - Highway Project Listing on Regionally Significant Route Segments and Year Number of Lanes Modeled																				
SORT KEY	AGENCY	AIR BASIN	PM10 BASIN	STREET	BEGIN	END	Type of Imprvmt.	RTP PROJECT ID/Other ID	COST (RTP, Other)	Year number of lanes modeled (each direction)										
										11	12	14	15	17	20	23	25	35		
Note: blacked out cells indicate segment in air basin without attainment dates in those years																				
522	Caltrans	SJV		SR58	BRANDT	SR43				1	1	1		1	1	1	1	1	1	1
523	Caltrans	SJV		SR58	SR43	CHERRY		KER08RTP092		1	1	1		1	1	1	1	1	1	2
524	Caltrans	SJV		SR58	CHERRY	SUPERIOR		KER08RTP092		1	1	1		1	1	1	1	1	1	2
525	Caltrans	SJV		SR58	SUPERIOR	GREELEY		KER08RTP092		1	1	1		1	1	1	1	1	1	2
526	Caltrans	SJV		SR58	GREELEY	DRIVER		KER08RTP092		1	1	1		1	1	1	1	1	1	2
527	Caltrans	SJV		SR58	DRIVER	NORD		KER08RTP092		1	1	1		1	1	1	1	1	1	2
528	Caltrans	SJV		SR58	NORD	WEGIS		KER08RTP092		1	1	1		1	1	1	1	1	1	2
529	Caltrans	SJV		SR58	WEGIS	HEATH		KER08RTP092		1	1	1		1	1	1	1	1	1	2
530	Caltrans	SJV		SR58	HEATH	RENFRO		KER08RTP092		1	1	1		1	1	1	1	1	1	3
531	Caltrans	SJV		SR58	RENFRO	JENKINS		KER08RTP092		1	1	1		1	1	1	1	1	1	3
532	Caltrans	SJV		SR58	JENKINS	ALLEN		KER08RTP092		1	1	1		1	1	1	1	1	1	3
533	Caltrans	SJV		SR58	ALLEN	OLD FARM	Add Lanes	KER08RTP090	\$8,800,000	2	2	2		3	3	3	3	3	3	3
534	Caltrans	SJV		SR58	OLD FARM	JEWETTA	Add Lanes	KER08RTP090	\$8,800,000	2	2	2		3	3	3	3	3	3	3
535	Caltrans	SJV		SR58	JEWETTA	VERDUGO	Add Lanes	KER08RTP090	\$8,800,000	2	2	2		3	3	3	3	3	3	3
536	Caltrans	SJV		SR58	VERDUGO	CALLOWAY	Add Lanes	KER08RTP090	\$8,800,000	2	2	2		3	3	3	3	3	3	3
537	Caltrans	SJV		SR58	CALLOWAY	MAIN PLAZA	Add Lanes	KER08RTP007	\$20,600,000	2	2	2		3	3	3	3	3	3	3
538	Bakersfield	SJV		SR58	MAIN PLAZA	COFFEE		KER08RTP007	\$20,600,000	2	2	2		3	3	3	3	3	3	3
539	Bakersfield	SJV		SR58	COFFEE	PATTON		KER08RTP007	\$20,600,000	2	2	2		3	3	3	3	3	3	3
540	Caltrans	SJV		SR58	PATTON	WEAR	Add Lanes	KER08RTP007	\$20,600,000	2	2	2		3	3	3	3	3	3	3
541	Caltrans	SJV		SR58	WEAR	FRUITVALE	Add Lanes	KER08RTP007	\$20,600,000	2	2	2		3	3	3	3	3	3	3
542	Caltrans	SJV		SR58	FRUITVALE	MOHAWK	Add Lanes	KER08RTP007	\$20,600,000	2	2	2		3	3	3	3	3	3	3
543	Caltrans	SJV		SR58	MOHAWK	LANDCO	Add Lanes	KER08RTP118	\$17,400,000	2	2	2		3	3	3	3	3	3	4
544	Caltrans	SJV		SR58	LANDCO	GIBSON	Add Lanes	KER08RTP007	\$20,600,000	2	2	2		3	3	3	3	3	3	4
545	Caltrans	SJV		SR58	GIBSON	SR99	Add Lanes	KER08RTP007	\$20,600,000	3	3	3		3	3	3	3	3	3	4
546	Caltrans	SJV		SR58	SR99	REAL				2	2	2		2	2	2	2	2	2	2
547	Caltrans	SJV		SR58	REAL	H ST	Add Lanes	KER08RTP019 KER08RTP093	\$50000000 \$474000000	2	2	2		3	3	3	3	3	3	4
548	Caltrans	SJV		SR58	H ST	CHESTER	Add Lanes	KER08RTP019 KER08RTP093	\$50000000 \$474000000	2	2	2		3	3	3	3	3	3	4
549	Caltrans	SJV		SR58	CHESTER	UNION	Add Lanes	KER08RTP019 KER08RTP093	\$50000000 \$474000000	2	2	2		3	3	3	3	3	3	4
550	Caltrans	SJV		SR58	UNION	COTTONWOOD	Add Lanes	KER08RTP019 KER08RTP093	\$50000000 \$474000000	2	2	2		3	3	3	3	3	3	4
551	Caltrans	SJV		SR58	COTTONWOOD	MT VERNON				3	3	3		3	3	4	4	4	4	4
552	Caltrans	SJV		SR58	MT VERNON	OSWELL				3	3	3		3	3	4	4	4	4	4
553	Caltrans	SJV		SR58	OSWELL	FAIRFAX				3	3	3		3	3	4	4	4	4	4
554	Caltrans	SJV		SR58	FAIRFAX	SR184				3	3	3		3	3	3	3	3	3	3
555	Caltrans	SJV		SR58	SR184	EDISON				2	2	2		2	2	2	2	2	2	2
556	Caltrans	SJV		SR58	EDISON	COMANCHE				2	2	2		2	2	2	2	2	2	2
557	Caltrans	SJV		SR58	COMANCHE	TOWER LINE				2	2	2		2	2	2	2	2	2	2
558	Caltrans	SJV		SR58	TOWER LINE	GENERAL BEALE				2	2	2		2	2	2	2	2	2	2
559	Caltrans	SJV		SR58	GENERAL BEALE	BEND RD	Truck Lanes	SHOPP		2	2	2		2	2	2	2	2	2	3
560	Caltrans	SJV		SR58	BEND RD	BEALVILLE	Truck Lanes	SHOPP		2	2	2		2	2	2	2	2	2	3

Appendix B - Highway Project Listing on Regionally Significant Route Segments and Year Number of Lanes Modeled																			
SORT KEY	AGENCY	AIR BASIN	PM10 BASIN	STREET	BEGIN	END	Type of Imprvmt.	RTP PROJECT ID/Other ID	COST (RTP, Other)	Year number of lanes modeled (each direction)									
										11	12	14	15	17	20	23	25	35	
561	Caltrans	SJV		SR58	BEALVILLE	BROOM RANCH				2	2	2		2	2	2	2	2	
562	Caltrans	MD	Y	SR58	BROOM RANCH	SR 202							2		2			2	2
563	Caltrans	MD		SR58		SR202							2					2	2
564	Caltrans	MD		SR58	MILL	DENNISON							2					2	2
565	Caltrans	MD		SR58	DENNISON	TEHACHAPI BLVD							2					2	2
566	Caltrans	MD		SR58	TEHACHAPI BLVD	SAND CANYON							2					2	2
567	Caltrans	MD		SR58	SAND CANYON	RANDBURG CUTOFF							2					2	2
568	Caltrans	MD		SR58	RANDBURG CUTOFF	SR14							2					2	2
569	Caltrans	MD		SR58	SR14	20 MULE TEAM PARKWAY							2					2	2
570	Caltrans	MD		SR58	20 MULE TEAM PARKWAY	OLD 58							2					2	2
571	Caltrans	MD		SR58	SR58	CALIFORNIA CITY							2					2	2
572	Caltrans	MD		SR58	CALIFORNIA CITY	MUROC							2					2	2
573	Caltrans	MD		SR58	MUROC	CLAY MINE							2					2	2
574	Caltrans	MD		SR58	CLAY MINE	20 MULE TEAM PARKWAY							2					2	2
575	Caltrans	MD		SR58	20 MULE TEAM	GEPHART							2					2	2
576	Caltrans	MD		SR58	GEPHART	BORAX							2					2	2
577	Caltrans	MD		SR58	BORAX	COUNTY LINE							2					2	2
578	Caltrans	SJV		SR65	COUNTY LINE	SR155				1	1	1		1	1	1	1	1	1
579	Caltrans	SJV		SR65	SR155	SHERWOOD				1	1	1		1	1	1	1	1	1
580	Caltrans	SJV		SR65	SHERWOOD	FAMOSO RD				1	1	1		1	1	1	1	1	1
581	Caltrans	SJV		SR65	FAMOSO RD	MERCED AVE				1	1	1		1	1	1	1	1	1
582	Caltrans	SJV		SR65	MERCED AVE	LERDO HWY				1	1	1		1	1	1	1	1	1
583	Caltrans	SJV		SR65	LERDO HWY	JAMES				1	1	1		1	1	1	1	1	1
584	Caltrans	SJV		SR65	JAMES	7TH STANDARD	Add Lanes	KER08RTP094		1	1	1		1	1	2	2	2	2
585	Caltrans	SJV		SR65	7TH STANDARD	SR99				2	2	2		2	2	2	2	2	2
586	Caltrans	SJV		SR99	COUNTY LINE	CECIL AVE				3	3	3		3	3	3	3	3	3
587	Caltrans	SJV		SR99	CECIL	SR155				3	3	3		3	3	3	3	3	3
588	Caltrans	SJV		SR99	SR155	WOOLLONES				3	3	3		3	3	3	3	3	3
589	Caltrans	SJV		SR99	WOOLLONES	POND				3	3	3		3	3	3	3	3	3
590	Caltrans	SJV		SR99	POND	SHERWOOD				3	3	3		3	3	3	3	3	3
591	Caltrans	SJV		SR99	SHERWOOD	SR46				3	3	3		3	3	3	3	3	3
592	Caltrans	SJV		SR99	SR46	KIMBERLINA RD				3	3	3		3	3	3	3	3	3
593	Caltrans	SJV		SR99	KIMBERLINA RD	MERCED AVE				3	3	3		3	3	3	3	3	3
594	Caltrans	SJV		SR99	MERCED	LERDO HWY				3	3	3		3	3	3	3	3	3
595	Caltrans	SJV		SR99	LERDO HWY	7TH STANDARD				3	3	3		3	3	3	3	3	3
596	Caltrans	SJV		SR99	7TH STANDARD	SR65		KER08RTP104	\$91,100,000	3	3	3		3	3	3	3	3	4
597	Caltrans	SJV		SR99	SR65	OLIVE		KER08RTP104	\$91,100,000	3	3	3		3	3	3	3	3	4
598	Caltrans	SJV		SR99	SNOW RD	SNOW RD	New Interchange	KER08RTP115	\$138,200,000	-	-	-		-	-	-	-	-	x
599	Caltrans	SJV		SR99	OLIVE	OLIVE	Ramp Improve	KER08RTP021	\$108,000,000	-	-	-		-	-	-	-	-	x
600	Caltrans	SJV		SR99	OLIVE	SR204		KER08RTP104	\$12,000,000	3	3	5		5	5	5	5	5	5
601	Caltrans	SJV		SR99	SR204	AIRPORT				4	4	4		4	4	4	4	4	4
602	Caltrans	SJV		SR99	AIRPORT	SR58(24TH ST)				4	4	4		4	4	4	4	4	4
603	Caltrans	SJV		SR99	SR58(24TH ST)	CALIFORNIA				4	4	4		4	4	4	4	4	4
604	Caltrans	SJV		SR99	CALIFORNIA	STOCKDALE				4	4	4		4	4	4	4	4	4

Appendix B - Highway Project Listing on Regionally Significant Route Segments and Year Number of Lanes Modeled																				
SORT KEY	AGENCY	AIR BASIN	PM10 BASIN	STREET	BEGIN	END	Type of Imprvmt.	RTP PROJECT ID/Other ID	COST (RTP, Other)	Year number of lanes modeled (each direction)										
										11	12	14	15	17	20	23	25	35		
605	Caltrans	SJV	SR99	STOCKDALE	MING					4	4	4		4	4	4	4	4	4	
606	Caltrans	SJV	SR99	MING	Wilson Road					4	4	4		4	4	4	4	4	4	
607	Caltrans	SJV	SR99	Wilson Road	WHITE LN		Add Lanes	KER08RTP077	\$52,000,000	3	3	4		4	4	4	4	4	4	
608	Caltrans	SJV	SR99	WHITE LN	PANAMA LN		Add Lanes	KER08RTP077	\$52,000,000	3	3	4		4	4	4	4	4	4	
609	Caltrans	SJV	SR99	PANAMA LN	HOSKING		Add Lanes	KER08RTP077	\$52,000,000	3	3	4		4	4	4	4	4	4	
610	Caltrans	SJV	SR99	SR119	HOSKING		Add Lanes	KER08RTP077	\$52,000,000	3	3	4		4	4	4	4	4	4	
611	Caltrans	SJV	SR99	SR223	SR119					3	3	3		3	3	3	3	3	3	
612	Caltrans	SJV	SR99	HERRING RD	SR223					3	3	3		3	3	3	3	3	3	
613	Caltrans	SJV	SR99	COPUS RD	HERRING RD					3	3	3		3	3	3	3	3	3	
614	Caltrans	SJV	SR99	SR166	COPUS RD					3	3	3		3	3	3	3	3	3	
615	Caltrans	SJV	SR99	I-5	SR166					3	3	3		3	3	3	3	3	3	
616	Caltrans	MD		TUCKER RD	RED APPLE	VALLEY							2						2	
617	Caltrans	MD		VALLEY BL	TUCKER	REEVES	Add Lanes	Local					2						2	
618	Caltrans	MD		VALLEY BL	REEVES	GOLDEN HILLS	Add Lanes	Local					2						2	
619	Kern County																			
620	Kern County	SJV	7TH_STANDAR	SR 43/Enos Lane	SANTA FE WAY		Add Lanes	KER08RTP113	\$11,500,000	1	1	1		1	1	1	1	1	1	
621	Kern County	SJV	7TH_STANDAR	SANTA FE	ZERKER RD		Add Lanes	KER08RTP005	\$57,000,000	2	2	2		2	2	2	2	2	2	
622	Kern County	SJV	7TH_STANDAR	ZERKER RD	ALLEN		Add Lanes	KER08RTP005	\$57,000,000	2	2	2		2	2	2	2	2	2	
623	Kern County	SJV	7TH_STANDAR	ALLEN	OLD FARM		Add Lanes	KER08RTP005	\$57,000,000	2	2	2		2	2	2	2	2	2	
624	Kern County	SJV	7TH_STANDAR	OLD FARM	JEWETTA		Add Lanes	KER08RTP005	\$57,000,000	2	2	2		2	2	2	2	2	2	
625	Kern County	SJV	7TH_STANDAR	VERDUGO	CALLOWAY		Add Lanes	KER08RTP005	\$57,000,000	2	2	2		2	2	2	2	2	2	
626	Kern County	SJV	7TH_STANDAR	JEWETTA	VERDUGO		Add Lanes	KER08RTP005	\$57,000,000	2	2	2		2	2	2	2	2	2	
627	Kern County	SJV	7TH_STANDAR	CALLOWAY	RIVERLAKES		Add Lanes	KER08RTP005	\$57,000,000	2	2	2		2	2	2	2	2	2	
628	Kern County	SJV	7TH_STANDAR	RIVERLAKES	COFFEE		Add Lanes	KER08RTP005	\$57,000,000	2	2	2		2	2	2	2	2	2	
629	Kern County	SJV	7TH_STANDAR	COFFEE	SR99					2	2	2		2	2	2	2	2	2	
630	Kern County	SJV	7TH_STANDAR	SR99	SR99					2	2	2		2	2	2	2	2	2	
631	Kern County	SJV	7TH_STANDAR	SR99	SR85					2	2	2		2	2	2	2	2	2	
632	Kern County	SJV	7TH_STANDAR	SR85	PEGASUS					2	2	2		2	2	2	2	2	2	
633	Kern County	SJV	7TH_STANDAR	PEGASUS	WINGS WAY					2	2	2		2	2	2	2	2	2	
634	Kern County	SJV	7TH_STANDAR	WINGS WAY	AIRPORT		Add Lanes	Local		1	1	1		1	2	2	2	2	2	
635	Kern County	SJV	7TH_STANDAR	AIRPORT	MC CRAY					2	2	2		2	2	2	2	2	2	
636	Kern County	SJV	7TH_STANDAR	MC CRAY	CHESTER					2	2	2		2	2	2	2	2	2	
637	Kern County	MD	90TH WEST	ROSAMOND	HOLIDAY		Add Lanes	Local					1						1	
638	Kern County	MD	90TH WEST	HOLIDAY	GASKELL		Add Lanes	Local					1						1	
639	Kern County	MD	90TH WEST	GASKELL	A AVE		Add Lanes	Local					1						1	
640	Kern County	SJV	AIRPORT	7TH STANDARD	DAY		Add Lanes	Local		1	1	1		2	2	2	2	2	2	
641	Kern County	SJV	AIRPORT	DAY	SKYWAY		Add Lanes	Local		1	1	1		2	2	2	2	2	2	
642	Kern County	SJV	AIRPORT	SKYWAY	NORRIS					2	2	2		2	2	2	2	2	2	
643	Kern County	SJV	AIRPORT	NORRIS	DECATUR/OLIVE		Add Lanes	Local		2	2	2		2	3	3	3	3	3	
644	Kern County	SJV	AIRPORT	DECATUR/OLIVE	ROBERTS LN		Add Lanes	Local		2	2	2		2	3	3	3	3	3	
645	Kern County	SJV	AIRPORT	ROBERTS LN	STATE RD					2	2	2		2	3	3	3	3	3	
646	Kern County	SJV	ALLEN	ALLEN	NORIEGA	HAGEMAN				1	1	1		1	2	2	2	2	2	
647	Kern County	SJV	ALLEN	HAGEMAN	MEACHAM		Add Lanes	Local		1	1	1		2	2	2	2	2	2	
648	Kern County	SJV	ALLEN	MEACHAM	SR58		Add Lanes	Local		1	1	1		2	2	2	2	2	2	

Appendix B - Highway Project Listing on Regionally Significant Route Segments and Year Number of Lanes Modeled																		
SORT KEY	AGENCY	AIR BASIN	PM10 BASIN	STREET	BEGIN	END	Type of Imprvmt.	RTP PROJECT ID/Other ID	COST (RTP, Other)	Year number of lanes modeled (each direction)								
										11	12	14	15	17	20	23	25	35
Note: blacked out cells indicate segment in air basin without attainment dates in those years																		
849	Kern County	SJV		CALLOWAY	7TH STANDARD	ETCHART	Add Lanes	Local		1	1	1		1	1	1	2	2
850	Kern County	SJV		CALLOWAY	ETCHART	SNOW	Add Lanes	Local		1	1	2		2	2	2	2	2
851	Kern County	SJV		CALLOWAY	SR58	PALM	Add Lanes	Local		2	2	2		3	3	3	3	3
852	Kern County	SJV		CALLOWAY	PALM	BRIMHALL	Add Lanes	Local		2	2	2		3	3	3	3	3
853	Kern County	SJV		CALIFORNIA	WASHINGTON	MT VERNON				2	2	2		2	2	2	2	2
854	Kern County	SJV		CALIFORNIA	MT VERNON	EDISON				2	2	2		2	2	2	2	2
855	Kern County	SJV		CHINA GRADE	CHESTER	MANOR				2	2	2		2	2	2	2	2
856	Kern County	SJV		CHINA GRADE	MANOR	MONTE CRISTO	Add Lanes	Local		1	1	1		1	1	1	1	2
857	Kern County	SJV		CHINA GRADE	MONTE CRISTO	CHINA GRADE LOOP/R	Add Lanes	Local		1	1	1		1	1	1	1	2
858	Kern County	SJV		CHINA GRADE	CHINA GRADE LOOP/R	ALFRED HARRELL	Add Lanes	Local		1	1	1		1	1	1	1	2
859	Kern County	IWV		CHINA LAKE BL	SPRINGER	MAHAN							1					1
860	Kern County	IWV		CHINA LAKE BL	MAHAN	SR395							1					1
861	Kern County	SJV		COFFEE	7TH STANDARD	ETCHART	Add Lanes	Local		1	1	1		1	2	2	2	3
862	Kern County	SJV		COFFEE	ETCHART	SNOW	Add Lanes	Local		1	1	1		1	2	2	2	3
863	Kern County	SJV		COFFEE	SNOW	NORRIS	Add Lanes	Local		1	1	1		1	2	2	2	3
864	Kern County	SJV		GOSFORD	HOSKING	BERKSHIRE	Add Lanes	Local		1	1	1		2	2	2	2	3
865	Kern County	SJV		HAGEMAN	RENFRO	JENKINS				1	1	1		1	1	1	2	2
866	Kern County	SJV		HAGEMAN	SANTA FE	ALLEN	Add Lanes	Local		3	3	3		3	3	3	3	3
867	Kern County	SJV		MANOR	MC CRAY	CHESTER				2	2	2		2	2	2	2	2
868	Kern County	SJV		MANOR	CHESTER	DAY				2	2	2		2	2	2	2	2
869	Kern County	SJV		MANOR	DAY	CHINA GRADE LOOP				2	2	2		2	2	2	2	2
870	Kern County	SJV		MANOR	CHINA GRADE LOOP	NORRIS				2	2	2		2	2	2	2	2
871	Kern County	SJV		MANOR	NORRIS	ROBERTS LN				2	2	2		2	2	2	2	2
872	Kern County	SJV		MING AVE	P ST	UNION				2	2	2		2	2	2	2	2
873	Kern County	SJV		MOHAWK	DOWNING	SR58				3	3	3		3	3	3	3	3
874	Kern County	SJV		MT VERNON	COLLEGE	FLOWER				2	2	2		2	2	2	2	2
875	Kern County	SJV		MT VERNON	KENTUCKY	EDISON HWY				2	2	2		2	2	2	2	2
876	Kern County	SJV		MT VERNON	EDISON HWY	CALIFORNIA				2	2	2		2	2	2	2	2
877	Kern County	SJV		MT VERNON	VIRGINIA	BRUNDAGE				2	2	2		2	2	2	2	2
878	Kern County	SJV		MT VERNON	BERNARD	COLLEGE				2	2	2		2	2	2	2	2
879	Kern County	SJV		MT VERNON	FLOWER	NILES				2	2	2		2	2	2	2	2
880	Kern County	SJV		MT VERNON	CALIFORNIA	VIRGINIA				2	2	2		2	2	2	2	2
881	Kern County	SJV		MT_VERNON	NILES	KENTUCKY				2	2	2		2	2	2	2	2
882	Kern County	SJV		MT_VERNON	White Lane/Muller Road	Panama Lane				0	0	0		0	0	0	0	1
883	Kern County	SJV		N CHESTER	BEARDSLEY	ROBERTS LN				2	2	2		2	2	2	2	2
884	Kern County	SJV		N CHESTER	ROBERTS LN	DECATUR				2	2	2		2	2	2	2	2
885	Kern County	SJV		N CHESTER	DECATUR	NORRIS				2	2	2		2	2	2	2	2
886	Kern County	SJV		N CHESTER	NORRIS	CHINA GRADE LOOP				2	2	2		2	2	2	2	2
887	Kern County	SJV		N CHESTER	CHINA GRADE LOOP	DAY				2	2	2		2	2	2	2	2
888	Kern County	SJV		N CHESTER	DAY	MANOR				2	2	2		2	2	2	2	2
889	Kern County	SJV		NILES	MONTEREY	MT VERNON				2	2	2		2	2	2	2	2
890	Kern County	SJV		NILES	MT VERNON	OSWELL				2	2	2		2	2	2	2	2
891	Kern County	SJV		NILES	OSWELL	STERLING RD				2	2	2		2	2	2	2	2
892	Kern County	SJV		NILES	STERLING RD	FAIRFAX				2	2	2		2	2	2	2	2

Appendix B - Highway Project Listing on Regionally Significant Route Segments and Year Number of Lanes Modeled																			
SORT KEY	AGENCY	AIR BASIN	PM10 BASIN	STREET	BEGIN	END	Type of Imprvmt.	RTP PROJECT ID/Other ID	COST (RTP, Other)	Year number of lanes modeled (each direction)									
										11	12	14	15	17	20	23	25	35	
Note: blacked out cells indicate segment in air basin without attainment dates in those years																			
693	Kern County	SJV		NILES	FAIRFAX	BRENTWOOD				2	2	2		2	2	2	2	2	
694	Bakersfield	SJV		NILES	BRENTWOOD	PARK DR				2	2	2		2	2	2	2	2	
695	Kern County	SJV		NILES	PARK DR	SR184				2	2	2		2	2	2	2	2	
696	Kern County	MD		OLD 58	ROSEWOOD	SR58BYPASS							2					2	2
697	Kern County	MD		OLD 58	ARROYO	ROSEWOOD							2						2
698	Kern County	MD		OLD 58	SR14	ARROYO							2						2
699	Kern County	MD		OLD 58	SR14	UNITED							2						2
700	Kern County	MD		OLD 58	UNITED	5TH ST							2						2
701	Kern County	MD		OLD 58	5TH	SR58BYPASS							2						2
702	Kern County	SJV		OLD_RIVER	CURNOW	SR119				1	1	1		1	1	1	1	2	
703	Kern County	SJV		OLD_RIVER	SR119	HOSKING				1	1	1		1	1	1	1	2	
704	Kern County	SJV		OLD_RIVER	HOSKING	BERKSHIRE	Add Lanes	Local		1	1	1		1	1	1	2	2	
705	Kern County	SJV		OLD_RIVER	BERKSHIRE	PANAMA LN	Add Lanes	Local		1	1	1		1	1	1	2	2	
706	Kern County	SJV		OSWELL	BERNARD	COLLEGE	Add Lanes	Local		2	2	2		2	2	2	2	3	
707	Kern County	SJV		OSWELL	COLLEGE	NILES	Add Lanes	Local		2	2	2		2	2	2	2	3	
708	Kern County	SJV		OSWELL	NILES	KENTUCKY	Add Lanes	Local		2	2	2		2	2	2	2	3	
709	Kern County	SJV		OSWELL	KENTUCKY	CALIFORNIA	Add Lanes	Local		2	2	2		2	2	2	2	3	
710	Kern County	SJV		OSWELL	CALIFORNIA	EDISON HWY	Add Lanes	Local		2	2	2		2	2	2	2	3	
711	Kern County	SJV		OSWELL	EDISON HWY	VIRGINIA	Add Lanes	Local		2	2	2		2	2	2	2	3	
712	Kern County	SJV		OSWELL	VIRGINIA	BRUNDAGE	Add Lanes	Local		2	2	2		2	2	2	2	3	
713	Kern County	SJV		OSWELL	WHITE LN	PANAMA LN				0	0	0		0	0	0	0	1	
714	Kern County	SJV		PANAMA_LN	SR 43/Enos Lane	RENFRO				1	1	1		2	2	2	2	2	
715	Kern County	SJV		PANAMA_LN	RENFRO	ALLEN	Add Lanes	Local		1	1	1		2	2	2	2	2	
716	Kern County	MD		RANDBURG CUTOFF	SR14	SR58BYPASS							1						1
717	Kern County	MD		ROSAMOND BL	TEHACHAPI WILLOW SF	80TH ST							1						1
718	Kern County	MD		ROSAMOND BL	80TH ST	70TH ST							1						1
719	Kern County	MD		ROSAMOND BL	70TH ST	65TH ST							1						1
720	Kern County	MD		ROSAMOND BL	65TH ST	60TH ST							1						1
721	Kern County	MD		ROSAMOND BL	60TH ST	50TH ST	Add Lanes	Local					2						2
722	Kern County	MD		ROSAMOND BL	50TH ST	40TH ST	Add Lanes	Local					3						3
723	Kern County	MD		ROSAMOND BL	40TH ST	30TH ST	Add Lanes	Local					3						3
724	Kern County	MD		ROSAMOND BL	30TH ST	25TH ST	Add Lanes	Local					3						3
725	Kern County	MD		ROSAMOND BL	25TH ST	SR14	Add Lanes	Local					3						3
726	Kern County	MD		ROSAMOND BL	SR14	20TH ST	Add Lanes	Local					3						3
727	Kern County	MD		ROSAMOND BL	20TH ST	SIERRA HWY	Add Lanes	Local					3						3
728	Kern County	MD		ROSAMOND BL	SIERRA HWY	15TH ST	Add Lanes	Local					3						3
729	Kern County	MD		ROSAMOND BL	15TH ST	10TH ST	Add Lanes	Local					3						3
730	Kern County	SJV		STOCKDALE	NORD	WEGIS	Add Lanes	Local		1	1	1		1	1	1	1	3	
731	Kern County	SJV		STOCKDALE	WEGIS	HEATH	Add Lanes	Local		1	1	1		1	1	1	1	3	
732	Kern County	SJV		STOCKDALE	HEATH	CLAUDIA AUTUMN DR	Add Lanes	Local		1	1	1		1	2	2	2	2	
733	Kern County	SJV		STOCKDALE	CLAUDIA AUTUMN DR	RENFRO	Add Lanes	Local		1	1	1		1	2	2	2	2	
734	Kern County	SJV		SO.CHESTER	WILSON	MING				2	2	2		2	2	2	2	2	
735	Kern County	MD		TEHACHAPI WILLOW SF	IRONE	ROSAMOND							1						1
736	Kern County	MD		TEHACHAPI WILLOW SF	HAMILTON	IRONE							1						1

Appendix B - Highway Project Listing on Regionally Significant Route Segments and Year Number of Lanes Modeled																				
SORT KEY	AGENCY	AIR BASIN	PM10 BASIN	STREET	BEGIN	END	Type of Imprvmt.	RTP PROJECT ID/Other ID	COST (RTP, Other)	Year number of lanes modeled (each direction)										
										11	12	14	15	17	20	23	25	35		
Note: blacked out cells indicate segment in air basin without attainment dates in those years																				
781	Kern County	SJV		HOSKING	South H Street	UNION				1	1	1	1	1	2	2	2	2	2	
782	Kern County	SJV		Jewetta Avenue	Snow Road	HAGEMAN				2	2	2		2	2	2	2	2	2	
783	Kern County	SJV		Jewetta Avenue	HAGEMAN	Meacham Road				1	1	1		1	2	2	2	2	2	
784	Kern County	SJV		Landco Drive	Hageman Road	Olive Drive				0	0	0		0	1	1	1	1	2	
785	Kern County	SJV		Masterson Street	SR 178	Paladino Drive				2	2	2		2	2	2	2	2	2	
786	Kern County	SJV		Masterson Street	Paladino Drive	ALFRED HARRELL HWY				0	0	0		0	2	2	2	2	2	
787	Kern County	SJV		Meacham Road	Renfro Road	Jenkins Road				1	1	1		1	1	1	1	2	2	
788	Kern County	SJV		Meacham Road	Jenkins Road	Allen Road				1	1	1		1	2	2	2	2	2	
789	Kern County	SJV		Morning Drive	Alfred Harrell Highway	Paladino Drive				0	0	0		0	0	0	1	1	1	
790	Kern County	SJV		Morning Drive	Paladino Drive	SR 178				1	1	1		1	2	2	2	2	2	
791	Kern County	SJV		Morning Drive	SR 178	College Avenue				1	1	1		1	1	1	1	1	1	
792	Kern County	SJV		Norris Road	Chester Avenue	Manor Street				1	1	1		1	1	1	1	1	2	
793	Kern County	SJV		Norris Road	SR 99	Airport Drive				1	1	1		1	1	1	1	2	2	
794	Kern County	SJV		Oak Street	California Avenue	SR 178/24th Street				2	2	2		2	2	2	3	3	3	
795	Kern County	SJV		OLD STINE	Ming Avenue	Belle Terrace				1	1	1		1	1	1	2	2	2	
796	Kern County	SJV		Olive Drive	Rudd Road (West Beltway)	Allen Road				1	1	1		1	1	2	2	2	2	
797	Kern County	SJV		Olive Drive	Allen Road	Jewetta Avenue				2	2	2		2	2	2	2	2	2	
798	Kern County	SJV		Paladino Drive	Fairfax Road	Morning Drive				0	0	0		0	0	2	2	2	2	
799	Kern County	SJV		Paladino Drive	Morning Drive	Masterson Street				1	1	1		1	1	1	1	2	2	
800	Kern County	SJV		Paladino Drive	Masterson Street	Alfred Harrell Highway				0	0	0		0	0	0	0	1	1	
801	Kern County	SJV		Patton Way	Meany Avenue	SR 58/Rosedale Highway				1	1	1		1	1	1	1	2	2	
802	Kern County	SJV		Quail Creek Road	Norris Road	SNOW ROAD				1	1	1		1	1	1	2	2	2	
803	Kern County	SJV		Quail Creek Road	Snow Road	7th Standard Road				0	0	0		0	0	0	2	2	2	
804	Kern County	SJV		Redbank Road	Fairfax Avenue	SR 184/Weedpatch Highway				1	1	1		1	2	2	2	2	2	
805	Kern County	SJV		Renfro Road	7th Standard Road	Olive Drive				0	0	0		0	0	0	0	1	1	
806	Kern County	SJV		Renfro Road	Olive Drive	Reina Road				1	1	1		0	0	0	1	1	1	
807	Kern County	SJV		Renfro Road	Reina Road	Johnson Road				1	1	1		1	1	1	1	2	2	
808	Kern County	SJV		Renfro Road	Johnson Road	Stockdale Highway				1	1	1		1	2	2	2	2	2	
809	Kern County	SJV		Santa Fe Way	Rudd Road (West Beltway)	Hageman Road				1	1	1		1	1	1	1	2	2	
810	Kern County	SJV		Snow Road	Jenkins Road	Allen Road				1	1	1		1	1	1	1	2	2	
811	Kern County	SJV		Snow Road	Allen Road	Old Farm Road				1	1	1		1	1	1	2	2	2	
812	Kern County	SJV		Snow Road	Old Farm Road	Jewetta Avenue				1	1	1		1	1	1	2	2	2	
813	Kern County	SJV		Snow Road	Jewetta Avenue	Calloway Drive				1	1	1		1	1	1	2	2	2	
814	Kern County	SJV		Snow Road	Calloway Drive	Quail Creek Road				1	1	1		1	1	1	2	2	2	
815	Kern County	SJV		Snow Road	Quail Creek Road	Coffee Road				1	1	1		1	1	1	2	2	2	
816	Kern County	SJV		Snow Road	Coffee Road	Fruitvale Avenue				1	1	1		1	1	1	2	2	2	
817	Kern County	SJV		Snow Road	Fruitvale Avenue	Golden State Highway				1	1	1		1	2	2	2	2	2	
818	Kern County	SJV		Stine Road	Taft Highway	Panama Lane				1	1	1		1	2	2	2	2	2	
819	Kern County	SJV		Verdugo Lane	Meacham Road	Rosedale Highway				1	1	1		1	1	1	1	1	1	
820	Kern County	SJV		Vineland Road	SR 178	Paladino Drive				0	0	0		2	2	2	2	2	2	
821	Kern County	SJV		Vineland Road	SR 184/Kern Canyon Road	SR 178				0	0	0		2	2	2	2	2	2	
822	Kern County	SJV		Wible Road	SR 119/Taft Highway	Curnow Road				1	1	1		1	1	1	1	2	2	
823	Kern County	SJV		Vineland Road	SR 58	Edison Highway				1	1	1		1	1	1	1	2	2	
824	Kern County	SJV		Vineland Road	Edison Highway	Eucalyptus Drive				1	1	1		1	1	1	1	2	2	

Appendix B - Highway Project Listing on Regionally Significant Route Segments and Year Number of Lanes Modeled																			
SORT KEY	AGENCY	AIR BASIN	PM10 BASIN	STREET	BEGIN	END	Type of Imprvmt.	RTP PROJECT ID/Other ID	COST (RTP, Other)	Year number of lanes modeled (each direction)									
										11	12	14	15	17	20	23	25	35	
Note: blacked out cells indicate segment in air basin without attainment dates in those years																			
825	Kern County	SJV		Vineland Road	Eucalyptus Drive	Pioneer Drive				1	1	1		1	1	1	1	2	
826	Kern County	SJV		Vineland Road	Pioneer Drive	SR 184/Morning Drive				0	0	0		0	0	0	0	1	
827	Kern County	SJV		White Lane/Muller Road	Cottonwood Road	OSWELL				0	0	0		0	0	0	0	2	
828	Kern County	SJV		White Lane/Muller Road	OSWELL	Fairfax Road				1	1	1		1	1	1	1	2	
829	California City																		
830	California City	MD		CAL CITY BL	SR14	RAILROAD							1					1	1
831	California City	MD		CAL CITY BL	RAILROAD	BARON BLVD							1					1	1
832	California City	MD		CAL CITY BL	BARON BLVD	NEURALIA							2					2	2
833	California City	MD		CAL CITY BL	NEURALIA	HACIENDA							2					2	2
834	California City	MD		CAL CITY BL	RANDBURG MOJAVE	HACIENDA							2					2	2
835	California City	MD		CAL CITY BL	REDWOOD	RANDBURG MOJAVE							2					2	2
836	California City	MD		CAL CITY BL	CARSON	REDWOOD							1					1	1
837	Ridgecrest																		
838	Ridgecrest	IWV		CHINA LAKE BL	RIDGECREST BLVD	UPJOHN							2					2	2
839	Ridgecrest	IWV		CHINA LAKE BL	UPJOHN	BOWMAN RD							2					2	2
840	Ridgecrest	IWV		CHINA LAKE BL	BOWMAN RD	COLLEGE HEIGHTS							1					1	1
841	Ridgecrest	IWV		CHINA LAKE BL	COLLEGE HEIGHTS	DOLPHIN							1					1	1
842	Ridgecrest	IWV		CHINA LAKE BL	DOLPHIN	DOWNNS							1					1	1
843	Ridgecrest	IWV		CHINA LAKE BL	DOWNNS	SPRINGER							1					1	1
844	Ridgecrest	IWV		CHINA LAKE BL	SPRINGER	SR395							1					1	1
845	Shafter																		
846	Shafter	SJV		LERDO_HWY	POPLAR	SHAFTER				1	1	1		1	1	1	1	1	1
847	Shafter	SJV		LERDO_HWY	SHAFTER	SR43				1	1	1		1	1	1	1	1	1
848	Shafter	SJV		LERDO_HWY	SR43	MANNEL				2	2	2		2	2	2	2	2	2
849	Shafter	SJV		LERDO_HWY	MANNEL	BEECH				2	2	2		2	2	2	2	2	2
850	Shafter	SJV		LERDO_HWY	BEECH	CHERRY				2	2	2		2	2	2	2	2	2
851	Shafter	SJV		LERDO_HWY	CHERRY	ZACHARY	Add Lanes	Local		2	2	2		2	2	2	2	3	3
852	Shafter	SJV		LERDO_HWY	ZACHARY	ZERKER	Add Lanes	Local		2	2	2		2	2	2	2	3	3
853	Shafter	SJV		LERDO_HWY	ZERKER	SR99	Add Lanes	Local		2	2	2		2	2	2	2	3	3

APPENDIX C
CONFORMITY ANALYSIS DOCUMENTATION

- 2011 adjust_vmt Spreadsheet
- 2011 Conformity EMFAC Spreadsheet
- 2011 Conformity Paved Road Spreadsheet
- 2011 Conformity Unpaved Road Dust Spreadsheet
- 2011 Conformity Construction Spreadsheet
- 2011 Conformity Trading Spreadsheet
- 2011 Conformity Totals Spreadsheet

- 2011 adjust_vmt Spreadsheet - KERN – San Joaquin Valley Planning Area (SJV)

Kern COG (SJV Portion) 2011 Conformity

Variable	Source	2011	2012	2014	2017	2020	2023	2025	2035
EDP	EMFAC 2007	463,376	475,475	500,632	536,308	572,095	608,620	634,269	773,953
EVMT	EMFAC 2007	20,290,036	20,784,024	21,951,564	23,720,446	25,545,062	27,129,886	28,146,334	33,686,624
MVMT	TPA Model	19,780,582	20,230,932	21,163,860	22,670,074	24,341,778	25,840,795	26,948,507	32,932,425
N	Calculated	451,741	462,822	482,667	512,560	545,147	579,701	607,276	756,625

<=Enter I

<= Read

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

- 2011 adjust_vmt Spreadsheet - KERN – Mojave Desert Planning Area (MD)

Kern COG (MD portion) 2011 Conformity

Variable	Source	Analysis Year				
		2011	2015	2025	2035	
EDP	EMFAC 2007	125124	141,868	180,038	218,149	
EVMT	EMFAC 2007	5995994	6,866,440	8,584,790	10,136,643	
MVMT	TPA Model	4,196,654	4,586,295	5,842,772	7,632,569	<=Enter Modeled Daily VMT Here
N	Calculated	87,575	94,758	122,533	164,259	<= Read New Vehicle Population Here

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

EMFAC Emissions (tons/day)

KERN (SJV)

<u>Pollutant</u>	<u>Source</u>	<u>Description</u>	2017			2025	2035		
Carbon Monoxide	EMFAC 2007 (Winter Run)	CO Total Exhaust (All Vehicles Total)							
		Conformity Total	76.74			56.94	55.62		
			77			57	56		
<hr/>									
Ozone	EMFAC 2007 (Summer Run)	ROG Total Exhaust (All Vehicles Total)	2011	2014	2017	2023	2025	2035	
		District Existing Local Reductions	Indirect Source Mitigation and School Bus Fleet rules	14.20	12.11	10.34	8.32	8.02	7.59
		ARB Existing Local Reductions	Reflash, Idling, and Moyer	0.00	0.00	0.00	0.00	0.00	0.00
		District New/Proposed Local Reductions	Employee Trip Reduction	0.10	0.11	0.11	0.11	0.11	0.11
		ARB New/Proposed State Reductions	Passenger and Truck Measures included in the Draft State Strategy	0.00	0.00	0.00	0.00	0.00	0.00
		Conformity Total		14.09	11.99	10.22	8.21	7.91	7.48
Ozone	EMFAC 2007 (Summer Run)	NOx Total Exhaust (All Vehicles Total)	79.67	63.90	49.71	33.22	30.95	28.79	
		District Existing Local Reductions	Indirect Source Mitigation and School Bus Fleet rules	0.28	0.18	0.26	0.22	0.22	0.22
		ARB Existing Local Reductions	Reflash, Idling, and Moyer	6.98	6.52	5.93	5.27	5.27	5.27
		District New/Proposed Local Reductions	Employee Trip Reduction	0.04	0.04	0.04	0.05	0.05	0.05
		ARB New/Proposed State Reductions	Passenger and Truck Measures included in the Draft State Strategy	0.00	0.00	0.00	0.00	0.00	0.00
		Conformity Total		72.37	57.18	43.48	27.68	25.41	23.25
<hr/>									
PM-10	EMFAC 2007 (Annual Run)	PM-10 Total (All Vehicles Total) * includes tire & brake wear				2020	2025	2035	
		ARB	Existing Reflash, Idling, and Moyer (HDI, PFR, Moyer, AB1493, Reflash)			2.17	1.95	2.05	
Conformity Total						2.15	1.93	2.03	
PM-10	EMFAC 2007 (Annual Run)	NOx Total Exhaust (All Vehicles Total)				39.54	31.04	28.80	
		ARB	Existing Reflash, Idling, and Moyer (HDI, PFR, Moyer, AB1493, Reflash)			6.45	6.45	6.45	
Conformity Total						34.09	25.59	23.35	

- 2011 Conformity EMFAC Spreadsheet (contd.)

			2012	2014	2017	2025	2035
PM2.5	EMFAC 2007 (Annual Run)	PM2.5 Total Exhaust (All Vehicles Total) * includes tire & brake wear	2.75	2.42	1.96	1.39	1.40
	ARB	Adopted State and Local Measures not included in EMFAC 2007	0.03	0.03	0.03	0.03	0.03
	ARB	2007 State Strategy	0.00	0.00	0.00	0.00	0.00
		Conformity Total	2.70	2.40	1.90	1.40	1.40
PM2.5	EMFAC 2007 (Annual Run)	NOx Total Exhaust (All Vehicles Total)	75.12	64.39	50.04	31.04	28.80
	ARB	Adopted State and Local Measure not included in EMFAC 2007	7.44	6.95	6.95	6.95	6.95
	ARB	2007 State Strategy	0.00	0.00	0.00	0.00	0.00
		Conformity Total	87.70	57.40	43.10	24.10	21.90

- 2011 Conformity EMFAC Spreadsheet – Mojave Desert (contd.)

EMFAC Emissions (tons/day)

KERN - MD

<u>Pollutant</u>	<u>Source</u>	<u>Description</u>	2011	2015	2025	2035
Ozone	EMFAC 2007 (Summer Run)	ROG Total Exhaust (All Vehicles Total)	3.13	2.45	1.84	1.96
	ARB	Reflash, Public Fleet, Idling, AB 1493, Moyer	0.01	0.01	0.01	0.01
	Conformity Total		3.12	2.44	1.83	1.95
<hr/>						
Ozone	EMFAC 2007 (Summer Run)	NOx Total Exhaust (All Vehicles Total)	14.24	10.15	6.03	5.80
	ARB	Reflash, Public Fleet, Idling, AB 1493, Moyer	1.21	1.21	1.21	1.21
	Conformity Total		13.03	8.94	4.82	4.59

- 2011 Conformity Paved Road Spreadsheet – Indian Wells Valley (IWV)

Paved Road Dust Emissions (tons/day)

KERN – IWV

TABLE 1
Paved Road PM-10 Emission Factors

COUNTY	AREA	Freeway		Major		Collector		Local		Local Rural (or SJV Local)		Avg Vehicle Weight (tons)
		Silt Load g/m ²	EF (lbs PM10 per 1e6 VMT)	Silt Load g/m ²	EF (lbs PM10 per 1e6 VMT)	Silt Load g/m ²	EF (lbs PM10 per 1e6 VMT)	Silt Load g/m ²	EF (lbs PM10 per 1e6 VMT)	Silt Load g/m ²	EF (lbs PM10 per 1e6 VMT)	
KERN	INDIAN WELLS VALLEY	0.020	573.8	0.035	825.5	0.035	825.5	0.320	3479	1.8	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	AREA	Analysis Year	Annual VMT (millions)	Travel Fractions					VMT
				Freeway	Major	Collector	Local	SJV Local	
KERN	INDIAN WELLS VALLEY	2011	237	0.235	0.587	0.072	0.078	0.029	648,727
		2015	248	0.235	0.587	0.072	0.078	0.029	673,354
		2025	288	0.235	0.587	0.072	0.078	0.029	789,152
		2035	438	0.235	0.587	0.072	0.078	0.029	1,200,572

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

COUNTY	AREA	Analysis Year	VMT (Annual VMT)	Paved Road PM10 Emissions (tons/yr)				PM10 Emissions (tons/year)	Total TPD
				Freeway	Major	Collector	Local		
KERN	INDIAN WELLS VALLEY	2011	237	15.96	57.37	7.04	68.13	146.50	0.40
		2015	248	16.57	59.55	7.30	68.64	152.06	0.42
		2025	288	19.42	69.79	8.56	80.44	178.21	0.49
		2035	438	28.54	106.17	13.02	122.38	271.12	0.74

- 2011 Conformity Unpaved Road Dust Spreadsheet – IWV

KERN -- IWV 2011

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

KERN -- IWV 2015

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

KERN -- IWV 2025

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

KERN -- IWV 2035

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

Road Construction Dust

KERN

Description	2020		2025		2035	
	Year	Lane Miles	Year	Lane Miles	Year	Lane Miles
	Baseline	2005	4790	2020	5664	2025
Horizon	2020	5,664	2025	5,752	2035	6,834
Difference	15	874	5	88	10	1082
Lane Miles per Year		58		18		108
Acres Disturbed		226		68		420
Acre-Months		4068		1229		7554
Emissions (tons/year)		447.488		135.168		830.976
Annual Average Day Emissions (tons)		1.226		0.370		2.277
District Rule 8021 Control Rates		0.290		0.290		0.290
Total Emissions (tons per day)		0.870		0.263		1.616

- 2011 Conformity Construction Spreadsheet – IWV

Road Construction Dust

KERN - INDIAN WELLS VALLEY

Description	2011		2015		2025		2035	
	Year	Lane Miles						
Baseline	2005	266	2011	358	2015	361	2025	412
Horizon	2011	358	2015	361	2025	412	2035	439
Difference	6	92	4	3	10	51	10	27
Lane Miles per Year		15		1		5		3
Acres Disturbed		59		3		20		10
Acre-Months		1071		52		356		189
Emissions (tons/year)		117.760		5.760		39.168		20.736
Total Emissions (tons per day)		0.323		0.016		0.107		0.057

- 2011 Conformity Trading Spreadsheet

PM10 Emission Trading Worksheet

KERN CONFORMITY ESTIMATES (tons/day)

	2020		2025		2035	
	PM10	NOx	PM10	NOx	PM10	NOx
Total On-Road Exhaust	2.150	34.090	1.930	25.590	2.030	23.350
Paved Road Dust	9.335		10.372		12.805	
Unpaved Road Dust	0.343		0.343		0.343	
Road Construction Dust	0.870		0.263		1.816	
Total	12.698	34.090	12.908	25.590	16.594	23.350

Difference (2020 Budget - 2020)

	PM10	NOx
2020 Budgets	14.7	39.5
2020	12.7	34.1
Difference	2.0	5.4
* 1.5 (Adjustment to NOx Budget)	-3.0	

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

Difference (2020 Budget - 2025)

	PM10	NOx
2020 Budgets	14.7	39.5
2025	12.9	25.6
Difference	1.8	13.9
* 1.5 (Adjustment to NOx Budget)	-2.7	

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

Difference (2020 Budget - 2035)

	PM10	NOx
2020 Budgets	14.7	39.5
2035	16.6	23.4
Difference	-1.9	16.1
* 1.5 (Adjustment to NOx Budget)	2.9	

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

1:1.5 PM10 to NOx Trading

	PM10	NOx
2020 Budget	14.7	39.5

Adjusted 2020 Budget	N/A	N/A
2020 Conformity Total	12.7	34.1
Difference	#VALUE!	#VALUE!

NOTE: TRADING NOT NECESSARY

Adjusted 2020 Budget	N/A	N/A
2025 Conformity Total	12.9	25.6
Difference	#VALUE!	#VALUE!

NOTE: TRADING NOT NECESSARY

Adjusted 2020 Budget	16.6	36.7
2035 Conformity Total	16.6	23.4
Difference	0.0	13.3

NOTE: FINAL DIFFERENCE MUST BE POSITIVE

2011 Conformity Totals Spreadsheet

Conformity Results Summary

2011 Conformity Results Summary -- KERN

Pollutant	Scenario	Emissions Total		DID YOU PASS?	
		CO (tons/day)		CO	
Carbon Monoxide	2010 Budget	180			
	2017	77		YES	
	2018 Budget	180			
	2018	75		YES	
	2025	57		YES	
	2035	56		YES	

	Scenario	ROG (tons/day)	NOx (tons/day)	ROG	NOx
		2011 Budget	15.7	79.4	
Ozone	2011	14.1	72.4	YES	YES
	2014 Budget	13.5	64.1		
	2014	12.0	57.2	YES	YES
	2017 Budget	11.6	49.5		
	2017	10.2	43.5	YES	YES
	2023	8.2	27.7	YES	YES
	2025	7.9	25.4	YES	YES
	2035	7.5	23.3	YES	YES

	Scenario	PM-10 (tons/day)	NOx (tons/day)	PM-10	NOx
		2020 Budget	14.7	39.5	
PM-10	2020	12.7	34.1	YES	YES
	2020 Budget	14.7	39.5		
	2025	12.9	25.6	YES	YES
	Adjusted 2020 Budget	16.6	36.7		
	2035	16.6	23.4	YES	YES

1997 PM2.5 24-Hour & Annual Standards and 2006 24-Hour Standard	Scenario	PM2.5 (tons/day)	NOx (tons/day)	PM2.5	NOx
		2012 Budget	3.0	74.2	
	2012	2.7	67.7	YES	YES
	2014	2.4	57.4	YES	YES
	2017	1.9	43.1	YES	YES
	2025	1.4	24.1	YES	YES
	2035	1.4	21.9	YES	YES

2011 Conformity Results Summary -- KERN (Mojave Desert)

Pollutant	Scenario	Emissions Total		DID YOU PASS?	
		ROG (tons/day)	NOx (tons/day)	ROG	NOx
Ozone	2008 Budget	5	18		
	2011	3	13	YES	YES
	2015	2	9	YES	YES
	2025	2	5	YES	YES
	2035	2	5	YES	YES

2011 Conformity Results Summary -- KERN (Indian Wells Valley)

Pollutant	Scenario	Emissions Total	DID YOU PASS?
		PM-10 (tons/day)	
PM-10	2001 Budget	1.6	
	2011	1.2	YES
	2013 Budget	1.7	
	2013	1.0	YES
	2015	0.9	YES
	2025	1.1	YES
	2035	1.3	YES

APPENDIX D

TIMELY IMPLEMENTATION DOCUMENTATION FOR

TRANSPORTATION CONTROL MEASURES

Kern COG
Timely Implementation Documentation

<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>2011 Conformity Update</u> (as of 3/10)	<u>2011 Conformity Update</u> (as of 3/11)
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	Complete
KE 1.1	Arvin	New bus service to Ikea plant and business park	2002	Not specified				Complete	Complete
KE 1.5	Arvin	Construct transfer station	2005	\$650,000 CMAQ (includes local)	2002	KER000503	CONSTRUCT NEW TRANSIT TRANSFER STATION	Complete	Complete
KE 9.3	Arvin	Drive Approach Modification Project; Traffic Signal Project	2003; 2003	\$395,000 Total				Complete	Complete
KE 10.2	Arvin	Bike Racks on Buses	2002	Not specified				Complete	Complete
KE 5.2 and 5.16	Bakersfield	Traffic signal interconnect projects	2003	\$1 M CMAQ (includes local)					

Kern COG
Timely Implementation Documentation

<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>2011 Conformity Update</u> (as of 3/10)	<u>2011 Conformity Update</u> (as of 3/11)
					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	Complete
					2002	KER000504	SIGNALIZATION, COMMUNICATION / SYNCHRONIZATION OF SOUTH H STREET FROM WHITE LANE TO PANAMA LANE	Complete	Complete
					2002	KER000505	SIGNALIZATION, COMMUNICATION / SYNCHRONIZATION OF STINE ROAD FROM WHITE LANE TO HARRIS ROAD	Complete	Complete
					2002	KER000506	SIGNALIZATION, COMMUNICATION / SYNCHRONIZATION OF ASHE ROAD FROM CLUB VIEW DRIVE TO NORTH HALF MOON BLVD.	Complete	Complete
					2002	KER000507	SIGNALIZATION, COMMUNICATION / SYNCHRONIZATION OF MISC. BRANCH COMMUNICATIONS AT VARIOUS LOCATIONS	Complete	Complete

Kern COG
Timely Implementation Documentation

<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>2011 Conformity Update</u> (as of 3/10)	<u>2011 Conformity Update</u> (as of 3/11)
					2002	KER010502	SIGNALIZATION: COMMUNICATION / SYNCHRONIZATION OF THREE IDENTIFIED SIGNAL LOCATIONS	Complete	Complete
					2002	KER990512	IN BAKERSFIELD -TRAFFIC SIGNAL WIRED INTERCONNECT ON NILES ST. FROM ALTA VISTA DR. TO HALEY ST.	Complete	Complete
					2002	KER990520	IN BAKERSFIELD -(TRUNK LINE) TRAFFIC SIGNAL WIRED INTERCONNECT ON CHESTER AVENUE FROM 23RD ST. TO W. COLUMBUS ST.	Complete	Complete
					2002	KER010503	SIGNALIZATION: COMMUNICATION / SYNCHRONIZATION OF MISC. BRANCH COMMUNICATIONS AT VARIOUS LOCATIONS	Complete	Complete
KE 5.3	Bakersfield	Intersection improvements at White and Wible Road; Westside Parkway	2003; 2007 +	Not specified				Complete	Complete

Kern COG
Timely Implementation Documentation

<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>2011 Conformity Update</u> (as of 3/10)	<u>2011 Conformity Update</u> (as of 3/11)
					2000	KER970508	SIGNALIZATION: TRUNK LINE COMMUNICATIONS/SYNCH RO. - WHITE LANE FROM WIBLE ROAD TO HUGHES LANE	Complete	Complete
					2002	KER010501	SIGNALIZATION: COMMUNICATION / SYNCHRONIZATION OF GOSFORD ROAD FROM WHITE LANE TO STOCKDALE HWY.	Complete	Complete
					2002	KER020102	IN BAKERSFIELD: FROM STOCKDALE HWY TO TRUXTUN AVE AT ROUTE 99; CONSTRUCT 4-LANE AND 6-LANE NEW FACILITY - Note: In 2009 FTIP, this project has six phases due to funding	Phase 1, 2, 3, and 5 are under construction. Design and right of way in progress for Phase 4 and 6.	Phase 1, 2, 3, and 5 are under construction. Design is complete for Phase 4 and 6. Right of way in progress for Phase 4.
KE 9.5	California City	Expand bike lanes by about 75%	2003	Not specified				Complete	Complete
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	Complete

Kern COG
Timely Implementation Documentation

<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>2011 Conformity Update</u> (as of 3/10)	<u>2011 Conformity Update</u> (as of 3/11)
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	Complete
					2000	KER990519	SIGNALIZATION, SIGNAL SYNCHRONIZATION, CHANNELIZATION AND RELATED SAFETY MODIFICATIONS - NILES ST. FROM VIRGINIA ST. TO MORNING DR	Complete	Complete
					2000	KER990518	SIGNAL SYNCHRONIZATION, CHANNELIZATION AND RELATED SAFETY MODIFICATIONS - FAIRFAX RD. FROM BRUNDAGE LANE TO COLLEGE AVE.	Complete	Complete
					2000	KER990523	SIGNALIZATION, SIGNAL SYNCHRONIZATION, CHANNELIZATION AND RELATED SAFETY MODIFICATIONS - OSWELL ST. FROM BRUNDAGE LANE TO BERNARD ST.	Complete	Complete

Kern COG
Timely Implementation Documentation

<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>2011 Conformity Update</u> (as of 3/10)	<u>2011 Conformity Update</u> (as of 3/11)
					2000	KER000533	SYNCHRONIZATION CHANNELIZATION AND RELATED SAFETY MODIFICATIONS ON CALIFORNIA AVENUE FROM WASHINGTON STREET TO EDISON HIGHWAY	Complete	Complete
								Complete	Complete
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	Complete
KE 10.2	Delano	Bike racks on four full size transit buses	2003	Not specified				Complete	Complete
J 34	GET	Develop and implement an area vehicle locator		\$2.2 million	2002	KER990526 KER990527	Area Vehicle Locator (Phase 1) Area Vehicle Locator (Phase 2)	Complete	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	Complete

Kern COG
Timely Implementation Documentation

<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>2011 Conformity Update</u> (as of 3/10)	<u>2011 Conformity Update</u> (as of 3/11)
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				Complete	Complete
KE 1.5	Taft	Construct transit transfer station	2002	\$375,000 CMAQ	2002	KER990550	IN THE CITY OF TAFT - CONSTRUCT TRANSIT TRANSFER STATION	Complete	Complete
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	Complete
SJ 5.3	Wasco	Traffic signal at Highway 46 and Griffith Avenue	Not specified	\$221,000				Complete	Complete
KE 7.17	Wasco	Construct new transit transfer station	design in 2002	\$619,710 CMAQ	2002	KER000520	CONSTRUCT NEW TRANSIT TRANSFER STATION	Complete	Complete

Kern COG
Timely Implementation Documentation

<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>2011 Conformity Update</u> (as of 3/10)	<u>2011 Conformity Update</u> (as of 3/11)
KE 9.1	Wasco	Convert two mid block alleys to pedestrian walkways	2002	TEA	2002	KER001001	DOWNTOWN STREETSCAPE IMPROVEMENT PROJECT	Complete	Complete

Kern Council of Governments
2002 RACM Timely Implementation Documentation

RACM Commitment	Agency	Measure Title	Measure Description (not verbatim)	2011 Conformity Update	2011 Conformity Update
				(as of 3/10)	(as of 3/11)
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.	Commitment Complete.
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). Westside Parkway will continue to be tracked.	Projects prior to 2007 complete (see Project TID Table). Westside Parkway will continue to be tracked.
KE1.1	County of Kern	Regional Express Bus Program	Purchase buses to operate regional express bus service	The County of Kern continues to offer regional express bus service.	The County of Kern continues to offer regional express bus service.
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.	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	Program implementation continues.	Program implementation continues.
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.	Commitment Complete.
KE5.1	Taft	Develop Intelligent Transportation Systems	Provide areas for pedestrian and bicyclist in vicinity of commercial development and promote use of such areas.	Commitment Complete.	Commitment Complete.
KE9.3	Taft	Bicycle/Pedestrian Program	Provide facilities for only pedestrian and bicycle use.	Commitment Complete.	Commitment Complete.
KE9.5	Taft	Encouragement of Bicycle Travel	Provide funding for bikeway system. Provide education materials	Commitment Complete.	Commitment Complete.
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.	Commitment Complete.
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.	Commitment Complete.
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 for vehicle traffic and open to foot traffic. Closure will continue for annual event.	Yes, the parade route was closed for vehicle traffic and open to foot traffic. Closure will continue for annual event.

APPENDIX E

PUBLIC HEARING PROCESS DOCUMENTATION

**NOTICE OF PUBLIC HEARING ON THE
DRAFT AMENDMENT #4 TO THE 2011 FEDERAL TRANSPORTATION IMPROVEMENT PROGRAM,
2011 REGIONAL TRANSPORTATION PLAN AMENDMENT #1 AND ADDENDUM TO THE
SUBSEQUENT ENVIRONMENTAL IMPACT REPORT, AND CORRESPONDING DRAFT CONFORMITY
ANALYSIS**

NOTICE IS HEREBY GIVEN that the Kern Council of Governments will hold a public hearing 7 p.m. April 21, 2011 at Kern Council of Governments office building located at 1401 19th Street, Suite 300, Bakersfield, CA 93301 regarding the Draft Amendment #4 to the 2011 Federal Transportation Improvement Program (2011 FTIP), 2011 Regional Transportation Plan (RTP) Amendment #1 and Addendum to the Subsequent Environmental Impact Report (EIR), and corresponding Draft Conformity Analysis. The purpose of the hearing is to receive public comments.

- The 2011 FTIP is a listing of capital improvement and operational expenditures utilizing federal and state monies for transportation projects in Kern County during the next four years.
- The Draft Amendment #4 to the 2011 FTIP contains information updates from outlying areas, Thomas Roads Improvement Program updates, State Highway Operations and Protection Program revisions including new projects, and other project revisions.
- The RTP is a long-term strategy to meet Kern County's transportation needs out the year 2035. The document is also referred to as the 2011 RTP.
- The 2011 RTP Amendment #1 contains project information updates to the Thomas Roads Improvement Program.
- The Draft 2011 FTIP Amendment #4 and 2011 RTP Amendment #1 contain project phases and/or projects that were not included in the federally approved 2011 FTIP and 2011 RTP.
- The Addendum to the Subsequent EIR outlines changes to the 2011 RTP as analyzed in the 2011 EIR and evaluates whether those changes or new information or changed circumstances would require substantial changes to the impacts identified or mitigation measures proposed.

- The Draft Conformity Analysis contains the documentation to support a finding that the Draft 2011 FTIP Amendment #4 and Draft 2011 RTP Amendment #1 meets the air quality conformity requirements for carbon monoxide, ozone and particulate matter.

Individuals with disabilities may call Kern Council of Governments at 661/861-2191 (or TTY: 661/832-7433, or TDD: 800/874-9436) with 3-working-day advance notice to request auxiliary aids necessary to participate in the public hearing. Translation services are available (with 3-working-day advance notice) to participants speaking any language with available professional translation services.

A concurrent 45-day public review and comment period will commence on March 14, 2011 and conclude April 27, 2011. The draft documents are available for review at the Kern COG office, located at 1401 19th Street, Suite 300, Bakersfield, CA 93301 and on the Kern COG website at www.kerncog.org

Public comments are welcomed at the hearing, or may be submitted in writing by 5 p.m. on April 27, 2011 to Ronald E. Brummett at the address below.

After considering the comments, the documents will be considered for adoption, by resolution, by the Kern Council of Governments at a regularly scheduled meeting to be held on 7 p.m. May 19, 2011. The documents will then be submitted to state and federal agencies for approval.

Contact Person: Ronald E. Brummett, Executive Director
Kern Council of Governments
1401 19th Street, Bakersfield, CA 93301
661/861-2191
rbrummett@kerncog.org

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

RESOLUTION NO. 11-14

In the matter of:

Amendment #4 to the 2011 Federal Transportation Improvement Program, 2011 Regional Transportation Plan Amendment #1 and Addendum to the Subsequent Environmental Impact Report, and Corresponding Conformity Analysis

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

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

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

WHEREAS, Amendment #4 to the 2011 Federal Transportation Improvement Program (2011 FTIP) and 2011 RTP Amendment #1 have 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, Amendment #4 to the 2011 FTIP program listing is consistent with: 1) the 2011 Regional Transportation Plan and its Amendment #1; 2) the 2010 State Transportation Improvement Program; and 3) the Corresponding Conformity Analysis; and

WHEREAS, Amendment #4 to the 2011 FTIP and 2011 RTP Amendment #1 contain the MPO's certification of the transportation planning process assuring that all Federal requirements have been fulfilled; and

WHEREAS, Amendment #4 to the 2011 FTIP and 2011 RTP Amendment #1 meet all applicable transportation planning requirements per 23 CFR Part 450.

WHEREAS, projects submitted in Amendment #4 to the 2011 and 2011 RTP Amendment #1 must be financially constrained and the financial plan affirms that funding is available; and

WHEREAS, an Addendum to the Subsequent Environmental Impact Report was prepared to assess the environmental effects of the proposed 2011 RTP Amendment #1; and

WHEREAS, Amendment #4 to the 2011 FTIP and 2011 RTP Amendment #1 include a new Conformity Analysis; and

WHEREAS, Amendment #4 to the 2011 FTIP and 2011 RTP Amendment #1 do not interfere with the timely implementation of the Transportation Control Measures; and

WHEREAS, Amendment #4 to the 2011 FTIP and 2011 RTP Amendment #1 conform to the applicable SIPs; and

Resolution No. 11-14

Page 1

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

WHEREAS, a public hearing was conducted on April 21, 2011 to hear and consider comments on Amendment #4 to the 2011 FTIP and 2011 RTP Amendment #1 and Addendum to the Subsequent EIR and Corresponding Conformity Analysis; and

NOW, THEREFORE, BE IT RESOLVED, that Kern COG adopts Amendment #4 to the 2011 FTIP and 2011 RTP Amendment #1 and Addendum to the Subsequent EIR and Corresponding Conformity Analysis.

BE IT FURTHER RESOLVED, that the Kern COG finds that Amendment #4 to the 2011 FTIP and 2011 RTP Amendment #1 and Addendum to the Subsequent EIR are in conformity with the requirements of the Federal Clean Air Act Amendments and applicable State Implementation Plans for air quality.

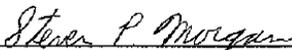
AUTHORIZED AND SIGNED THIS 19TH DAY OF MAY 2011.

AYES: Tarver, Couch, Fuller, Crump, Cantu, Morgan, Johnston, Krier, Wegman, Watson, Bretz, Silver

NOES: None

ABSTAIN: None

ABSENT: Vallejo, Smith, McQuiston



Steven Morgan, Chairman
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 adopted at a regular meeting thereof held on the 19th day of May 2011.



Ronald E. Brummett, Executive Director
Kern Council of Governments

MAY 19 2011

Date: _____

APPENDIX F

RESPONSE TO PUBLIC COMMENTS

**Conformity Analysis, Regional Transportation Plan Amendment #1, Addendum to the
Subsequent Environmental Impact Report, and 2011 Federal Transportation
Improvement Program Amendment No. 4**

Benham Emami, Engineering Manager II

County of Ventura, Public Works Agency

Transportation Department

Traffic, Advance Planning & Permits Division

See letter attached - dated 3/25/11

Response:

Thank you for your comments. Your agency is included on Kern COG's notification mailing list and will receive notice whenever projects move toward further environmental review and/or construction.

Tricia Maier, Manager

County of Ventura, Resource Management Agency

Planning Programs Section

See letter attached - dated 4/27/11

Response:

Thank you for your comments. Staff is updating Kern COG's mailing list to include Ms. Hocking's address on it's notification mailing list. Ms. Hocking will receive notice whenever projects move toward further environmental review and/or construction.



**PUBLIC WORKS AGENCY
TRANSPORTATION DEPARTMENT
Traffic, Advance Planning & Permits Division**

RECEIVED
APR 27 2011
**KERN COUNCIL
OF GOVERNMENTS**

MEMORANDUM

DATE: March 25, 2011

TO: RMA – Planning Division
Attention: Laura Hocking

FROM: Behnam Emami, Engineering Manager II *Ben*

SUBJECT: REVIEW OF DOCUMENT 10-015-1
Draft Amendment #4 to 2011 FTIP/RTP Amendment #1, Addendum to the Subsequent EIR, and Corresponding Draft Conformity Analysis for Interagency Consultation and Public Review
Kern County, California (Kern Co.)
Lead Agency: **Kern Council of Governments**

Pursuant to your request, the Public Works Agency - Transportation Department has completed the review of the above subject document.

The "project" as defined by the Kern Council of Governments is a proposal for a formal amendment, Type #5: Formal Amendment, Conformity Determination and New Regional Emissions Analysis to the 2011 Federal Transportation Improvement Program (FTIP) and 2011 Regional Transportation Plan (RTP). The 2011 FTIP is the programming document that identifies four years (FY 10/11, FY 11/12, FY 12/13, and FY 13/14) of federal, state, and local funding sources for projects in Kern County.

We offer the following comment:

If any of the projects listed in the 2011 FTIP or 2011 RTP, any future amendments, or subsequent environmental documents will have an impact on Ventura County roads, in particular Lockwood Valley Road, then the Transportation Department would like to review the project.

Our review is limited to the impacts this project may have on the County's Regional Road Network.

Please contact me at 654-2087 if you have questions.

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RESOURCE MANAGEMENT AGENCY
county of ventura

Planning Division
Kimberly L. Prillhart
Director

April 27, 2011

Kern Council of Governments
1401 19th Street, Suite 300
Bakersfield, CA 93301

E-mail: rpacheco@kerncog.org
mbeardslee@kerncog.org
rball@kerncog.org

RECEIVED
APR 27 2011
KERN COUNCIL
OF GOVERNMENTS

Subject: Comments on the Draft Amendment #4 to 2011 FTIP, 2011 RTP Amendment #1 plus Addendum to the Subsequent EIR

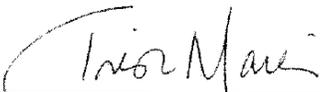
Dear Ms. Pacheco, Ms. Beardslee, and Mr. Ball:

Thank you for the opportunity to review and comment on the subject document. Attached are the comments that we have received resulting from intra-county review of the subject document. Additional comments may have been sent directly to you by other County agencies.

Your proposed responses to these comments should be sent directly to the commenter, with a copy to Laura Hocking, Ventura County Planning Division, L#1740, 800 S. Victoria Avenue, Ventura, CA 93009.

If you have any questions regarding any of the comments, please contact the appropriate respondent. Overall questions may be directed to Laura Hocking at (805) 654-2443.

Sincerely,


Tricia Maier, Manager
Planning Programs Section

Attachment

County RMA Reference Number 10-015-1

800 South Victoria Avenue, L# 1740, Ventura, CA 93009 (805) 654-2481 Fax (805) 654-2509



Printed on Recycled Paper

