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Federal Highway Administration

California Division

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December 16, 2016

In Reply, Refer To:
HDA-CA

Mr. Ahron Hakimi
Executive Director
Kern Council of Governments
1401 19th Street
Suite 300
Bakersfield, CA 93301

Subject: Conformity Determination for the Kern Council of Governments (KCOG) 2017 Federal Transportation Improvement Program (FTIP) and 2014 Regional Transportation Plan (RTP) Amendment # 1

Dear Mr. Hakimi:

The Federal Highway Administration (FHWA) and the Federal Transit Administration (FTA) have completed our review of the submitted conformity determination for the Kern Council of Governments (KCOG) 2017 FTIP and 2014 RTP Amendment # 1 and Corresponding Conformity Analysis. A FTA/FHWA air quality conformity determination is required for the new FTIP pursuant to the Environmental Protection Agency's (EPA) Transportation Conformity Rule, 40 CFR Parts 51 and 93, and the United States Department of Transportation's Statewide and Metropolitan Planning Rule, 23 CFR Part 450.

On September 15, 2016 KCOG adopted the subject conformity analysis and made the corresponding conformity determination via Resolution 16-35. The conformity analysis submitted indicates that all air quality conformity requirements have been met. Based on our review, and after consultation with the EPA Region 9 office, we find that the 2017 FTIP conforms to the applicable state implementation plan in accordance with the provisions of 40 CFR Parts 51 and 93. In accordance with the December 15, 2014 Memorandum of Understanding (MOU) between the Federal Highway Administration, California Division and the Federal Transit Administration, Region IX, the FTA has concurred with this conformity determination.

In accordance with the above MOU, the FHWA's single signature constitutes FHWA and FTA's joint air quality conformity determination for KCOG's 2017 FTIP. If you have any questions pertaining to this conformity finding, please contact Scott Carson, FHWA (scott.carson@dot.gov), at (916) 498-5029.

Sincerely,

For: Vince Mammano
Division Administrator

CONFORMITY ANALYSIS

FOR THE 2017 FEDERAL TRANSPORTATION IMPROVEMENT PROGRAM AND 2014 REGIONAL TRANSPORTATION PLAN AMENDMENT #1

SEPTEMBER 15, 2016

Kern Council of Governments

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EXECUTIVE SUMMARY

This report presents the Conformity Analysis for 2017 Federal Transportation Improvement Program (2017 FTIP) and 2014 Regional Transportation Plan Amendment #1 (2014 RTP Amendment #1). 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 2017 FTIP and the 2014 RTP Amendment #1; a finding of conformity is therefore supported. The 2017 FTIP, the 2014 RTP Amendment #1, and corresponding conformity analysis was approved by the Kern Council of Governments Policy Board on September 15, 2016. Federal approval is anticipated on or before December 16, 2016. FHWA/FTA last issued a finding of conformity for the 2015 FTIP and 2014 RTP on December 31, 2015.

2017 FTIP and 2014 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.

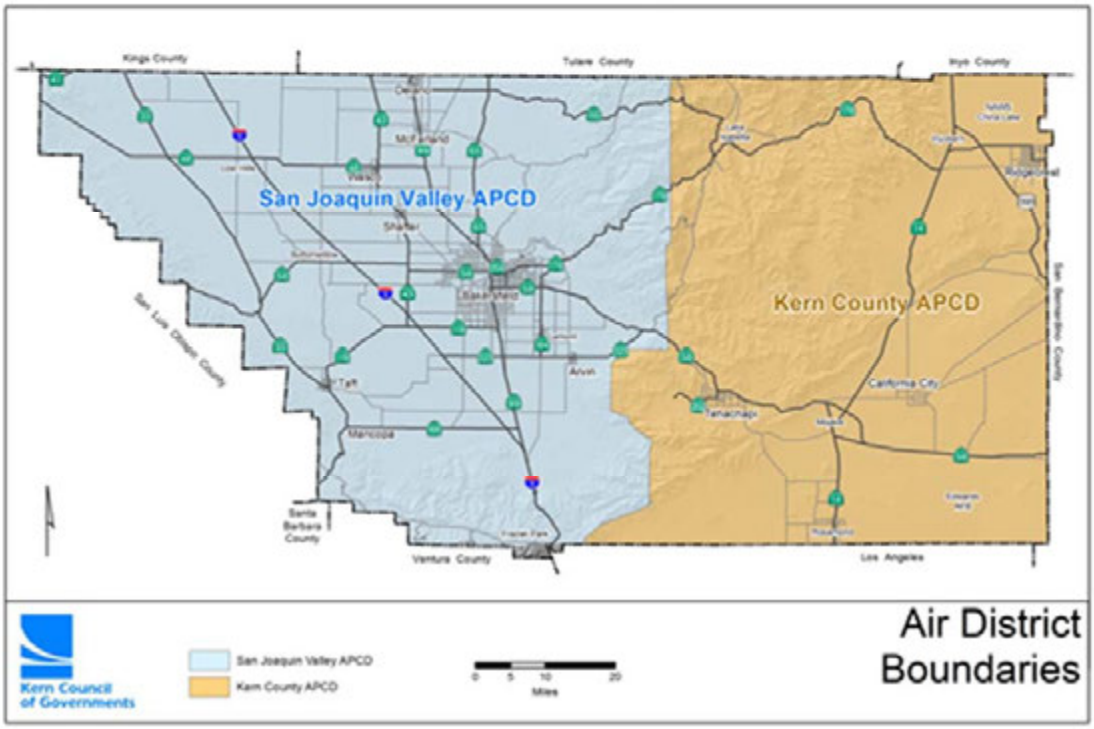
CONFORMITY REQUIREMENTS

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 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.

Figure 1– Air Pollution Control Districts in the Kern Region



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 (Eastern Kern) 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

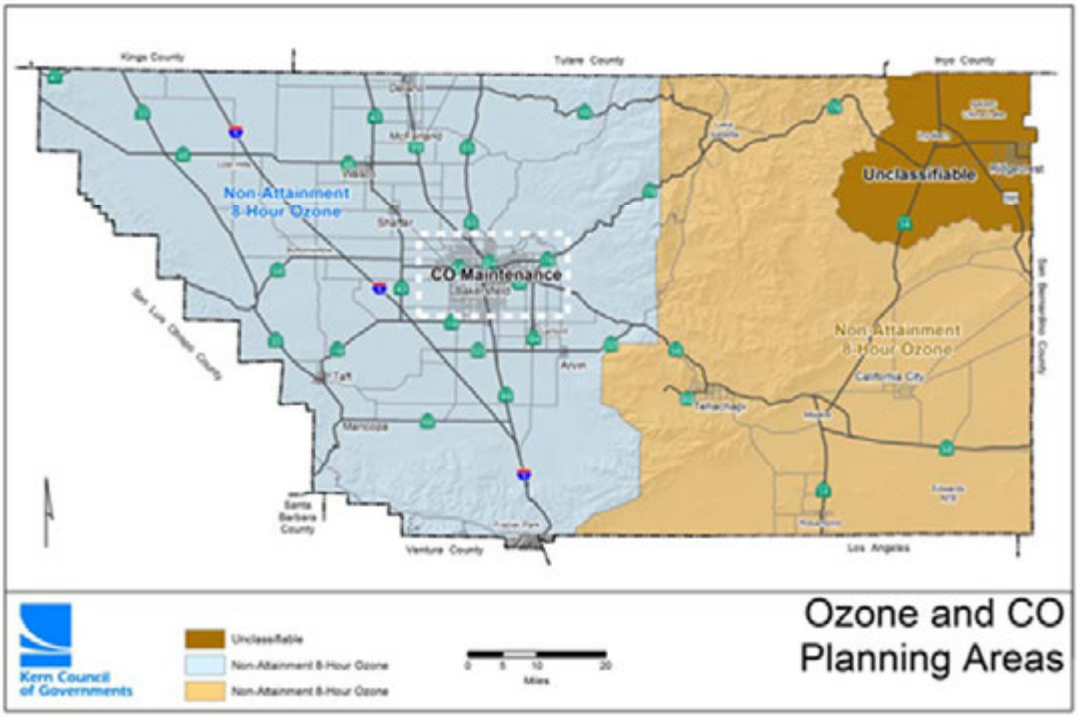
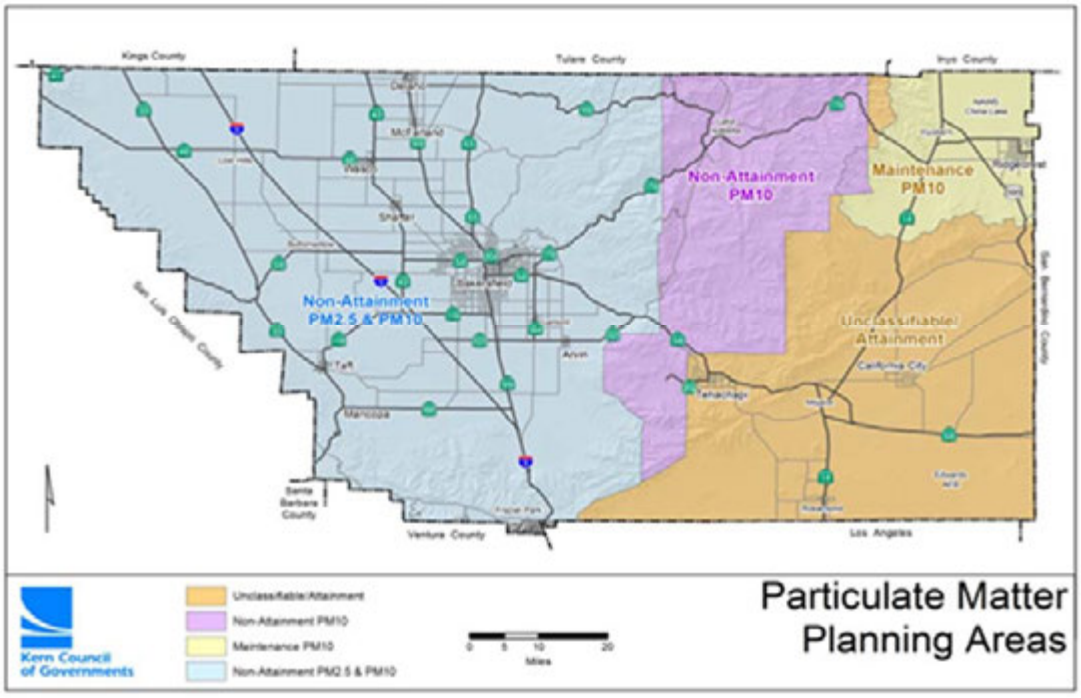


Figure 3 – Particulate Matter Planning Areas



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 2017, 2018, 2019, 2020, 2021, 2023, 2025, 2031, 2035 and 2040 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 2017 FTIP and the 2014 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 2017 FTIP and the 2014 RTP Amendment #1 for all years tested are projected to be less than the approved emissions budgets specified in the *2007 Ozone Plan (as revised in 2015)*. 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 2017 FTIP and the 2014 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 (as revised in 2015)*. The conformity tests for PM-10 are therefore satisfied.

- For the 1997 and 2012 PM2.5 standards, the total regional on-road vehicle-related emissions associated with implementation of the 2017 FTIP and 2014 RTP Amendment #1 for the analysis years are either (1) projected to be less than the approved emission budgets, or (2) less than the emission budgets using the approved PM2.5 and NOx trading mechanism for transportation conformity purposes from the *2008 PM2.5 Plan (as revised in 2011)*. The conformity tests for PM2.5 for the 1997 and 2012 standards are therefore satisfied.

- For the 2006 24-hour PM2.5 standard, the total regional on-road vehicle-related emissions associated with implementation of the 2017 FTIP and the 2014 RTP Amendment #1 for the analysis years are either (1) projected to be less than the approved emission budgets, or (2) less than the emission budgets using the approved PM2.5 and NOx trading mechanism for transportation conformity purposes from the *2012 PM2.5 Plan (as revised in 2015)*. The conformity tests for PM2.5 for the 2006 standard are therefore satisfied.

- The 2017 FTIP and the 2014 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 2017, 2025, 2035, and 2040 for the Eastern Kern ozone area and the Indian Wells Valley PM-10 area. 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 (Eastern Kern) ozone, the total regional on-road vehicle-related emissions (ROG and NOx) associated with implementation of the 2017 FTIP and the 2014 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 2017 FTIP and the 2014 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 Re-designation 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 E includes public hearing documentation conducted on the 2017 FTIP, the 2014 RTP Amendment #1, and corresponding conformity analysis on July 21, 2016. Comments received on the conformity analysis and responses made as part of the public involvement process are included in Appendix F.

CHAPTER 1:
FEDERAL AND STATE REGULATORY REQUIREMENTS

The criteria for determining conformity of transportation programs and plans under the Federal transportation conformity regulation (40 CFR Parts 51 and 93) and the applicable conformity tests for the San Joaquin Valley nonattainment areas are summarized in this section. The Conformity Analysis for the 2017 FTIP and the 2014 RTP Amendment #1 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 four year (FFY 2016/17 – 2019/20) programming document for the preservation, expansion, and management of the transportation system. The 2014 RTP has a 2040 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 present. These amendments have addressed a number of items related to conformity lapses, grace periods, and other related issues to streamline the conformity process.

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.

On March 14, 2012, EPA published the Transportation Conformity Rule Restructuring Amendments, effective April 13, 2012 (EPA, 2012a). The amendments restructure several sections of the rule so that they apply to any new or revised National Ambient Air Quality Standards. In addition, several clarifications to improve implementation of the rule were finalized.

On March 6, 2015, EPA published *Implementation of the 2008 National Ambient Air Quality Standards for Ozone: State Implementation Plan Requirements* final rule (effective April 6, 2015), which shifted the San Joaquin Valley 2008 Ozone Standard attainment date from December 31, 2032 to July 20, 2032 (EPA, 2015). EPA's March 2015 ozone implementation rule also revoked the 1997 Ozone Standard for transportation conformity purposes.

On July 29, 2016 EPA released its Final Rule titled *Implementing National Ambient Air Quality Standards for Fine Particles: State Implementation Plan Requirements*. According to the implementation rule, areas designated as nonattainment for the 1997 PM2.5 standards, must continue to continue to demonstrate conformity to these standards until attainment (EPA, 2016).

MULTI-JURISDICTIONAL GUIDANCE

EPA reissued Guidance for Transportation Conformity Implementation in Multi-Jurisdictional Nonattainment and Maintenance Areas in July 2012 (EPA, 2012c). This guidance updates and supersedes the July 2004 "multi-jurisdictional" guidance (EPA, 2004a), but does not change the substance of the guidance on how nonattainment areas with multiple agencies should conduct conformity determinations. This guidance applies to the San Joaquin Valley since there are multiple MPOs within a single nonattainment area. The main principle of the guidance is that one regional emissions analysis is required for the entire nonattainment area. However, separate modeling and conformity documents may be developed by each MPO.

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

With respect to PM2.5, the Transportation Conformity Rule PM2.5 and PM10 Amendments published on March 24, 2010 effectively incorporates the "multi-jurisdictional" guidance directly into the rule. 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. In May 2015 the San Joaquin Valley Unified Air Pollution Control District requested ARB to withdraw Rule 9120 from California State Implementation Plan consideration.

In July of 2015, ARB sent a letter to EPA withdrawing Rule 9120 from the California State Implementation Plan. Therefore EPA can no longer act on the Rule. 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 cannot be approved for the San Joaquin Valley, the Federal transportation conformity rule 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 August 2013 (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. EMFAC2014 was used in the Conformity Analysis and is documented in Chapter 3. EPA issued a federal register notice on December 14, 2015 formally approving EMFAC2014 for use in conformity determinations.

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 Kern Council of Governments adopted consultation process and policy for conformity analysis includes a 30-day comment period followed by a public meeting.

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. The Conformity Analysis for 2017 FTIP and 2014 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 National Ambient Air Quality Standard (NAAQS) for 8-hour ozone (revoked 1997 and 2008 standards), and particulate matter under 2.5 microns in diameter (PM2.5) (1997, 2006 and 2012 standards); and has a maintenance plan for 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. State Implementation Plans have been prepared to address carbon monoxide, ozone, PM-10 and PM2.5:

- The 2004 Revision to the California State Implementation Plan for Carbon Monoxide was approved by EPA on November 30, 2005 (effective January 30, 2006).

- The 2007 Ozone Plan (1997 Standard), as revised in 2015, was approved by EPA on July 8, 2016 (effective September 30, 2016).

- The 2016 Ozone Plan (2008 standard) was adopted by the Air District on June 16, 2016 and subsequently adopted by ARB on July 21, 2016. Since the new ozone budgets have not yet been approved by EPA, the 2007 Ozone Plan budgets will continue to be used for this conformity analysis.

- The 2007 PM-10 Maintenance Plan, as revised in 2015, was approved by EPA on July 8, 2016 (effective September 30, 2016).
- The 2008 (1997 Standard) PM2.5 Plan (as revised in 2011) was approved by EPA on November 9, 2011 (effective January 9, 2012).

- The 2015 (1997 Standards) PM2.5 Plan was approved by ARB on May 21, 2015. On February 9, 2016 EPA published proposed conditional approval of the 2015 Plan; no final EPA action has been taken on the plan. As a result, the proposed SIP budgets are assumed to be unavailable for use and the 2008 PM2.5 Plan conformity budgets are the only budgets applicable to the 1997 and 2012 PM2.5 standards at this time.

- The 2012 PM2.5 Plan (2006 Standard), as revised in 2015, was approved by EPA on August 16, 2016 (effective September 30, 2016).

EPA designated the San Joaquin Valley nonattainment area for the 2008 Ozone Standard, effective July 20, 2012. Transportation conformity applies one year after the effective date (July 20, 2013). Federal approval for the eight SJV MPO's 2008 Ozone standard conformity demonstrations was received on July 8, 2013. In addition, the Eastern portion of Kern County, the Mojave Desert, was designated nonattainment and classified Marginal with an attainment date of 2014. On August 27, 2015, EPA issued a proposed rule to reclassify Eastern Kern as a "Moderate" nonattainment area. On May 4, 2016, EPA has finalized the proposed reclassification of Eastern Kern with a new attainment date of July 20, 2018. The attainment year of 2017 must be modeled.

EPA's March 2015 final rule implementing the 2008 Ozone Standard also revoked the 1997 Ozone Standard for transportation conformity purposes. This revocation became effective April 6, 2015.

On November 13, 2009, EPA published Air Quality Designations for the 2006 24-hour PM2.5 standard, effective December 14, 2009. Nonattainment areas are required to meet the standard by 2014; transportation conformity began to apply on December 14, 2010. On January 20, 2016 EPA published *Designation of Areas for Air Quality Planning Purposes; California; San Joaquin Valley; Reclassification as Serious Nonattainment for the 2006 PM2.5 NAAQS* finalizing SJV reclassification to Serious Nonattainment effective February 19, 2016. Nonattainment areas are required to meet the standard as expeditiously as practicable, but no later than December 31, 2019. 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.

EPA's nonattainment area designations for the new 2012 PM2.5 standards became effective on April 15, 2015. Conformity for a given pollutant and standard applies one year after the effective

date (April 15, 2016). It is important to note that the 2012 PM2.5 standards nonattainment area boundary for the San Joaquin Valley are exactly the same as the nonattainment area boundary for the 1997 annual standard.

On March 23, 2015, EPA released its Final Rule for *Implementing National Ambient Air Quality Standards for Fine Particles.* According to the implementation rule, areas designated as nonattainment for the 1997 PM2.5 standards, must continue to continue to demonstrate conformity to these standards until attainment.

In the San Joaquin Valley, the 1997 standards (both 24-hour and annual) continue to apply.

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 sub-regional emission budgets by MPOs if the applicable implementation plans (or implementation plan submission) explicitly indicates an intent to create such sub-regional 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 (CO). 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 (2008 STANDARD)

EPA's final rule implementing the 2008 ozone standard also revoked the 1997 ozone standard for transportation conformity purposes. This revocation became effective April 6, 2015. Areas designated nonattainment for the 2008 ozone standard are required to use any existing adequate

or approved SIP motor vehicle emissions budgets for a prior ozone standard until budgets for the 2008 ozone standard are either found adequate or approved. Therefore, when a 2008 ozone nonattainment area has adequate or approved budgets for any ozone standard, the budget test requirements (40 CFR 93.118) must be met.

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).

EPA approved the 2007 Ozone (1997 standard) Plan (as revised in 2015) including conformity budgets on July 8, 2016 (effective September 30, 2016). The revised SIP identified both reactive organic gases (ROG) and nitrogen oxides (NOx) subarea budgets in tons per average summer day for each MPO in the nonattainment area. It is important to note that the boundaries for both the 2008 ozone standard and previous ozone standard are identical. Consequently, for this conformity analysis, the SJV MPOs will continue to conduct demonstrations for subarea emissions budgets as established in the 2007 Ozone Plan (as revised in 2015).

The approved conformity budgets from Table 1 of the August 12, 2016 Federal Register are provided in a table below. These budgets will be used to compare to emissions resulting from the 2017 FTIP and the 2014 RTP Amendment #1.

Table 1-2:
Approved Budgets from the 2007 Ozone Plan (as revised in 2015)

(summer tons/day)

County	2011		2014		2017		2020		2023	
	ROG	NOx	ROG	NOx	ROG	NOx	ROG	NOx	ROG	NOx
Fresno	14.3	36.2	10.7	30.0	8.7	29.9	6.8	24.3	5.6	14.6
Kern (SJV)	12.7	50.3	9.7	42.7	6.9	26.8	5.7	22.4	4.8	12.9
Kings	2.8	10.7	2.1	8.9	1.4	5.5	1.1	4.7	0.9	2.7
Madera	3.4	9.3	2.5	7.7	2.0	5.5	1.6	4.5	1.3	2.7
Merced	5.1	19.9	3.7	16.7	2.7	10.3	2.1	8.5	1.7	5.1
San Joaquin	11.1	24.6	8.4	20.5	6.4	14.1	5.1	11.3	4.3	7.3
Stanislaus	8.5	16.9	6.4	13.9	4.1	11.3	3.2	9.2	2.7	5.8
Tulare	8.8	16.0	6.7	13.2	4.0	10.3	3.1	8.1	2.5	4.9

[(a)] Note that EPA did not take action on the 2011 and 2014 budgets of the 2007 Ozone Plan (as revised in 2015). These budgets are not in the timeframe of this conformity analysis.

PM-10

The 2007 PM-10 Maintenance Plan (as revised in 2015) was approved by EPA on July 8, 2016 (effective September 30, 2016), 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 re-entrained dust from travel on paved roads, vehicular exhaust, travel on unpaved roads, and

road construction. The conformity budgets from Table 1 of the August 12, 2016 Federal Register are provided below and will be used to compare emissions for each analysis year.

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.

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	7.0	25.4
Kern[(a)]	12.1	88.3	7.4	23.3
Kings	3.1	16.7	1.8	4.8
Madera	3.6	13.9	2.5	4.7
Merced	6.2	39.4	3.8	8.9
San Joaquin	9.1	42.6	4.6	11.9
Stanislaus	5.6	29.7	3.7	9.6
Tulare	7.3	25.1	3.4	8.4

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

(b) Note that EPA did not take action on the 2005 budgets of the 2007 PM10 Maintenance Plan (as revised in 2015). These budgets are not in the timeframe of this conformity analysis.

PM2.5

EPA and FHWA have indicated that areas violating both the annual and 24-hour standards for PM2.5 must address all standards in the conformity determination. The San Joaquin Valley currently violates both the 1997 annual and 24-hour and 2012 annual PM2.5 standards and the

2006 24-hour PM2.5 standards; thus the conformity determination includes all corresponding analyses (see discussion under Air Quality Designations Applicable to the San Joaquin Valley above).

1997 (24-hour and annual) and 2012 (annual) PM2.5 Standards

The 2008 PM2.5 Plan for the 1997 PM2.5 standard (as revised in 2011) was approved by EPA on November 9, 2011, which contains motor vehicle emission budgets for PM2.5 and NOx established based on average annual daily emissions, as well as a trading mechanism. 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 5 of the November 9, 2011 Federal Register are provided in Table 1-4 below and will be used to compare emissions resulting from the 2017 FTIP and the 2014 RTP Amendment #1.

In accordance with Section 93.109(i)(3) of the conformity rule, if a 2012 PM2.5 nonattainment area has adequate or approved SIP budgets that address the annual 1997 PM2.5 standards, it must use the budget test until new 2012 PM2.5 standard budgets are found adequate or approved. The attainment year of 2021 will be modeled. For this Conformity Analysis, the SJV will conduct determinations for subarea emission budgets as established in the 2008 PM2.5 (1997 Standard) Plan.

In addition, the final PM2.5 Implementation Rule requires areas designated as nonattainment for the 1997 PM2.5 standards to continue demonstrate conformity to these standards until attainment. In the San Joaquin Valley, the 1997 standards (both 24-hour and annual) continue to apply.

Table 1-4:
On-Road Motor Vehicle 1997 (24-hour and annual) and

2012 (annual) PM2.5 Standard Emissions Budgets

(tons per average annual day)

	2012		2014	
County	**PM2.5**	**NOx**	**PM2.5**	**NOx**
Fresno	1.5	35.7	1.1	31.4
Kern (SJV)	1.9	48.9	1.2	43.8
Kings	0.4	10.5	0.3	9.3
Madera	0.4	9.2	0.3	8.1
Merced	0.8	19.7	0.6	17.4
San Joaquin	1.1	24.5	0.9	21.6
Stanislaus	0.7	16.7	0.6	14.6
Tulare	0.7	15.7	0.5	13.8

The 2008 PM2.5 SIP includes a trading mechanism that allows trading from the motor vehicle emissions budget for the PM-2.5 precursor NOx to the motor vehicle emissions budget for primary PM-2.5 using a 9 to 1 ratio. The trading mechanism allows the agencies responsible for demonstrating transportation conformity in the San Joaquin Valley to supplement the applicable budget for PM-2.5 with a portion of the applicable corresponding budget for NOx, and use these adjusted motor vehicle emissions budgets for PM-2.5 and NOx to demonstrate transportation conformity with the PM-2.5 SIP for analysis years after 2014. As noted above, EPA approved the 2008 PM2.5 Plan (as revised in 2011) on November 9, 2011, which includes approval of the trading mechanism.

The trading mechanism will be used only for conformity analyses for analysis years after 2014. 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-2.5 budget shall only be those remaining after the NOx budget has been met.

As noted above, in accordance with the EPA Transportation Conformity Rule Restructuring Amendments Nonattainment areas allows 2012 PM2.5 areas with adequate or approved 1997 PM2.5 budgets to determine conformity for both NAAQS at the same time, using the budget test.

2006 24-Hour PM2.5 Standard

The 2012 (2006 Standard) PM2.5 Plan was first approved by ARB on January 24, 2013 and the Plan Supplement requesting reclassification to Serious and including revised budgets was approved by ARB on October 24, 2014. EPA proposed approval of the plan on January 13, 2015.

On January 20, 2016, EPA finalized reclassification of the San Joaquin Valley to Serious nonattainment for the 2006 24-hour PM2.5 Standard. On May 18, 2016 EPA published proposed approval of the revised 2012 Plan PM2.5 budgets. Then August 16, 2016, the 2012 PM2.5 Plan was approved by EPA including the revised conformity budgets and a trading mechanism (effective September 30, 2016).

The 2012 PM2.5 Plan for the 2006 PM2.5 standard (as revised in 2015) contains motor vehicle emission budgets for PM2.5 and NOx established based on average winter daily emissions, as well as a trading mechanism. 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 the 2012 PM2.5 Plan (as revised in 2015) are provided in Table 1-5 below and will be used to compare emissions resulting from the 2017 FTIP and the 2014 RTP Amendment #1.

Table 1-5
On-Road Motor Vehicle 2006 24-Hour PM2.5 Standard Emissions Budgets

(tons per average winter day)

	2014		2017	
County	**PM2.5**	**NOx**	**PM2.5**	**NOx**
Fresno	1.0	31.6	1.0	32.1
Kern (SJV)	1.2	43.2	0.8	28.8
Kings	0.2	8.8	0.2	5.9
Madera	0.3	8.7	0.2	6.0
Merced	0.5	17.2	0.3	11.0
San Joaquin	0.7	20.0	0.6	15.5
Stanislaus	0.5	15.1	0.4	12.3
Tulare	0.5	14.3	0.4	11.2

(a) Note that EPA did not take action on the 2014 budgets of the 2012 PM2.5 Plan (as revised in 2015). These budgets are not in the timeframe of this conformity analysis.

The 2012 PM2.5 SIP includes a trading mechanism that allows trading from the motor vehicle emissions budget for the PM2.5 precursor NOx to the motor vehicle emissions budget for primary PM-2.5 using an 8 to 1 ratio. The trading mechanism allows the agencies responsible for demonstrating transportation conformity in the San Joaquin Valley to supplement the applicable budget for PM-2.5 with a portion of the applicable corresponding budget for NOx, and use these adjusted motor vehicle emissions budgets for PM2.5 and NOx to demonstrate transportation conformity with the PM2.5 SIP for analysis years after 2014. As noted above, EPA approved the 2012 PM2.5 Plan budgets (as revised in 2015) on August 16, 2016 (effective September 30, 2016).

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 1-6:
San Joaquin Valley Conformity Analysis Years

Pollutant	Budget Years[1]	Attainment/ Maintenance Year	Intermediate Years	RTP Horizon Year
CO	NA	2018	2017/2025/2035	2040
Ozone	2014/2017/2020/2023	2031	NA	2040
PM-10	NA	2020	2025/2035	2040
1997 and 2012 PM2.5	NA	2014/2021[2]	2017/2018/2025/2035	2040
2006 24-hour PM2.5	2014/2017	2019[3]	2025/2035	2040

Budget years that are not in the time frame of the transportation plan/conformity analysis are not included as analysis years (e.g., 2014), although they may be used to demonstrate conformity.

[2]. Note: 2014 is the attainment year for the 1997PM2.5 standards. 2021 is the attainment year for the 2012 PM2.5 standards.

[3]Note: The 2006 standard must be met as expeditiously as practicable, but no later than December 31, 2019.

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 the 2008 Ozone Standard, the San Joaquin Valley has been classified as an Extreme nonattainment area with an attainment date of July 20, 2032. In accordance with the March 2015 *Implementation of the 2008 National Ambient Air Quality Standards for Ozone: State Implementation Plan Requirements* final rule, the attainment year of 2031 must be modeled. When using the budget test, the attainment year of the 2008 Ozone standard must be analyzed (e.g. 2031). In addition, in areas that have approved or adequate budgets for the 1997 ozone standard, consistency with those budgets must also be determined.

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, 2010 unless EPA approves an attainment date extension. States must identify their attainment dates based on the rate of reductions from their control strategies and the severity of the PM2.5 problem. On February 9, 2016 EPA released its proposed *Approval and Disapproval of California Air Plan; San Joaquin Valley Serious Area Plan and Attainment Date Extension for the 1997 PM2.5 NAAQS.* No final EPA action has been taken on the plan. As a result, the proposed SIP budgets are assumed to be unavailable for use and the 2008 PM2.5 Plan conformity budgets are the only budgets applicable at this time for the 1997 PM2.5 standard.

On January 20, 2016, EPA finalized reclassification of the San Joaquin Valley to Serious nonattainment for the 2006 24-hour PM2.5 Standard. On May 18, 2016 EPA published proposed approval of the revised 2012 Plan PM2.5 budgets. Then on August 16, 2016, EPA issued final approval of the 2012 PM2.5 Plan (inclusive of the revised conformity budgets and trading mechanism) for the 2006 24-hour PM2.5 standard, effective September 30, 2016. The attainment year of 2019 must be modeled.

On April 15, 2015, EPA classified the San Joaquin Valley as Moderate nonattainment for the 2012 PM2.5 Standards. In accordance with Section 93.109(i)(3) of the conformity rule, if a 2012 PM2.5 nonattainment area has adequate or approved SIP budgets that address the annual 1997 PM2.5 standards, it must use the budget test until new 2012 PM2.5 standard budgets are found adequate or approved. When using the budget test, the attainment year must be analyzed (e.g. 2021). In addition, in areas that have approved or adequate budgets for the 1997 annual PM2.5 standards, consistency with those budgets must also be determined. The attainment year of 2021 must be modeled.

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 (Eastern Kern), 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 2017 FTIP and 2014 RTP Amendment #1 also includes analysis of existing and future air quality impacts for each applicable pollutant.

The Eastern Kern 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 Eastern Kern county, 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).

On May 4, 2016, EPA finalized the proposed reclassification (effective June 3, 2016) of Eastern Kern to moderate nonattainment with a new attainment date of July 20, 2018. In accordance with the Ozone Implementation Rule, the attainment year of 2017 must be modeled. A new SIP must be developed by the Eastern Kern Air Pollution District within 18 months of the effective reclassification. According to the Ozone Implementation Rule, areas designated nonattainment for the 2008 ozone standard are required to use any existing adequate or approved SIP motor vehicle emissions budgets for a prior ozone standard until budgets for the 2008 ozone standard are either found adequate or approved; thus, the Early Progress Plan conformity budgets will continue to be used in this conformity analysis.

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 PM2.5 standards or the 2006 24-hour PM2.5 standard.

G. CONFORMITY TEST REQUIREMENTS

OZONE

Under the existing conformity regulation, regional emissions analyses for ozone areas must address nitrogen oxides (NOx) 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 NOx are provided in the table below.

Table 1-7:
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 Re-designation 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 1-8:
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., 2019);
- The last year of the transportation plan's forecast period (e.g., 2040); 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, 2035).

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 1-9:
Other Portions of Kern County
Conformity Analysis Years

Pollutant	Budget Years	Attainment/ Maintenance Year	Intermediate Years	RTP Horizon Year
E. Kern Ozone	NA	2017	2025/2035	2040
Indian Wells Valley PM-10	NA	[1]	2017/2025/2035	2040
East Kern PM-10	NA	NA	2017/2025/2035	2040

[1] Since the attainment year is currently 2010 for PM-10, which is 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.

CHAPTER 2:
LATEST PLANNING ASSUMPTIONS AND TRANSPORTATION MODELING

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 May 2016.

Key elements of the latest planning assumption guidance include:

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

The Kern Council of Governments uses the TP+/ CUBE transportation model. The model was validated in 2013 for the 2008 base year. The latest planning assumptions used in the transportation model validation and Conformity Analysis is summarized in Table 2-1.

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

Assumption	Year and Source of Data (MPO action)	Modeling	Next Scheduled Update
Population	Base Year: 2013 Projections: 2009/2012 In October 2009, the Kern COG policy board adopted population projections. In 2011 the forecast was found to be within 1/10th of 1% of the observed 2010 Census population. In December 2011 the distribution was updated based on the 2010 Census using the same forecast total. In 2012, the forecast was validated again using The Planning Center methodology.	This data is disaggregated to the TAZ level using 2010 U.S. Census population and household data for input into the CUBE for the base year validation. Projections use the Uplan Land Use Model for distribution of socio-economic data to the TAZ level based on local adopted general plans.	Population forecast is scheduled to be revisited by the Kern COG policy board in Spring 2015.

Employment	**Base Year**: 2006/2008 The employment data was geocoded by Kern COG and used to allocate the EDD employment estimates for the 2006 and updated in 2008. The 2008 model validation incorporated the Census' Longitudinal Employer-Household Dynamics (LEHD) data. Minor adjustments to the distribution of employment growth are made by collecting local planning assumptions through the Kern Regional Transportation Modeling, consistent with adopted Kern COG policy. **Projections**: 2006/2008/2014 The 2006 growth forecast is based on the Caltrans Economic Forecast and adjusted for self-employed. The forecast is tied to population forecast which have proven reliable when compared to recent Census data and was reconfirmed in 2008 and 2012. The forecast uses a jobs per household ratio (JPH) historically ranging from 1.1 to 1.3, and assumes a gradual decrease in the	This data is disaggregated to the TAZ level for input into the CUBE for the base year validation. Major adjustments to the employment forecast have coincided with model validation years 2006 and 2008. Projections use the Uplan Land Use Model for distribution of socio-economic data to the TAZ level based on local adopted general plans.	Employment forecast is scheduled to be revisited by the Kern COG policy board in 2015 coinciding with the 2015 Model Update.

Assumption	Year and Source of Data (MPO action)	Modeling	Next Scheduled Update
	current ratio from 1.2 JPH to 1.1 in 2040 as the population ages as well as other factors, consistent with adopted Kern COG policy.		
Traffic Counts	542 traffic count locations from the Kern Regional Traffic Count Program were used in 2013 model validation.	CUBE was validated using these traffic counts.	Traffic counts are gathered annually and used updated every four years, as funding is available.
Vehicle Miles of Travel	The transportation model was validated in 2013 to the 2008 base year. The validation came within 2.7% percent of Caltrans HPMS VMT estimate for that year.	CUBE is the transportation model used to estimate VMT in Kern County.	VMT is an output of the transportation model. VMT is affected by the TIP/RTP project updates and is included in each new conformity analysis. VMT is scheduled to be recalibrated to HPMS and observed counts in the 2015 travel model update.

Assumption	Year and Source of Data (MPO action)	Modeling	Next Scheduled Update
Speeds	The 2014 transportation model validation was based on survey data on peak and off-peak highway speeds collected in 2008. Speed distributions were updated in EMFAC2014, using methodology approved by ARB and with information from the transportation model.	CUBE. The transportation model includes a feedback loop that assures congested speeds are consistent with travel speeds. EMFAC2014	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 scheduled for 2015.

A. 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 (TMC) provides oversight for the land use and socioeconomic data inputs into the model. The TMC is made up of local government planning and public works staff. The TMC is a subcommittee of the Regional Planning Advisory Committee to the Kern COG policy board. The TMC 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 population forecast every 3-5 years.

Land use and socioeconomic data at the zonal level are used for determining trip generation. The TMC updates the distribution of zonal data as new information and planning assumptions are available. The population and household base year estimate is based on the US Census and State of California Department of Finance (DOF) estimates. The model includes 11 housing types distributed using 2010 Census data. The population forecast growth countywide totals were adopted in 2009 by the Kern COG policy board and are based on current and past DOF projections, historic performance and were re-confirmed using The Planning Center study methodology for the San Joaquin Valley in 2013.

The base year employment estimate and forecast was developed using California Employment Development Department (EDD) data, 2006 Caltrans Economic Forecast and U.S. Census 2008 LEHD data. The base year employment is based on the 2008 LEHD and distributed by geocoding

using ArcGIS software. The forecast is based on a jobs housing balance ratio assumption developed in 2006 and applied to the 2009 population forecast adopted by the Kern COG Board and re-validated using the planning center methodology in 2014. This method has proven to be very reliable because the population was within $1/10^{th}$ of 1 percent of the 2010 Census. Employment data is currently stratified into 20 employment sectors using EDD and LEHD data.

Income stratification for zonal data is based on the 2010 Census, along with vehicle availability to determine mode choice trip generation rates. School enrollment forecasts and future school location are developed in consultation with Kern County Superintendent of Schools.

The household and employment forecast distribution uses the open source Uplan Land Use Model developed by UC Davis using ArcGIS, incorporating economic factors such as proximity to urban services (sewer, existing urban), rail and interchanges in distribution of employment and households. The model limits distribution based on local general plans and other factors. The model has allowed testing of over 150 scenarios to better balance land use and transportation expenditures in development of the 2014 RTP.

A. TRANSPORTATION MODELING

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

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

As discussed above, the San Joaquin Valley Model Improvement Program (MIP) travel demand model for Kern, from Fehr and Peers, applies an advanced four-step travel demand model system of trip generation, distribution, mode choice, and traffic assignment, with nearly all stages recognizing household demographics, auto availability, modes including explicit auto occupancy, transit by walk and drive access, walk and bike, pricing, and congestion by time of day. Revisions were made to the MIP travel demand model in 2013 by DKS Associates to address a variety of other calibration considerations, including gateway volumes from the statewide and neighboring models, the 2008 National Household Travel Survey, 2001 California Household Travel Survey, 542 traffic count locations, transit route volumes observed in 2008, and travel characteristics and parameters known or derived from other regions in California or the US that were similar to Kern. The 2013 re-calibrated model was then re-subjected to additional sensitivity tests by Fehr & Peers in August 2013 for both the base condition and the dynamic test condition with successful results.[2]

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 2013 to 2008 observed counts at more than 500 locations from the Kern Regional Traffic Count Program. The validation incorporated data for Kern County from the most recent available 2001 and 2008 household travel

[2] http://www.kerncog.org/images/docs/transmodel/Kern_DynamicValidation_20130828.pdf

surveys. 100% of screen-lines in the 2013 model were within the maximum desirable deviation. Overall freeways, expressways and principal arterials ranged from 4-9 percent of observed counts. 66 percent of all the links are within the maximum desirable deviation. Total VMT is within 2.7% of Highway Performance Monitoring System observed VMT for Kern County, well within the allowable +-5% based on best practice.

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 and use the data to update posted speed limits. These observed speeds are input into the model as the free flow 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 feedback look includes a step for mode choice, ensuring that zone to zone impedances are used in the mode split distribution. In addition, the model validation included a series of speed sensitivity tests. The model responded appropriately for the increased and decreased speed tests.

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:

Several recent on-board transit surveys have been performed for the transit systems in Kern. The Kern COG regional travel demand model was validated in 2013 to 2008 observed transit ridership data. Transit boardings were within 16 percent of observed surveys in the 2008 base year, within the +-20 percent best practice guidelines. In addition the model was subjected to a land use sensitivity test that measured the capability of the model to accurately report transit ridership in high quality transit areas. To implement these tests, land use developments by Traffic Analysis Zone (TAZ) were classified into place types and selected to be changed either geographically (move all the development to a different place but retain the development and demographics) or by place type (keep the development in the same location but modify the place type to reflect different "D" variables). The results showed that the Kern travel model provided results with a high level of correlation to the well calibrated small scale test model.

VALIDATION/CALIBRATION

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

Supporting Documentation:

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 (screen-lines) throughout each county.

For Serious and above nonattainment areas, transportation conformity guidance, Section 93.122(b)(3) of the conformity regulation 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.

HPMS results are discussed above under traffic counts. In addition, sensitivity testing for speed/time, cost, capacity/congestion, and land use/induced demand were performed. The model performed within expected parameters for each test.

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 2015 Federal Transportation Improvement Program (2015 FTIP) and the 2014 Regional Transportation Plan (2014 RTP). Not all of the street and freeway projects included in the TIP/RTP qualify for inclusion in the highway network. Projects that call for study, design, 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.

B. 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

Horizon Year	Total Population (thousands)	Employment (thousands)	Average Weekday VMT (millions)	Total Lane Miles
2017	810.2	282.1	21.4	N/A
2018	824.9	296.3	22.3	N/A
2019	839.8	301.3	22.5	N/A
2020	855.0	305.9	22.9	5634
2021	883.7	311.2	23.5	N/A
2023	942.6	321.3	24.3	N/A
2025	980.6	331.7	25.7	5738
2031	1006.3	361.5	28.1	N/A
2035	1128.7	383.7	30.1	6874
2040	1199.8	415.6	31.6	6889

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
2017	109.5	38.4	3.7	1858
2025	131.1	46.4	4.2	1889
2035	148.9	54.1	4.7	2252
2040	197.7	59.9	5.7	2252

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
2017	38.3	15.2	0.6	357
2025	41.5	18.7	0.6	406
2035	43.3	22.7	0.8	431
2040	46.6	24.9	0.9	431

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
2017	38.6	6.7	1.2	452
2025	44.0	7.6	1.3	452
2035	47.7	8.2	1.3	464
2040	55.5	8.7	1.6	464

C. 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 EMFAC2014 model (http://www.arb.ca.gov/msei/onroad/latest_version.htm). EMFAC2014 is the most recent model for use in California conformity analyses. Vehicle registrations, age distribution and fleet mix are developed and included in the model by CARB and cannot be updated by the user. EPA issued a federal register notice on December 14, 2015 formally approving EMFAC2014 for conformity.

D. 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 8-hour Ozone Plan (as revised in 2015) 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
Existing Local Reductions: District Rule 9310 (School Bus Fleets)	Summer NOx
Existing State Reductions: Carl Moyer Program & AB 1493 GHG Standards	Summer ROG Summer NOx
New/Proposed Local Reductions: District Rule 9410 (Employer Based Trip Reduction)	Summer ROG Summer NOx
New/Proposed State Reductions: Smog Check & Reformulated Gas (RFG)	Summer ROG Summer NOx

NOTE: This table is consistent with the 2007 Ozone Plan (as revised in 2015) which was approved by EPA on July 8, 2016 (effective September 30, 2016). State reductions from the Carl Moyer, AB1493, Smog Check and RFG have been included in EMFAC2014.

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: Paved and Unpaved Roads	PM-10 paved road dust PM-10 unpaved road dust
District Rule 8021 Controls: Construction, Demolition, Excavation, Extraction, and Other Earthmoving Activities	PM-10 road construction dust

NOTE: State reductions from the Carl Moyer, Reflash and Idling have been included in EMFAC2014.

PM2.5

Committed control measures in the 2008 PM2.5 Plan (revised 2011) and 2012 PM2.5 Plan (as revised in 2015) that reduce mobile source emissions and are included in the conformity demonstration are shown in Table 2-5 and 2-6, respectively.

Table 2-5:
2008 PM2.5 (1997 Standard) Plan Measures Assumed in the Conformity Analysis

Measure Description	Pollutants
Existing Local Reductions: District Rule 9310 (School Bus Fleets)	Annual PM2.5 Annual NOx
Existing State Reductions: Carl Moyer Program & AB 1493 GHG Standards	Annual PM2.5 Annual NOx
New/Proposed Local Reductions: District Rule 9410 (Employer Based Trip Reduction)	Annual PM2.5 Annual NOx
New/Proposed State Reductions: Smog Check	Annual PM2.5 Annual NOx

NOTE: This table is consistent with the 2008 PM2.5 Plan (as revised in 2011) as approved by EPA on November 9, 2011 (effective January 9, 2012). State reductions from the Carl Moyer, AB1493, and Smog Check have been included in EMFAC2014.

Table 2-6:
2012 PM2.5 (2006 Standard) Plan Measures Assumed in the Conformity Analysis

Measure Description	Pollutants
Existing Local Reductions: District Rule 9310 (School Bus Fleets)	Annual PM2.5 Annual NOx
Existing State Reductions: Carl Moyer Program & AB 1493 GHG Standards	Annual PM2.5 Annual NOx
New/Proposed Local Reductions: District Rule 9410 (Employer Based Trip Reduction)	Annual PM2.5 Annual NOx
New/Proposed State Reductions: Smog Check	Annual PM2.5 Annual NOx

NOTE: This table is consistent with the 2012 PM2.5 Plan (as revised in 2015) approved by EPA on August 16, 2016 (effective September 30, 2016). State reductions from the Carl Moyer, AB1493 and Smog Check have been included in EMFAC2014.

CHAPTER 3:
AIR QUALITY MODELING

The model used to estimate vehicle exhaust emissions for carbon monoxide, ozone precursors, and particulate matter is EMFAC2014. CARB emission factors for PM-10 have been used to calculate re-entrained paved and unpaved road dust, and fugitive dust associated with road construction. For this conformity analysis, model inputs not dependent on the TIP or RTP are consistent with the applicable SIPs, which include:

- The 2004 Revision to the California State Implementation Plan for Carbon Monoxide was approved by EPA on November 30, 2005 (effective January 30, 2006).

- The 2007 Ozone Plan (1997 Standard), as revised in 2015, was approved by EPA on July 8, 2016 (effective September 30, 2016).

- The 2016 Ozone Plan (2008 standard) was adopted by the Air District on June 16, 2016 and subsequently adopted by ARB on July 21, 2016. Since the new ozone budget have not yet been approved by EPA, the 2007 Ozone Plan budgets will continue to be used for this conformity analysis.

- The 2007 PM-10 Maintenance Plan (as revised in 2015) was approved by EPA on July 8, 2016 (effective September 30, 2016).

- The 2008 (1997 Standard) PM2.5 Plan (as revised in 2011) was approved by EPA on November 9, 2011 (effective January 9, 2012).

- The 2015 (1997 Standards) PM2.5 Plan was approved by ARB on May 21, 2015. On February 9, 2016 EPA published proposed conditional approval of the 2015 Plan; no final EPA action has been taken on the plan. As a result, the proposed SIP budgets are assumed to be unavailable for use and the 2008 PM2.5 Plan conformity budgets are the only budgets applicable to the 1997 and 2012 PM2.5 standards at this time.

- The 2012 PM2.5 Plan was approved by EPA on August 16, 2016 (effective September 30, 2016) inclusive of the revised conformity budgets and PM2.5 trading mechanism.

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 1-6.

A. EMFAC2014

The EMFAC model (short for EMission FACtor) is a computer emissions modeling software that estimates emission rates for motor vehicles for calendar years from 2000 to 2050 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, light, heavy, and medium-duty trucks, motorcycles, 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 MPO level. EMFAC contains default vehicle activity data that can be used to estimate a motor vehicle emissions inventory in tons/day for a specific year and season, and as a function of ambient temperature, relative humidity, vehicle population, mileage accrual, miles of travel, and vehicle speeds.

Section 93.111 of the conformity regulation requires the use of the latest emission estimation model in the development of conformity determinations. On December 30, 2014, ARB released EMFAC2014, which is the latest update to the EMFAC model for use by California State and local governments to meet Clean Air Act (CAA, 1990) requirements. Nearly a year later, on December 14, 2015, EPA announced the availability of this latest version of the California EMFAC model for use in SIP development in California. EMFAC2014 will be required for conformity analysis on or after December 14, 2017, or when conformity budgets modeled with EMFAC2014 are found adequate or approved by EPA.

A transportation data template has been prepared to summarize the transportation model output for use in EMFAC 2014. The template includes allocating VMT by speed bin by hour of the day.

EMFAC2014 was used to estimate exhaust emissions for CO, ozone, PM-10, and PM2.5 conformity demonstrations consistent with the applicable air quality plan. Note that the statewide SIP measures documented in Chapter 2 are already incorporated in the EMFAC2014 model.

B. ADDITIONAL PM-10 ESTIMATES

PM-10 emissions for re-entrained 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

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 road dust calculations have been updated to reflect this new methodology. More specifically, the emission factor equation and k value (particle size multiplier) have been updated accordingly. CARB default assumptions for roadway silt loading by roadway class, average vehicle weight, and rainfall correction factor remain unchanged. Emissions are estimated for five roadway classes

including freeways, arterials, collectors, local roads, and rural roads. Countywide VMT information is used for each road class to prepare the emission estimates.

CALCULATION OF REENTRAINED DUST FROM UNPAVED ROAD TRAVEL

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

CALCULATION OF PM-10 FROM ROADWAY CONSTRUCTION

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

PM-10 TRADING MECHANISM

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

C. PM2.5 APPROACH

EPA and FHWA have indicated that areas violating both the annual and 24-hour standards for PM2.5 must address all standards in the conformity determination. The San Joaquin Valley currently violates both the 1997 and 2012 annual PM2.5 standards, and the 1997 and 2006 24-hour PM2.5 standards; thus the conformity determination includes analyses to all PM2.5 standards.

The following PM2.5 approach addresses the 1997 (annual and 24-hour), the 2012 (annual), and the 2006 24-hour standards:

EMFAC2014 incorporates data for temperature and relative humidity that vary by geographic area, calendar year and season. The annual average represents an average of all the monthly inventories. A winter average represents an average of the California winter season (October through February). EMFAC will be run to estimate direct PM2.5 and NOx emissions from motor vehicles for an annual or winter average day as described below.

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 EMFAC2014 represent the most accurate VMT 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.

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 EMFAC2014. 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 PM2.5 Standard – At this time, EPA has not finalized the approval of the 2015 PM2.5 Plan, thus the 2008 PM2.5 Plan budgets will continue to be used in this conformity analysis. The 2008 PM2.5 Plan (as revised in 2011) was approved by EPA on November 9, 2011 (effective January 9, 2012) and contains motor vehicle emission budgets for PM2.5 and NOx emissions established based on average annual daily emissions. The annual inventory methodology contained in the 2008 Plan (as revised in 2011) and used to establish emissions budgets is consistent with the methodology used herein. 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 PM2.5 Standard –

On January 20, 2016, EPA finalized reclassification of the San Joaquin Valley to Serious nonattainment for the 2006 24-hour PM2.5 Standard. On May 18, 2016 EPA published proposed approval of the revised 2012 Plan PM2.5 budgets. Then on August 16, 2016 the 2012 PM2.5 Plan was approved by EPA including the revised conformity budgets and a trading mechanism (effective September 30, 2016). The 2012 PM2.5 Plan (as revised in 2015) contains motor vehicle emission budgets for PM2.5 and NOx established based on average winter daily emissions. The winter inventory methodology contained in the 2012 Plan and used to establish emissions budgets is consistent with the methodology used herein. The motor vehicle emissions budget for PM2.5 include 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. 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 PM2.5 standards.

2012 PM2.5 Standard – EPA's nonattainment area designations for the 2012 PM2.5 standard became effective on April 15, 2015. Conformity applies one year after the effective date (April 15, 2016). In accordance with Section 93.109(i)(3) of the federal transportation conformity rule, if a 2012 PM2.5 area has adequate or approved SIP budgets that address the annual 1997 standards, it must use the budget test until new 2012 PM2.5 standard budgets are found adequate or approved. It is important to note that the 2012 annual PM2.5 nonattainment area boundary for the San Joaquin Valley is exactly the same as the nonattainment area boundary for the 1997 and 2006 PM2.5 standards.

1997 and 2012 PM2.5 TRADING MECHANISM

At this time, EPA has not finalized the approval of the 2015 PM2.5 Plan, thus consistent with the PM2.5 implementation rule, the 2008 PM2.5 Plan budgets and trading mechanism will continue to be used in this conformity analysis.

The 2008 PM2.5 SIP (as revised in 2011) allows trading from the motor vehicle emissions budget for the PM2.5 precursor NOx to the motor vehicle emissions budget for primary PM2.5 using a 9 to 1 ratio. This trading mechanism will be used for the 1997 annual and 24-hour hour and 2012 PM2.5 standard conformity analyses for analysis years after 2014.

2006 PM2.5 TRADING MECHANISM

On August 16, 2016 EPA approved the 2012 PM2.5 SIP including the PM2.5 trading mechanism that allows trading from the motor vehicle emissions budget for the PM2.5 precursor NOx to the motor vehicle emissions budget for primary PM-2.5 using an 8 to 1 ratio. This trading mechanism will be used for the 2006 24-hour PM2.5 standard conformity analysis for analysis years after 2014.

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 EMFAC2011 using the methodology described above.

For Indian Wells Valley (Kern County Portion), PM-10 on-road exhaust is not significant and not included in the emissions budgets or the conformity estimates. Paved road dust, 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).

- On August 27, 2015, EPA issued a proposed rule to reclassify Eastern Kern as a "Moderate" nonattainment area. On May 4, 2016, EPA finalized the proposed reclassification of Eastern Kern (effective June 3, 2016) with a new attainment date of July 20, 2018. In accordance with the Ozone Implementation Rule, the attainment year of 2017 must be modeled. A new SIP must be developed by the Eastern Kern Air Pollution District within 18 months of the effective reclassification. The Early Progress Plan conformity budgets will continue to be used in this conformity analysis until new budgets are approved.

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

New step-by-step air quality modeling instructions were developed for SJV MPO use with EMFAC2014. These instructions were provided for interagency consultation in May 2016. EPA, FHWA, and ARB concurred. Documentation of the conformity analysis for both options is provided in Appendix C, including:

- 2017 FTIP Conformity EMFAC Summary Spreadsheet
- 2017 FTIP Conformity Paved Road Spreadsheet
- 2017 FTIP Conformity Unpaved Road Dust Spreadsheet
- 2017 FTIP Conformity Construction Spreadsheet
- 2017 FTIP Conformity Totals Spreadsheet
- 2017 FTIP Conformity PM10 Trading 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 this 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 2007 Ozone Plan (as revised in 2015) was approved by EPA on July 8, 2016 (effective September 30, 2016). However, the Plan does not include TCMs for the San Joaquin Valley.

APPLICABLE IMPLEMENTATION PLAN FOR PM-10

The 2007 PM-10 Maintenance Plan (as revised in 2015) was approved by EPA on July 8, 2016. No new local agency control measures were included in the Plan.

The Amended 2003 PM-10 Plan was approved by EPA on May 26, 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.

APPLICABLE IMPLEMENTATION PLAN FOR PM2.5

The 2012 PM2.5 Plan was approved by EPA on August 16, 2016 (effective September 30, 2016). The 2008 PM2.5 Plan (as revised in 2011) was approved by EPA on November 9, 2011 (effective January 9, 2012). However, the Plans do not include TCMs for the San Joaquin Valley.

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 including the 2017 FTIP and 2014 RTP as amended. This documentation has been updated as part of this Conformity Analysis. A summary of this information is provided in Appendix D.

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

A new 2002 RACM TID Table was prepared in 2006 to address the more general RACM commitments that require additional timely implementation documentation per EPA. A brief summary of the commitment, including finite end dates if applicable, is included for each measure. The MPOs provided a status update regarding implementation in consultation with their member jurisdictions. If a specific project has been implemented, it is included in the Project TID Table under “Additional Projects Identified”. This documentation was included in the Conformity Analysis for the 2007 TIP and 2004 RTP (as amended) that was approved by FHWA in October 2006 as well as the 2015 TIP and 2014 RTP as amended. The 2002 RACM TID Table has

been updated as part of this Conformity Analysis. A summary of this information is provided in Appendix D.

D. TCM FINDINGS FOR THE TIP AND REGIONAL TRANSPORTATION PLAN

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

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

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

In May 2003, the San Joaquin Valley MPO Executive Directors committed to conduct feasibility analyses as part of each new RTP in support of the 2003 PM-10 Plan. This commitment was retained in the 2007 PM-10 Maintenance Plan. In accordance with this commitment, Kern Council of Governments undertook a process to identify and evaluate potential control measures that could be included in the 2014 RTP. The analysis of additional measures included verification of the feasibility of the measures in the PM-10 Plan BACM analysis, as well as an analysis of new PM-10 commitments from other PM-10 nonattainment areas.

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

The Local Government Control Measures considered in the PM-10 Plan BACM analysis that were considered for inclusion in the 2014 RTP included:

- Paving or Stabilizing Unpaved Roads and Alleys

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

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 2009. New PM-10 plans that have been reviewed include:

a. Puerto Rico, Municipality of Guaynabo, PM-10 Limited Maintenance Plan, submitted March 2009 (EPA adequacy issued 8/25/09). On-road fugitive dust controls include paving, street sweeping and stabilization controls.

b. Nogales, AZ PM-10 Attainment Demonstration, EPA approval notice signed 8/24/12. On-road fugitive dust controls include paving projects and capital improvement projects @ the Ports of Entry.

c. Coso Junction, CA PM-10 Maintenance Plan, dated May 17, 2010 (EPA adequacy issued 9/3/10). No transportation control measures; transportation projects “exempt”.

d. Sacramento, CA PM-10 Implementation / Maintenance Plan, dated October 28, 2010. No new control measures included; no existing on-road controls either.

e. Truckee Meadows, NV PM-10 Maintenance Plan, adopted May 2009 (EPA adequacy issued 6/2/10). On-road fugitive dust controls include sweeping and sanding; contingency measures have already been considered in SJV analysis.

f. Eagle River, AK PM-10 Maintenance Plan, adopted August 2010 (EPA adequacy issued 5/14/12). On-road fugitive dust controls includes paving, winter traction sand; contingency measures include sweeping.

Based on review of commitments from other PM-10 nonattainment areas that have been developed since the previous RTP, no additional on-road fugitive dust controls measures are available for consideration.

Based on consultation with CARB and the Air District, Kern Council of Governments considered priority funding allocations in the 2014 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. 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.

CHAPTER 5:
INTERAGENCY CONSULTATION

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

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

A. INTERAGENCY CONSULTATION

Consultation is generally conducted through the San Joaquin Valley Interagency Consultation Group (combination of previous Model Coordinating Committee and Programming Coordinating Group). The San Joaquin Valley Interagency Consultation (IAC) Group has been established by the Valley Transportation Planning Agency's Director's Association to provide a coordinated approach to valley transportation planning and programming (Transportation Improvement Program, Regional Transportation Plan, and Amendments), transportation conformity, climate change, and air quality (State Implementation Plan and Rules). The purpose of the group is to ensure Valley

wide coordination, communication and compliance with Federal and California Transportation Planning and Clean Air Act requirements. Each of the eight Valley MPOs and the Air District are represented. In addition, the Federal Highway Administration, Federal Transit Administration, the Environmental Protection Agency, the California Air Resources Board and Caltrans (Headquarters, District 6, and District 10) are all represented. The IAC Group meets approximately quarterly.

The boilerplate conformity document was distributed for interagency consultation on June 2, 2016. Comments received have been addressed and incorporated into this version of the analysis.

The conformity analysis for the 2017 FTIP and 2014 RTP Amendment #1 were developed in consultation with Kern Council of Governments local partner agencies, including member jurisdictions, Caltrans, and local transit agencies.

In addition to consultation with our Conformity Partners through the interagency consultation process, a proactive consultation with process with local transportation providers was also included. This consultation is governed by signed memorandums of agreement and includes the Golden Empire Transit District, City of Delano Transit, and the Consolidated Transit Services Agency. Municipal transit service providers are represented by their member agencies on the Kern COG board. The transit agencies include representation on the Regional Planning Advisory Committee (RPAC) and Transportation Technical Advisory Committees (TTAC) which provide oversight for the development of the TIP, RTP and Conformity Analysis. The transit agencies are also represented on the Social Services Technical Advisory Committee which oversees un-met transit needs. In addition to local transit, Kern COG also maintains a memorandum of agreements with both the San Joaquin Unified Air Pollution Control District (APCD) and the East Kern APCD the latter of which also has representation on the TTAC. Both agencies are also include as interagency consultation partners. Kern COG also maintains a comprehensive database of over 1,900 agency and public contacts that receive notices on meeting agendas and document availability.

The draft 2017 FTIP and 2014 RTP Amendment #1 and the corresponding Conformity Analysis was released on July 6, 2016 for a 30-day public comment period, followed by Board adoption on September 15, 2016. Federal approval is anticipated on or before December 16, 2016.

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 FTIPs/RTPs. In addition, all public comments must be addressed in writing.

All MPOs in the San Joaquin Valley have standard public involvement procedures Kern Council of Governments adopted consultation process and policy for conformity analysis includes a 30-day comment period followed by a public hearing. A public meeting is also conducted prior to adoption and all public comments are responded to in writing. The Appendices contain corresponding documentation supporting the public involvement procedures.

CHAPTER 6:
TIP AND RTP CONFORMITY

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

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

This chapter presents the results of the conformity tests, satisfying the remaining requirement of the transportation conformity regulation. Separate tests were conducted for carbon monoxide, ozone, PM-10 and PM2.5 (1997 and 2012 PM2.5 standards and 2006 24-hour PM2.5 standards). 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/NOx), PM-10 (PM-10/NOx), and PM2.5 (PM2.5/NOx) respectively, in tons per day for each of the horizon years tested.

CO:

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, 2035 and 2040 are less than the 2018 emissions budget. The TIP/RTP therefore satisfy the conformity emissions test for carbon monoxide.

Ozone:

For 8-hour ozone, the applicable conformity test is the emissions budget test, using the 2007 Ozone Plan (as revised in 2015) budgets established for ROG and NOx for an average summer (ozone) season day. EPA approved the Plan and conformity budgets (as revised in 2015) on July 8, 2016 (effective September 30, 2016). 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 therefore satisfy the conformity emissions test for volatile organic compounds and nitrogen oxides.

PM-10:

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 revisions including conformity budgets were approved by EPA on July 8, 2016 (effective September 30, 2016). The modeling results for all analysis years indicate that the PM-10 emissions predicted for the "Build" scenarios are less than the emissions budget for 2020. The TIP/RTP therefore satisfy the conformity emissions tests for PM-10.

1997 PM2.5 Standards:

At this time, EPA has not finalized the approval of the 2015 PM2.5 Plan, thus 2008 PM2.5 Plan budgets will continue to be used in this conformity analysis. For 1997 PM2.5 Standards, the applicable conformity test is the emission budget test, using budgets established in the 2008 PM2.5 Plan (as revised in 2011). EPA approved the 2008 PM2.5 Plan (as revised in 2011) November 9, 2011 (effective January 9, 2012). The modeling results for all analysis years indicate that the on-road vehicle PM2.5 and NOx emissions predicted for the "Build" scenarios are less than the emissions budget. The TIP/RTP therefore satisfy the conformity emissions test for PM2.5 and nitrogen oxides.

2006 PM2.5 Standard:

On January 20, 2016 EPA published *Designation of Areas for Air Quality Planning Purposes; California; San Joaquin Valley; Reclassification as Serious Nonattainment for the 2006 PM2.5 NAAQS* finalizing SJV reclassification to Serious Nonattainment effective February 19, 2016. Then on August 16, 2016 EPA approved 2012 PM2.5 Plan (effective September 30, 2016). For the 2006 PM2.5 standard, the applicable conformity test is the emission budget test, using adequate budgets established in the 2012 PM2.5 Plan (as revised in 2015). The modeling results for all analysis years indicate that the on-road vehicle PM2.5 and NOx emissions predicted for the "Build" scenarios are less than the emissions budget. The TIP/RTP therefore satisfy the conformity emissions test for PM2.5 and nitrogen oxides.

2012 PM2.5 Standard:

In accordance with Section 93.109(i)(3), areas designated nonattainment for the 2012 PM2.5 standards are required to use existing adequate or approved SIP motor vehicle emissions budgets for a prior annual PM2.5 standard until budgets for the 2012 PM2.5 standards are either found adequate or approved. For the 2012 PM2.5 standards, the applicable conformity test is the emissions budget test, using the 2008 PM2.5 Plan (1997 standard) budgets. EPA approved the 2008 PM2.5 Plan (as revised in 2011) November 9, 2011 (effective January 9, 2012). The modeling results for all analysis years indicate that the on-road vehicle PM2.5 and NOx emissions predicted for the "Build" scenarios are less than the emissions budget. The TIP/RTP therefore satisfy the conformity emissions test for PM2.5 and nitrogen oxides.

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 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 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 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 Conformity Analysis for the 2017 FTIP and the 2014 RTP Amendment #1 is supported.

Table 6-1:
Conformity Results Summary

2017 FTIP Conformity Results Summary -- Kern (SJV)

Pollutant	Scerio	Emissions Total	DID YOU PASS?
		CO (tons/day)	CO
Carbon Monoxide	2010 Budget	180	
	2017	41	YES
	2018 Budget	180	
	2018	38	YES
	2025	24	YES
	2035	19	YES
	2040	18	YES

		ROG (tons/day)	NOx (tons/day)	ROG	NOx
Ozone	2017 Budget	6.9	26.8		
	2017	6.7	26.5	YES	YES
	2020 Budget	5.7	22.4		
	2020	5.5	22.1	YES	YES
	2023 Budget	4.8	12.9		
	2023	4.6	12.6	YES	YES
	2031	3.9	10.6	YES	YES
	2040	3.4	10.2	YES	YES

		PM-10 (tons/day)	NOx (tons/day)	PM-10	NOx
PM-10	2020 Budget	7.4	23.3		
	2020	7.4	23.3	YES	YES
	Adjusted 2020 Budget	7.6	23.0		
	2025	7.6	12.8	YES	YES
	Adjusted 2020 Budget	10.1	19.3		
	2035	10.1	10.9	YES	YES
	Adjusted 2020 Budget	8.9	21.1		
	2040	8.9	10.7	YES	YES

		PM2.5 (tons/day)	NOx (tons/day)	PM2.5	NOx
1997 24-Hour and 1997 & 2012 Annual PM2.5 Standards	2014 Budget	1.2	43.8		
	2017	0.8	28.0	**YES**	**YES**
	2014 Budget	1.2	43.8		
	2018	0.8	26.5	**YES**	**YES**
	2014 Budget	1.2	43.8		
	2021	0.7	21.3	**YES**	**YES**
	2014 Budget	1.2	43.8		
	2025	0.7	12.8	**YES**	**YES**
	2014 Budget	1.2	43.8		
	2035	0.8	10.9	**YES**	**YES**
	2014 Budget	1.2	43.8		
	2040	0.8	10.7	**YES**	**YES**

		PM2.5 (tons/day)	NOx (tons/day)	PM2.5	NOx
2006 PM2.5 Winter 24-Hour Standard	2017 Budget	0.8	28.8		
	2017	0.8	28.7	**YES**	**YES**
	2017 Budget	0.8	28.8		
	2019	0.8	25.6	**YES**	**YES**
	2017 Budget	0.8	28.8		
	2025	0.7	13.1	**YES**	**YES**
	2017 Budget	0.8	28.8		
	2035	0.8	11.1	**YES**	**YES**
	2017 Budget	0.8	28.8		
	2040	0.8	10.9	**YES**	**YES**

2017 FTIP Conformity Results Summary -- Kern (MD)

		ROG (tons/day)	NOx (tons/day)	ROG	NOx
Ozone	2008 Budget	5.0	18.0		
	2017	1.3	4.2	**YES**	**YES**
	2025	0.8	1.9	**YES**	**YES**
	2035	0.6	1.5	**YES**	**YES**
	2040	0.6	1.7	**YES**	**YES**

2017 FTIP Conformity Results Summary -- Kern (Indian Wells Valley)

		PM-10 (tons/day)	PM-10
PM-10	2013 Budget	1.7	
	2017	1.0	**YES**
	2013 Budget	1.7	
	2025	0.9	**YES**
	2013 Budget	1.7	
	2035	0.9	**YES**
	2013 Budget	1.7	
	2040	0.9	**YES**

REFERENCES

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EPA, 2004a. *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, 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.

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

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APPENDIX A

CONFORMITY CHECKLIST

CONFORMITY ANALYSIS DOCUMENTATION

FHWA Checklist for MPO TIPs/RTPs

June 27, 2005

40 CFR	Criteria	Page	Comments
§93.102	Document the applicable pollutants and precursors for which EPA designates the area as nonattainment or maintenance. Describe the nonattainment or maintenance area and its boundaries.	Ch. 1 p. 12-13	
§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. 1-2	
§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.	App. B	
§93.108	Document that the TIP/RTP is financially constrained (23 CFR 450).	E.S. p. 1-2	

40 CFR	Criteria	Page	Comments
§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 p. 8,12 Ch.2,p. 32-47	
§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. 12-31	
§93.110 (a, b)	Document the use of latest planning assumptions (source and year) at the "time the conformity analysis begins," including current and future population, employment, travel and congestion. Document the use of the most recent available vehicle registration data. Document the date upon which the conformity analysis was begun.	Ch. 2, p. 32-47	
USDOT/EPA guidance	Document the use of planning assumptions less than five years old. If unable, include written justification for the use of older data. (1/18/02)	Ch. p. 2, 32	
§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. 38-44	
§93.111	Document the use of the latest emissions model approved by EPA.	Ch.3, p. 52-60	
§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. 71-73	
§93.113	Document timely implementation of all TCMs in approved SIPs. Document that implementation is consistent with schedules in the applicable SIP and	Ch. 4, p. 61-68 App. D	

40 CFR	Criteria	Page	Comments
	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.		
§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]	For areas with SIP budgets: Document that emissions from the transportation network for each applicable pollutant and precursor, including projects in any associated donut area that are in the Statewide TIP and regionally significant non-Federal projects, are consistent with any adequate or approved motor vehicle emissions budget for all pollutants and precursors in applicable SIPs.	Ch.1, p. 12-31	
§93.118 (b)	Document for which years consistency with motor vehicle emissions budgets must be shown.	Ch. 2, p. 47	
§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. 1, p. 25-31	
§93.119[1]	For areas without applicable SIP budgets: Document that emissions from the transportation network for each applicable pollutant and precursor, including projects in any associated donut area that are in the Statewide TIP and regionally significant non-Federal projects, are consistent with the requirements of the "Action/Baseline", "Action/1990" and/or "Action/2002" interim emissions tests as applicable.	NA	
§93.119 (g)	Document the use of the appropriate analysis years in the regional emissions analysis for areas without applicable SIP budgets.	NA	
§93.119 (h,i)	Document how the baseline and action scenarios are defined for each analysis year.	Ch.1, p. 25-31	

40 CFR	Criteria	Page	Comments
§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	App B	
§93.122 (a)(2, 3)	Document that only emission reduction credits from TCMs on schedule have been included, or that partial credit has been taken for partially implemented TCMs. Document that the regional emissions analysis only includes emissions credit for projects, programs, or activities that require regulatory action if: the regulatory action has been adopted; the project, program, activity or a written commitment is included in the SIP; EPA has approved an opt-in to the program, EPA has promulgated the program, or the Clean Air Act requires the program (indicate applicable date). Discuss the implementation status of these programs and the associated emissions credit for each analysis year.	Ch.4, p. 61-68	
§93.122 (a)(4,5,6)	For non-regulatory 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, p. 32-47	
§93.122 (b)(1)(ii) [2]	Document the land use, population, employment, and other network-based travel model assumptions.	Ch.2, p. 37	

40 CFR	Criteria	Page	Comments
§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, p. 32-47	
§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 final assigned volumes.	Ch.2, p. 38	
§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, p. 38	
§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, p. 38	
§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, p. 44	
§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, p. 44	
§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	Ch.2, p. 38	
§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. 54-60	
§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	

40 CFR	Criteria	Page	Comments
§93.126, §93.127, §93.128	Document all projects in the TIP/RTP that are exempt from conformity requirements or exempt from the regional emissions analysis. Indicate the reason for the exemption (Table 2, Table 3, traffic signal synchronization) and that the interagency consultation process found these projects to have no potentially adverse emissions impacts.	App B	

[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

TRANPORTATION PROJECT LISTING

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

									Year number of lanes modeled (each direction)									
SORT KEY	AGENCY	AIR BASIN	STREET	BEGIN	END	Type of Imprvmnt	RTP PROJECT ID/Other ID	COST (RTP, Other)	17	18	19	20	21	23	25	31	35	40
1	**Bakersfield**																	
2	Bakersfield	SJV	7th STANDARD RD	SANTA FE	ZERKER RD	Add Lanes	KER08RTP005	$57,000,000	2	2	2	2	2	2	2	2	2	2
3	Bakersfield	SJV	7th STANDARD RD	JEWETTA	VERDUGO	Add Lanes	KER08RTP005	$57,000,000	2	2	2	2	2	2	2	2	2	2
4	Bakersfield	SJV	7th STANDARD RD	VERDUGO	CALLOWAY	Add Lanes	KER08RTP005	$57,000,000	2	2	2	2	2	2	2	2	2	2
5	Bakersfield	SJV	AIRPORT	STATE RD	SR99	Add Lanes	Local		2	2	2	3	3	3	3	3	3	3
6	Bakersfield	SJV	ALFRED HARRELL	MT VERNON	CHINA GRADE LOOP				2	2	2	2	2	2	2	2	2	2
7	Bakersfield	SJV	ALFRED HARRELL	CHINA GRADE LOOP	FAIRFAX				2	2	2	2	2	2	2	3	3	3
8	Bakersfield	SJV	ALFRED HARRELL	FAIRFAX	WEST END HARTPARK	Add Lanes	Local		2	2	2	2	2	2	2	2	2	2
9	Bakersfield	SJV	ALFRED HARRELL	WEST END HARTPARK	LAKE MING	Add Lanes	Local		1	1	1	1	1	1	1	2	2	2
10	Bakersfield	SJV	ALFRED HARRELL	LAKE MING	PALADINO	Add Lanes	Local		1	1	1	1	1	1	1	2	2	2
11	Bakersfield	SJV	ALFRED HARRELL	PALADINO	SR178	Add Lanes	Local		1	1	1	1	1	1	1	2	2	2
12	Bakersfield	SJV	ALLEN	SR58	BRIMHALL	Add Lanes	Local		3	3	3	3	3	3	3	3	3	3
13	Bakersfield	SJV	ALLEN	BRIMHALL	WESTSIDE PARKWAY	Add Lanes		$7,000,000	3	3	3	3	3	3	3	3	3	3
14	Bakersfield	SJV	ALLEN	WESTSIDE PARKWAY	STOCKDALE	Add Lanes		$7,000,000	2	2	2	2	2	2	2	2	2	2
15	Bakersfield	SJV	ALLEN	STOCKDALE	MING AVE			$124,972	2	2	2	2	2	2	2	2	2	2
16	Bakersfield	SJV	ALLEN	MING AVE	WHITE LN				1/2	1/2	1/2	1/2	1/2	1/2	1/2	3	3	3
17	Bakersfield	SJV	ALLEN	WHITE LN	CAMPUS PARK				0	1	1	1	1	1	1	2	2	2
18	Bakersfield	SJV	ALLEN	CAMPUS PARK	PANAMA LN				0	0	0	0	1	1	1	2	2	2
19	Bakersfield	SJV	ALLEN	PANAMA LN	SR 119				0	0	0	0	1	1	1	1	1	1
20	Bakersfield	SJV	ASHE RD	PANAMA LN	SR 119				1	1	1	2	2	2	2	2	2	2
21	Bakersfield	SJV	BRIMHALL RD	Rudd Road	RENFRO RD				0	0	0	2	2	2	2	2	2	2
22	Bakersfield	SJV	BRIMHALL RD	RENFRO RD	ALLEN				1	1	1	2	2	2	2	2	2	2
23	Bakersfield	SJV	BUENA VISTA RD	WHITE LN	HARRIS RD				2	2	2	2	2	2	2	2	2	2
24	Bakersfield	SJV	BUENA VISTA RD	HARRIS RD	PANAMA LN				2	2	2	2	2	2	2	2	2	2
25	Bakersfield	SJV	BUENA VISTA RD	PANAMA LN	SR 119				1	2	2	2	2	2	2	2	2	2
26	Bakersfield	SJV	BUENA VISTA RD	SR 119	CURNOW RD				1	1	1	1	1	1	1	2	2	2
27	Bakersfield	SJV	CALLOWAY	ETCHART	SNOW	Add Lanes	Local		1	1	1	1	2	2	2	2	2	2
28	Bakersfield	SJV	CALLOWAY	SNOW	NORRIS				2	2	2	2	2	2	3	3	3	3
29	Bakersfield	SJV	CALLOWAY	NORRIS	OLIVE				3/2	3/2	3/2	3/2	3	3	3	3	3	3
30	Bakersfield	SJV	CALLOWAY	OLIVE	NORIEGA				3	3	3	3	3	3	3	3	3	3
31	Bakersfield	SJV	CALLOWAY	NORIEGA	HAGEMAN				3	3	3	3	3	3	3	3	3	3
32	Bakersfield	SJV	CALLOWAY	HAGEMAN	MEACHAM				3	3	3	3	3	3	3	3	3	3
33	Bakersfield	SJV	CALLOWAY	MEACHAM	SR58				3	3	3	3	3	3	3	3	3	3
34	Bakersfield	SJV	CALLOWAY	BRIMHALL	WESTSIDE PARKWAY	Add Lanes	Local		3	3	3	3	3	3	3	3	3	3
35	Bakersfield	SJV	CALLOWAY	WESTSIDE PARKWAY	STOCKDALE				3	3	3	3	3	3	3	3	3	3
36	Bakersfield	SJV	CALIFORNIA	STOCKDALE	MOHAWK				3	3	3	3	3	3	3	3	3	3
37	Bakersfield	SJV	CALIFORNIA	MOHAWK	REAL				3	3	3	3	3	3	3	3	3	3
38	Bakersfield	SJV	CALIFORNIA	REAL	SR99				3	3	3	3	3	3	3	3	3	3
39	Bakersfield	SJV	CALIFORNIA	SR99	OAK				3	3	3	3	3	3	3	3	3	3

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

									Year number of lanes modeled (each direction)									
SORT KEY	AGENCY	AIR BASIN	STREET	BEGIN	END	Type of Imprvmnt.	RTP PROJECT ID/Other ID	COST (RTP, Other)	17	18	19	20	21	23	25	31	35	40
40	Bakersfield	SJV	CALIFORNIA	OAK	A ST				3/2	3/2	3/2	3/2	3/2	3/2	3/2	3/2	3	3
41	Bakersfield	SJV	CALIFORNIA	A ST	H ST				3	3	3	3	3	3	3	3	3	3
42	Bakersfield	SJV	CALIFORNIA	H ST	CHESTER				3	3	3	3	3	3	3	3	3	3
43	Bakersfield	SJV	CALIFORNIA	CHESTER	L ST				3	3	3	3	3	3	3	3	3	3
44	Bakersfield	SJV	CALIFORNIA	L ST	N ST				3	3	3	3	3	3	3	3	3	3
45	Bakersfield	SJV	CALIFORNIA	N ST	Q ST				3	3	3	3	3	3	3	3	3	3
46	Bakersfield	SJV	CALIFORNIA	Q ST	UNION				3	3	3	3	3	3	3	3	3	3
47	Bakersfield	SJV	CALIFORNIA	UNION	BAKER				3	3	3	3	3	3	3	3	3	3
48	Bakersfield	SJV	CALIFORNIA	BAKER	KING				3	3	3	3	3	3	3	3	3	3
49	Bakersfield	SJV	CALIFORNIA	KING	BEALE				3	3	3	3	3	3	3	3	3	3
50	Bakersfield	SJV	CALIFORNIA	BEALE	HALEY				3	3	3	3	3	3	3	3	3	3
51	Bakersfield	SJV	CALIFORNIA	HALEY	WASHINGTON				2	2	2	2	2	2	2	2	2	2
52	Bakersfield	SJV	CASA LOMA	UNION	MADISON				1	1	1	1	2	2	2	2	2	2
53	Bakersfield	SJV	CASA LOMA	MADISON	COTTONWOOD				1	1	1	1	2	2	2	2	2	2
54	Bakersfield	SJV	CASA LOMA	COTTONWOOD	WASHINGTON				1	1	1	1	1	1	1	2	2	2
55	Bakersfield	SJV	CASA LOMA	WASHINGTON	FAIRFAX				0	0	0	0	0	0	0	2	2	2
56	Bakersfield	SJV	CHESTER	34TH ST	COLUMBUS				2	2	2	2	2	2	2	2	2	2
57	Bakersfield	SJV	CHESTER	30TH ST	34TH ST				2	2	2	2	2	2	2	2	2	2
58	Bakersfield	SJV	CHESTER	SR178	30TH ST				2	2	2	2	2	2	2	2	2	2
59	Bakersfield	SJV	COFFEE	7TH STANDARD	ETCHART	Add Lanes	Local		1	1	1	2	2	2	2	3	3	3
60	Bakersfield	SJV	COFFEE	ETCHART	SNOW	Add Lanes	Local		1	1	1	2	2	2	2	3	3	3
61	Bakersfield	SJV	COFFEE	NORRIS	OLIVE	Add Lanes	Local		3/2	3/2	3/2	3/2	3/2	3/2	3/2	3	3	3
62	Bakersfield	SJV	COFFEE	OLIVE	HAGEMAN				3	3	3	3	3	3	3	3	3	3
63	Bakersfield	SJV	COFFEE	HAGEMAN	MEANY				3	3	3	3	3	3	3	3	3	3
64	Bakersfield	SJV	COFFEE	MEANY	DOWNING				3	3	3	3	3	3	3	3	3	3
65	Bakersfield	SJV	COFFEE	DOWNING	GRANITE FALLS				3	3	3	3	3	3	3	3	3	3
66	Bakersfield	SJV	COFFEE	GRANITE FALLS	SR58				3	3	3	3	3	3	3	3	3	3
67	Bakersfield	SJV	COFFEE	SR58	BRIMHALL				3	3	3	3	3	3	3	3	3	3
68	Bakersfield	SJV	COFFEE	BRIMHALL	WESTSIDE PARKWAY				3	3	3	3	3	3	3	3	3	3
69	Bakersfield	SJV	COFFEE	WESTSIDE PARKWAY	TRUXTUN				3	3	3	3	3	3	3	3	3	3
70	Bakersfield	SJV	COFFEE	TRUXTUN	STOCKDALE				3	3	3	3	3	3	3	3	3	3
71	Bakersfield	SJV	CENTENNIAL CORRIDOR	SR 58	WESTSIDE PARKWAY	New Freeway	KER08RTP020	$698,000	0	0	3	3	3	3	3	3	3	3
72	Bakersfield	SJV	COTTONWOOD	SR 58	PANAMA RD				1	1	1	1	1	1	1	2	2	2
73	Bakersfield	SJV	FAIRFAX RD	ALFRED HARRELL HIGHWAY	PALADINO DR				1	1	1	1	1	1	2	2	2	2
74	Bakersfield	SJV	FAIRFAX RD	REDBANK RD	PANAMA LN				1	1	1	1	1	1	1	2	2	2
75	Bakersfield	SJV	FAIRVIEW RD	MONITOR ST	SOUTH UNION AVE				1	1	1	1	1	1	1	2	2	2
76	Bakersfield	SJV	GOSFORD	SR119	MC KEE	Add Lanes	Local		1	1	1	2	2	2	2	2	2	2
77	Bakersfield	SJV	GOSFORD	MC KEE	MC CUTCHEN	Add Lanes	Local		1	1	1	2	2	2	2	2	2	2
78	Bakersfield	SJV	GOSFORD	MC CUTCHEN	PANAMA LN	Add Lanes	Local		1	1	1	2	2	2	2	2	2	2

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

									Year number of lanes modeled (each direction)									
SORT KEY	AGENCY	AIR BASIN	STREET	BEGIN	END	Type of Imprvmnt.	RTP PROJECT ID/Other ID	COST (RTP, Other)	17	18	19	20	21	23	25	31	35	40
79	Bakersfield	SJV	GOSFORD	PANAMA LN	HARRIS				3	3	3	3	3	3	3	3	3	3
80	Bakersfield	SJV	GOSFORD	HARRIS	PACHECO				3	3	3	3	3	3	3	3	3	3
81	Bakersfield	SJV	GOSFORD	PACHECO	DISTRICT				3	3	3	3	3	3	3	3	3	3
02	Bakersfield	SJV	GOSFORD	DISTRICT	WHITE LN				3	3	3	3	3	3	3	3	3	3
83	Bakersfield	SJV	GOSFORD	WHITE LN	S LAURELGLEN				3	3	3	3	3	3	3	3	3	3
84	Bakersfield	SJV	GOSFORD	S LAURELGLEN	N LAURELGLEN				3	3	3	3	3	3	3	3	3	3
85	Bakersfield	SJV	GOSFORD	N LAURELGLEN	MING				3	3	3	3	3	3	3	3	3	3
86	Bakersfield	SJV	GOSFORD	MING	CAMINO MEDIA				3	3	3	3	3	3	3	3	3	3
87	Bakersfield	SJV	GOSFORD	CAMINO MEDIA	STOCKDALE				3	3	3	3	3	3	3	3	3	3
88	Bakersfield	SJV	HAGEMAN	ALLEN	OLD FARM				3/2	3/2	3/2	3/2	3	3	3	3	3	3
89	Bakersfield	SJV	HAGEMAN	OLD FARM	JEWETTA				2	2	2	2	3	3	3	3	3	3
90	Bakersfield	SJV	HAGEMAN	JEWETTA	VERDUGO				2/1	2/1	2/1	2/1	3	3	3	3	3	3
91	Bakersfield	SJV	HAGEMAN	VERDUGO	CALLOWAY				3	3	3	3	3	3	3	3	3	3
92	Bakersfield	SJV	HAGEMAN	CALLOWAY	MAIN PLAZA				3	3	3	3	3	3	3	3	3	3
93	Bakersfield	SJV	HAGEMAN	MAIN PLAZA	RIVERLAKES				3	3	3	3	3	3	3	3	3	3
94	Bakersfield	SJV	HAGEMAN	RIVERLAKES	COFFEE				3	3	3	3	3	3	3	3	3	3
95	Bakersfield	SJV	HAGEMAN	COFFEE	PATTON				3	3	3	3	3	3	3	3	3	3
96	Bakersfield	SJV	HAGEMAN	PATTON	FRUITVALE				3	3	3	3	3	3	3	3	3	3
97	Bakersfield	SJV	HAGEMAN	FRUITVALE	MOHAWK				3	3	3	3	3	3	3	3	3	3
98	Bakersfield	SJV	HAGEMAN	MOHAWK	KNUDSEN DR				2	2	2	2	2	2	2	2	3	3
99	Bakersfield	SJV	HAGEMAN	KNUDSEN DR	SR 99	New Ramps	KER08RTP013	$68,900,000	0	0	0	2	2	2	2	2	3	3
100	Bakersfield	SJV	MCCUTCHEN RD	BUENA VISTA	GOSFORD				1	1	1	1	1	1	2	2	2	2
101	Bakersfield	SJV	MCCUTCHEN RD	GOSFORD	STINE				1	1	1	1	2	2	2	2	2	2
102	Bakersfield	SJV	HOSKING	STINE	AKERS RD				1	1	1	2	2	2	2	2	2	2
103	Bakersfield	SJV	HOSKING	AKERS RD	WIBLE RD				2	2	2	2	2	2	2	2	2	2
104	Bakersfield	SJV	HOSKING	WIBLE RD	SO. H ST	Interchange I	KER08RTP009	$31,000,000	2	2	2	2	3	3	3	3	3	3
105	Bakersfield	SJV	HOSKING	SO. H ST	UNION				1	1	1	2	2	2	2	2	2	2
106	Bakersfield	SJV	JEWETTA AVE	SNOW	HAGEMAN				2	2	2	2	2	2	2	2	2	2
107	Bakersfield	SJV	JEWETTA AVE	HAGEMAN	MEACHAM				1	1	1	2	2	2	2	2	2	2
108	Bakersfield	SJV	MANOR	ROBERTS LN	UNION				2	2	2	2	2	2	2	2	2	2
109	Bakersfield	SJV	MASTERSON ST	ALFRED HARRELL HWY	PALADINO DR				0	0	0	2	2	2	2	2	2	2
110	Bakersfield	SJV	MASTERSON ST	PALADINO DR	SR 178				2	2	2	2	2	2	2	2	2	2
111	Bakersfield	SJV	MING AVE	WEST BELTWAY	S ALLEN				0	0	0	2	2	2	2	2	2	2
112	Bakersfield	SJV	MING AVE	S ALLEN	BUENA VISTA				2	2	2	2	2	2	2	2	2	2
113	Bakersfield	SJV	MING AVE	BUENA VISTA	GRAND LAKES				3	3	3	3	3	3	3	3	3	3
114	Bakersfield	SJV	MING AVE	GRAND LAKES	OLD RIVER RD				3	3	3	3	3	3	3	3	3	3
115	Bakersfield	SJV	MING AVE	OLD RIVER RD	HAGGIN OAKS				3	3	3	3	3	3	3	3	3	3
116	Bakersfield	SJV	MING AVE	HAGGIN OAKS	GOSFORD				3	3	3	3	3	3	3	3	3	3
117	Bakersfield	SJV	MING AVE	GOSFORD	EL PORTAL				3	3	3	3	3	3	3	3	3	3

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

									Year number of lanes modeled (each direction)									
SORT KEY	AGENCY	AIR BASIN	STREET	BEGIN	END	Type of Imprvmnt.	RTP PROJECT ID/Other ID	COST (RTP, Other)	17	18	19	20	21	23	25	31	35	40
118	Bakersfield	SJV	MING AVE	EL PORTAL	ASHE				3	3	3	3	3	3	3	3	3	3
119	Bakersfield	SJV	MING AVE	ASHE	NEW STINE				3	3	3	3	3	3	3	3	3	3
120	Bakersfield	SJV	MING AVE	NEW STINE	STINE RD				3	3	3	3	3	3	3	3	3	3
121	Bakersfield	SJV	MING AVE	STINE	AKERS				3	3	3	3	3	3	3	3	3	3
122	Bakersfield	SJV	MING AVE	AKERS	REAL				3	3	3	3	3	3	3	3	3	3
123	Bakersfield	SJV	MING AVE	REAL	WIBLE				3	3	3	3	3	3	3	3	3	3
124	Bakersfield	SJV	MING AVE	WIBLE	HUGHES LN				3	3	3	3	3	3	3	3	3	3
125	Bakersfield	SJV	MING AVE	HUGHES LN	H ST				2	2	2	2	2	2	2	2	2	2
126	Bakersfield	SJV	MING AVE	H ST	CHESTER				2	2	2	2	2	2	2	2	2	2
127	Bakersfield	SJV	MING AVE	CHESTER	P ST				2	2	2	2	2	2	2	2	2	2
128	Bakersfield	SJV	MING AVE	P ST	UNION				2	2	2	2	2	2	2	2	2	2
129	Bakersfield	SJV	MOHAWK	HAGEMAN	DOWNING				3	3	3	3	3	3	3	3	3	3
130	Bakersfield	SJV	MOHAWK	ROSEDALE	TRUXTUN	New Arterial	KER08RTP004	$377,000,000	3	3	3	3	3	3	3	3	3	3
131	Bakersfield	SJV	MOHAWK	SR 58	SR 58/Rosedale Highway 0.5 mi s/o				3	3	3	3	3	3	3	3	3	3
132	Bakersfield	SJV	MONTEREY	UNION	ALTA VISTA				3	3	3	3	3	3	3	3	3	3
133	Bakersfield	SJV	MONTEREY	ALTA VISTA	BAKER				3	3	3	3	3	3	3	3	3	3
134	Bakersfield	SJV	MONTEREY	BAKER	BEALE				3	3	3	3	3	3	3	3	3	3
135	Bakersfield	SJV	MONTEREY	BEALE	HALEY				3	3	3	3	3	3	3	3	3	3
136	Bakersfield	SJV	MONTEREY	HALEY	NILES				3	3	3	3	3	3	3	3	3	3
137	Bakersfield	SJV	MORNING DR	ALFRED HARRELL HWY	PALADINO DR				0	0	0	0	0	0	1	1	1	1
138	Bakersfield	SJV	MORNING DR	PALADINO DR	SR 178				1	1	1	2	2	2	2	2	2	2
139	Bakersfield	SJV	MORNING DR	SR 178	COLLEGE				1	1	1	1	1	1	1	1	1	1
140	Bakersfield	SJV	MT VERNON	COLUMBUS	SR178				2	2	2	2	2	2	2	2	2	2
141	Bakersfield	SJV	MT VERNON	SR58	BELLE TERRACE				2	2	2	2	2	2	2	2	2	2
142	Bakersfield	SJV	MT VERNON	BELLE TERRACE	CASA LOMA DR				1	1	1	1	1	1	1	2	2	2
143	Bakersfield	SJV	MT VERNON	WHITE LN/MULLER RD	PANAMA LN				0	0	0	0	0	0	0	0	1	1
144	Bakersfield	SJV	N. CHESTER	COLUMBUS	BEARDSLEY				2	2	2	2	2	2	2	2	2	2
145	Bakersfield	SJV	NEW STINE RD	WILSON	MING				3	3	3	3	3	3	3	3	3	3
146	Bakersfield	SJV	NEW STINE RD	MING	SUNDALE				3	3	3	3	3	3	3	3	3	3
147	Bakersfield	SJV	NEW STINE RD	SUNDALE	BELLE TERRACE				3	3	3	3	3	3	3	3	3	3
148	Bakersfield	SJV	NEW STINE RD	BELLE TERRACE	STOCKDALE				3	3	3	3	3	3	3	3	3	3
149	Bakersfield	SJV	NILES	UNION	ALTA VISTA				3	3	3	3	3	3	3	3	3	3
150	Bakersfield	SJV	NILES	ALTA VISTA	BAKER				3	3	3	3	3	3	3	3	3	3
151	Bakersfield	SJV	NILES	BAKER	BEALE				3	3	3	3	3	3	3	3	3	3
152	Bakersfield	SJV	NILES	BEALE	HALEY				3	3	3	3	3	3	3	3	3	3
153	Bakersfield	SJV	NILES	HALEY	MONTEREY				3	3	3	3	3	3	3	3	3	3
154	Bakersfield	SJV	OAK ST	CALIFORNIA AVE	SR 178 / 24th ST				2	2	2	2	2	2	3	3	3	3
155	Bakersfield	SJV	OLD_RIVER	STOCKDALE	CAMINO MEDIA				3	3	3	3	3	3	3	3	3	3
156	Bakersfield	SJV	OLD_RIVER	CAMINO MEDIA	MING				3	3	3	3	3	3	3	3	3	3

Appendix B - Highway Project Listing on Regionally Significant Route Segments and Year Number of Lanes Modeled																				
									Year number of lanes modeled (each direction)											
SORT KEY	AGENCY	AIR BASIN	STREET	BEGIN	END	Type of Imprvmnt.	RTP PROJECT ID/Other ID	COST (RTP, Other)	17	18	19	20	21	23	25	31	35	40
157	Bakersfield	SJV	OLD_RIVER	MING	WHITE LN				3	3	3	3	3	3	3	3	3	3
158	Bakersfield	SJV	OLD_RIVER	WHITE LN	CAMPUS PARK	Add Lanes	Local		3	3	3	3	3	3	3	3	3	3
159	Bakersfield	SJV	OLD_RIVER	CAMPUS PARK	PACHECO	Add Lanes	Local		3	3	3	3	3	3	3	3	3	3
160	Bakersfield	SJV	OLD_RIVER	PACHECO	HARRIS	Add Lanes	Local		3	3	3	3	3	3	3	3	3	3
161	Bakersfield	SJV	OLD_RIVER	HARRIS	PANAMA LN	Add Lanes	Local		2	2	2	2	2	2	2	2	2	2
162	Bakersfield	SJV	OLD_RIVER	PANAMA LN	BERKSHIRE	Add Lanes	Local		1	1	1	1	1	1	2	2	2	2
163	Bakersfield	SJV	OLD_RIVER	BERKSHIRE	MCCUTCHEN(HOSKING)	Add Lanes	Local		1	1	1	1	1	1	2	2	2	2
164	Bakersfield	SJV	OLD STINE	MING AVE	BELLE TERRACE				1	1	1	1	1	1	2	2	2	2
165	Bakersfield	SJV	OLIVE DR	RUDD RD (WEST BELTWAY)	ALLEN				1	1	1	1	1	2	2	2	2	2
166	Bakersfield	SJV	OLIVE DR	ALLEN	JEWETTA				2	2	2	2	2	2	2	2	2	2
167	Bakersfield	SJV	OSWELL	SR178	BERNARD	Add Lanes	Local		3	3	3	3	3	3	3	3	3	3
168	Bakersfield	SJV	OSWELL	BRUNDAGE	SR58				2	2	2	2	2	2	2	2	2	2
169	Bakersfield	SJV	PALADINO DR	FAIRFAX	MORNING DR				0	0	0	0	0	2	2	2	2	2
170	Bakersfield	SJV	PALADINO DR	MORNING DR	MASTERSON Street				1	1	1	1	1	1	1	2	2	2
171	Bakersfield	SJV	PALADINO DR	MASTERSON Street	ALFRED HARRELL HWY				0	0	0	0	0	0	0	1	1	1
172	Bakersfield	SJV	PANAMA_LN	ALLEN	WINDERMERE ST	Add Lanes	Local		1	1	1	1	2	2	3	3	3	3
173	Bakersfield	SJV	PANAMA_LN	WINDERMERE ST	BUENA VISTA BLVD	Add Lanes	Local		1	1	1	1	2	2	3	3	3	3
174	Bakersfield	SJV	PANAMA_LN	BUENA VISTA	MOUNTAIN VISTA	Add Lanes	Local		2	2	2	2	2	2	3	3	3	3
175	Bakersfield	SJV	PANAMA_LN	MOUNTAIN VISTA	OLD RIVER RD	Add Lanes	Local		1	2	2	2	2	2	3	3	3	3
176	Bakersfield	SJV	PANAMA_LN	OLD RIVER RD	PROGRESS	Add Lanes	Local		1	2	2	2	2	2	3	3	3	3
177	Bakersfield	SJV	PANAMA_LN	PROGRESS	GOSFORD	Add Lanes	Local		1	2	2	2	2	2	3	3	3	3
178	Bakersfield	SJV	PANAMA_LN	GOSFORD	RELIANCE	Add Lanes	Local		1/2	1/2	1/2	1/2	2	2	3	3	3	3
179	Bakersfield	SJV	PANAMA_LN	RELIANCE	ASHE	Add Lanes	Local		1/2	1/2	1/2	1/2	2	2	3	3	3	3
180	Bakersfield	SJV	PANAMA_LN	ASHE	GOLDEN GATE	Add Lanes	Local		3/2	3/2	3/2	3/2	3/2	3/2	3	3	3	3
181	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	3	3
182	Bakersfield	SJV	PANAMA_LN	STINE RD	AKERS	Add Lanes	Local		3	3	3	3	3	3	3	3	3	3
183	Bakersfield	SJV	PANAMA_LN	AKERS	WIBLE	Add Lanes	Local		3	3	3	3	3	3	3	3	3	3
184	Bakersfield	SJV	PANAMA_LN	WIBLE	SR99				3	3	3	3	3	3	3	3	3	3
185	Bakersfield	SJV	PANAMA_LN	SR99	H ST				3	3	3	3	3	3	3	3	3	3
186	Bakersfield	SJV	PANAMA_LN	H ST	MONITOR	Add Lanes	Local		2	2	2	2	2	2	3	3	3	3
187	Bakersfield	SJV	PANAMA_LN	MONITOR	UNION	Add Lanes	Local		2	2	2	2	2	2	3	3	3	3
188	Bakersfield	SJV	PANAMA_LN	UNION	COTTONWOOD				1	2	2	2	2	2	2	2	2	2
189	Bakersfield	SJV	PANAMA LN	COTTONWOOD	SR184				1	1	1	1	1	1	1	2	2	2
190	Bakersfield	SJV	PANORAMA DR	1700 FEET N COLUMBUS	UNION				2	2	2	2	2	2	2	2	2	2
191	Bakersfield	SJV	QUAIL CREEK RD	SNOW	7th STANDARD RD				0	0	0	0	0	0	2	2	2	2
192	Bakersfield	SJV	REAL RD	STOCKDALE	SR58				2	2	2	2	2	2	2	2	2	2
193	Bakersfield	SJV	RENFRO RD	7th STANDARD RD	OLIVE DR				0	0	0	0	0	0	0	1	1	1
194	Bakersfield	SJV	RENFRO RD	OLIVE DR	REINA RD				0	0	0	0	0	0	1	1	1	1
195	Bakersfield	SJV	RENFRO RD	JOHNSON RD	STOCKDALE HWY				1	1	1	2	2	2	2	2	2	2

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

									Year number of lanes modeled (each direction)									
SORT KEY	AGENCY	AIR BASIN	STREET	BEGIN	END	Type of Imprvmnt.	RTP PROJECT ID/Other ID	COST (RTP, Other)	17	18	19	20	21	23	25	31	35	40
196	Bakersfield	SJV	SANTA FE WAY	RUDD RD (West Beltway)	HAGEMAN RD				1	1	1	1	1	1	1	2	2	2
197	Bakersfield	SJV	SNOW RD	RENFRO RD	ALLEN				1	1	1	1	1	1	1	2	2	2
198	Bakersfield	SJV	SNOW RD	JEWETTA AVE	CALLOWAY DR				2/1	2/1	2/1	2/1	2/1	2/1	2	2	2	2
199	Bakersfield	SJV	SNOW RD	COFFEE RD	FRUITVALE AVE				1	1	1	1	1	1	2	2	2	2
200	Bakersfield	SJV	SO.CHESTER	UNION	PLANZ RD				2	2	2	2	2	2	2	2	2	2
201	Bakersfield	SJV	SO.CHESTER	PLANZ RD	WILSON				2	2	2	2	2	2	2	2	2	2
202	Bakersfield	SJV	SO.CHESTER	MING	BELLE TERRACE				2	2	2	2	2	2	2	2	2	2
203	Bakersfield	SJV	SO.CHESTER	BELLE TERRACE	SR58				2	2	2	2	2	2	2	2	2	2
204	Bakersfield	SJV	SO.CHESTER	SR58	BRUNDAGE				2	2	2	2	2	2	2	2	2	2
205	Bakersfield	SJV	SO.CHESTER	BRUNDAGE	4TH ST				2	2	2	2	2	2	2	2	2	2
206	Bakersfield	SJV	SO.CHESTER	4TH ST	CALIFORNIA				2	2	2	2	2	2	2	2	2	2
207	Bakersfield	SJV	SO.CHESTER	CALIFORNIA	TRUXTUN				2	2	2	2	2	2	2	2	2	2
208	Bakersfield	SJV	SO.CHESTER	TRUXTUN	10TH ST				2	2	2	2	2	2	2	2	2	2
209	Bakersfield	SJV	SO.CHESTER	18TH ST	21ST ST				2	2	2	2	2	2	2	2	2	2
210	Bakersfield	SJV	SO.CHESTER	21ST ST	SR178				2	2	2	2	2	2	2	2	2	2
211	Bakersfield	SJV	SO. H ST	ARVIN-EDSION CANAL	HOSKING				2	2	2	2	2	2	2	2	2	2
212	Bakersfield	SJV	SO. H ST	HOSKING	SR119				1	1	1	1	1	1	1	2	2	2
213	Bakersfield	SJV	STINE RD	WILSON	PLANZ RD				3	3	3	3	3	3	3	3	3	3
214	Bakersfield	SJV	STINE RD	PLANZ RD	WHITE LN				3	3	3	3	3	3	3	3	3	3
215	Bakersfield	SJV	STINE RD	WHITE LN	DISTRICT				3	3	3	3	3	3	3	3	3	3
216	Bakersfield	SJV	STINE RD	DISTRICT	PACHECO				3	3	3	3	3	3	3	3	3	3
217	Bakersfield	SJV	STINE RD	PACHECO	HARRIS				3	3	3	3	3	3	3	3	3	3
218	Bakersfield	SJV	STINE RD	HARRIS	PANAMA LN				3	3	3	3	3	3	3	3	3	3
219	Bakersfield	SJV	STINE RD	PANAMA LN	BERKSHIRE				2	2	2	2	2	2	2	2	2	2
220	Bakersfield	SJV	STINE RD	BERKSHIRE	HOSKING				2	2	2	2	2	2	2	2	2	2
221	Bakersfield	SJV	STINE RD	HOSKING	MC KEE				2	2	2	2	2	2	2	2	2	2
222	Bakersfield	SJV	STINE RD	MC KEE	SR119				2	2	2	2	2	2	2	2	2	2
223	Bakersfield	SJV	STOCKDALE	SR 43	NORD				1	1	1	1	1	1	1	2	2	2
224	Bakersfield	SJV	STOCKDALE	NORD	WEGIS	New Freeway	KER08RTP020	$698,000,000	2	2	2	2	2	2	2	3	3	3
225	Bakersfield	SJV	STOCKDALE	WEGIS	HEATH	New Freeway	KER08RTP020	$698,000,000	2	2	2	2	2	2	2	3	3	3
226	Bakersfield	SJV	STOCKDALE	HEATH	CLAUDIA AUTUMN DR	New Freeway	KER08RTP020	$698,000,000	1	1	1	2	2	2	2	2	2	2
227	Bakersfield	SJV	STOCKDALE	CLAUDIA AUTUMN DR	RENFRO	New Freeway	KER08RTP020	$698,000,000	1	1	1	2	2	2	2	2	2	2
228	Bakersfield	SJV	STOCKDALE	RENFRO	ALLEN				3	3	3	3	3	3	3	3	3	3
229	Bakersfield	SJV	STOCKDALE	ALLEN	JEWETTA				3	3	3	3	3	3	3	3	3	3
230	Bakersfield	SJV	STOCKDALE	JEWETTA	BUENA VISTA BLVD				3	3	3	3	3	3	3	3	3	3
231	Bakersfield	SJV	STOCKDALE	BUENA VISTA	CALLOWAY				3	3	3	3	3	3	3	3	3	3
232	Bakersfield	SJV	STOCKDALE	CALLOWAY	COFFEE				3	3	3	3	3	3	3	3	3	3
233	Bakersfield	SJV	STOCKDALE	COFFEE	ASHE				3	3	3	3	3	3	3	3	3	3
234	Bakersfield	SJV	STOCKDALE	ASHE	CALIFORNIA				3	3	3	3	3	3	3	3	3	3

Appendix B - Highway Project Listing on Regionally Significant Route Segments and Year Number of Lanes Modeled									Year number of lanes modeled (each direction)									
SORT KEY	AGENCY	AIR BASIN	STREET	BEGIN	END	Type of Imprvmnt.	RTP PROJECT ID/Other ID	COST (RTP, Other)	17	18	19	20	21	23	25	31	35	40
235	Bakersfield	SJV	STOCKDALE	CALIFORNIA	MONTCLAIR				3	3	3	3	3	3	3	3	3	3
236	Bakersfield	SJV	STOCKDALE	MONTCLAIR	STINE RD				3	3	3	3	3	3	3	3	3	3
237	Bakersfield	SJV	STOCKDALE	STINE	REAL				3	3	3	3	3	3	3	3	3	3
238	Bakersfield	SJV	STOCKDALE	REAL	SR99				3	3	3	3	3	3	3	3	3	3
239	Bakersfield	SJV	STOCKDALE	SR99	OAK				3	3	3	3	3	3	3	3	3	3
240	Bakersfield	SJV	TRUXTUN AVE	OAK	BEECH	Add Lanes	Local		2	2	2	2	2	2	2	2	3	3
241	Bakersfield	SJV	TRUXTUN AVE	BEECH	PINE ST	Add Lanes	Local		2	2	2	2	2	2	2	2	3	3
242	Bakersfield	SJV	TRUXTUN AVE	PINE	B ST	Add Lanes	Local		2	2	2	2	2	2	2	2	3	3
243	Bakersfield	SJV	TRUXTUN AVE	B ST	F ST	Add Lanes	Local		2	2	2	2	2	2	2	2	3	3
244	Bakersfield	SJV	TRUXTUN AVE	F ST	H ST	Add Lanes	Local		2	2	2	2	2	2	2	2	3	3
245	Bakersfield	SJV	TRUXTUN AVE	H ST	CHESTER				2	2	2	2	2	2	2	2	2	2
246	Bakersfield	SJV	TRUXTUN AVE	CHESTER	M ST				3	3	3	3	3	3	3	3	3	3
247	Bakersfield	SJV	TRUXTUN AVE	M ST	N ST				3	3	3	3	3	3	3	3	3	3
248	Bakersfield	SJV	TRUXTUN AVE	N ST	Q ST				3	3	3	3	3	3	3	3	3	3
249	Bakersfield	SJV	TRUXTUN AVE	Q ST	UNION				3	3	3	3	3	3	3	3	3	3
250	Bakersfield	SJV	UNION	MANOR	COLUMBUS	Add Lanes	Local		3	3	3	3	3	3	3	3	3	3
251	Bakersfield	SJV	UNION	COLUMBUS	34TH ST				3	3	3	3	3	3	3	3	3	3
252	Bakersfield	SJV	UNION	34TH ST	30TH ST				3	3	3	3	3	3	3	3	3	3
253	Bakersfield	SJV	UNION	30TH ST	NILES				3	3	3	3	3	3	3	3	3	3
254	Bakersfield	SJV	UNION	NILES	MONTEREY				3	3	3	3	3	3	3	3	3	3
255	Bakersfield	SJV	UNION	MONTEREY	KENTUCKY				3	3	3	3	3	3	3	3	3	3
256	Bakersfield	SJV	UNION	KENTUCKY	SR204				3	3	3	3	3	3	3	3	3	3
257	Bakersfield	SJV	UNION	SR204	21ST ST				3	3	3	3	3	3	3	3	3	3
258	Bakersfield	SJV	UNION	21ST ST	18TH ST				3	3	3	3	3	3	3	3	3	3
259	Bakersfield	SJV	UNION	18TH ST	TRUXTUN				3	3	3	3	3	3	3	3	3	3
260	Bakersfield	SJV	UNION	TRUXTUN	CALIFORNIA				3	3	3	3	3	3	3	3	3	3
261	Bakersfield	SJV	UNION	CALIFORNIA	4TH ST				3	3	3	3	3	3	3	3	3	3
262	Bakersfield	SJV	UNION	4TH ST	BRUNDAGE				3	3	3	3	3	3	3	3	3	3
263	Bakersfield	SJV	UNION	BRUNDAGE	SR58				3	3	3	3	3	3	3	3	3	3
264	Bakersfield	SJV	UNION	SR58	BELLE TERRACE	Add Lanes	Local		3	3	3	3	3	3	3	3	3	3
265	Bakersfield	SJV	UNION	MING	WILSON	Add Lanes	Local		2	2	2	2	2	2	3	3	3	3
266	Bakersfield	SJV	UNION	WILSON	PLANZ	Add Lanes	Local		2	2	2	2	2	2	3	3	3	3
267	Bakersfield	SJV	UNION	PLANZ	CHESTER	Add Lanes	Local		2	2	2	2	2	2	3	3	3	3
268	Bakersfield	SJV	UNION	CHESTER	WHITE LN	Add Lanes	Local		2	2	2	2	2	2	3	3	3	3
269	Bakersfield	SJV	UNION	PACHECO	FAIRVIEW RD	Add Lanes	Local		2	2	2	2	2	2	2	3	3	3
270	Bakersfield	SJV	UNION	FAIRVIEW RD	PANAMA LN	Add Lanes	Local		2	2	2	2	2	2	2	3	3	3
271	Bakersfield	SJV	UNION	PANAMA LN	BERKSHIRE	Add Lanes	Local		2	2	2	2	2	2	2	3	3	3
272	Bakersfield	SJV	UNION	BERKSHIRE	HOSKING	Add Lanes	Local		2	2	2	2	2	2	2	3	3	3
273	Bakersfield	SJV	VINELAND RD	PALADINO DR	SR 178				2	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

									Year number of lanes modeled (each direction)									
SORT KEY	AGENCY	AIR BASIN	STREET	BEGIN	END	Type of Imprvmnt.	RTP PROJECT ID/Other ID	COST (RTP, Other)	17	18	19	20	21	23	25	31	35	40
274	Bakersfield	SJV	VINELAND RD	SR 178	SR 184/Kern Canyon Road				2	2	2	2	2	2	2	2	2	2
275	Bakersfield	SJV	WHITE LN/Muller Road	COTTONWOOD RD	OSWELL				0	0	0	0	0	0	0	2	2	2
276	Bakersfield	SJV	WHITE LN	BUENA VISTA	MOUNTAIN VISTA				3	3	3	3	3	3	3	3	3	3
277	Bakersfield	SJV	WHITE LN	MOUNTAIN VISTA	OLD RIVER RD				3	3	3	3	3	3	3	3	3	3
278	Bakersfield	SJV	WHITE LN	OLD RIVER RD	PARK VIEW				3	3	3	3	3	3	3	3	3	3
279	Bakersfield	SJV	WHITE LN	PARK VIEW	PIN OAK PARK				3	3	3	3	3	3	3	3	3	3
280	Bakersfield	SJV	WHITE LN	PIN OAK PARK	GOSFORD				3	3	3	3	3	3	3	3	3	3
281	Bakersfield	SJV	WHITE LN	GOSFORD	LILY				3	3	3	3	3	3	3	3	3	3
282	Bakersfield	SJV	WHITE LN	LILY	ASHE				3	3	3	3	3	3	3	3	3	3
283	Bakersfield	SJV	WHITE LN	ASHE	WILSON				3	3	3	3	3	3	3	3	3	3
284	Bakersfield	SJV	WHITE LN	WILSON	CLOVE				3	3	3	3	3	3	3	3	3	3
285	Bakersfield	SJV	WHITE LN	CLOVE	STINE RD				3	3	3	3	3	3	3	3	3	3
286	Bakersfield	SJV	WHITE LN	STINE RD	AKERS				3	3	3	3	3	3	3	3	3	3
287	Bakersfield	SJV	WHITE LN	AKERS	WIBLE RD				3	3	3	3	3	3	3	3	3	3
288	Bakersfield	SJV	WHITE LN	WIBLE RD	SR99				3	3	3	3	3	3	3	3	3	3
289	Bakersfield	SJV	WHITE LN	SR99	HUGHES LN				3	3	3	3	3	3	3	3	3	3
290	Bakersfield	SJV	WHITE LN	HUGHES LN	H ST				3/2	3/2	3/2	3/2	3/1	3/2	3/2	3/2	3/2	3/2
291	Bakersfield	SJV	WHITE LN	H ST	MONITOR				2	2	2	2	2	2	2	2	2	2
292	Bakersfield	SJV	WHITE LN	MONITOR	UNION				2	2	2	2	2	2	2	2	2	2
293	Bakersfield	SJV	WIBLE	SR 119	CURNOW RD				1	1	1	1	1	1	1	2	2	2
294	Bakersfield	SJV	WESTSIDE PARKWAY	HEATH	WEST BELTWAY	New Freeway	KER08RTP016	$170,000,000	2	2	2	2	2	2	2	2	3	3
295	Bakersfield	SJV	WESTSIDE PARKWAY	WEST BELTWAY	ALLEN	New Freeway	KER08RTP016	$170,000,000	2	2	2	2	2	2	2	3	3	3
296	Bakersfield	SJV	WESTSIDE PARKWAY	ALLEN	JEWETTA	New Freeway	KER08RTP020	$698,000,000	3	3	3	3	3	3	3	3	3	3
297	Bakersfield	SJV	WESTSIDE PARKWAY	JEWETTA	CALLOWAY	New Freeway	KER08RTP020	$698,000,000	3	3	3	3	3	3	3	3	3	3
298	Bakersfield	SJV	WESTSIDE PARKWAY	CALLOWAY	COFFEE	New Freeway	KER08RTP020	$698,000,000	3	4/3	4/3	4/3	4/3	4/3	4/3	4/3	4/3	4/3
299	Bakersfield	SJV	WESTSIDE PARKWAY	COFFEE	MOHAWK	New Freeway	KER08RTP020	$698,000,000	4/3	4	4	4	4	4	4	4	4	4
300	Bakersfield	SJV	WESTSIDE PARKWAY(PHASE 4 C)	MOHAWK	TRUXTUN	New Freeway	KER08RTP020	$698,000,000	2	var.	var.	2-4	var.	2-4	2-4	var.	2-4	2-4
300A	Bakersfield	SJV	WESTSIDE PKWY-PH. 4-EB	MOHAWK OFF-RAMP	MOHAWK LOOP ON-RAMP	New Freeway	KER08RTP020	$698,000,000	2	3	3	3	3	3	3	3	3	3
300B	Bakersfield	SJV	WESTSIDE PKWY-PH. 4-EB	MOHAWK LOOP ON-RAMP	TRUXTUN OFF RAMP	New Freeway	KER08RTP020	$698,000,000	2	4	4	4	4	4	4	4	4	4
300C	Bakersfield	SJV	WESTSIDE PKWY-PH. 4-EB	TRUXTUN OFF-RAMP	SR 99 OFF-RAMP	New Freeway	KER08RTP020	$698,000,000	2	3	3	3	3	3	3	3	3	3
300D	Bakersfield	SJV	WESTSIDE PKWY-PH. 4-WB	SR 99 ON-RAMP	MOHAWK OFF-RAMP	New Freeway	KER08RTP020	$698,000,000	2	3	3	3	3	3	3	3	3	3
300E	Bakersfield	SJV	WESTSIDE PKWY-PH. 4-WB	MOHAWK OFF-RAMP	TRUXTUN ON RAMP	New Freeway	KER08RTP020	$698,000,000	2	2	2	2	2	2	2	2	2	2
300F	Bakersfield	SJV	WESTSIDE PKWY-PH. 4-WB	TRUXTUN ON RAMP	MOHAWK ON-RAMP	New Freeway	KER08RTP020	$698,000,000	2	3	3	3	3	3	3	3	3	3
300G	Bakersfield	SJV	WESTSIDE PKWY-PH. 4-WB	MOHAWK LOOP ON-RAMP	DIRECT ON-RAMP	New Freeway	KER08RTP020	$698,000,000	2	4	4	4	4	4	4	4	4	4
301	Bakersfield	SJV	WEST BELTWAY	7TH STANDARD	SR 58/Rosedale Highway		KER08RTP102		0	0	0	0	0	0	0	0	2	2
302	Bakersfield	SJV	WEST BELTWAY	SR58	WESTSIDE PARKWAY	New Freeway	KER08RTP016	$170,000,000	0	0	0	0	0	0	0	3	3	3
303	Bakersfield	SJV	WEST BELTWAY	WESTSIDE PARKWAY	PACHECO		KER08RTP016		0	0	0	0	0	0	0	0	2	2
304	Bakersfield	SJV	WEST BELTWAY	PACHECO	PANAMA LN		KER08RTP097		0	0	0	0	0	0	0	0	2	2
305	Bakersfield	SJV	WEST BELTWAY	PANAMA LN	SR 119		KER08RTP097		0	0	0	0	0	0	0	0	2	2

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

									Year number of lanes modeled (each direction)									
SORT KEY	AGENCY	AIR BASIN	STREET	BEGIN	END	Type of Imprvmnt.	RTP PROJECT ID/Other ID	COST (RTP, Other)	17	18	19	20	21	23	25	31	35	40
306	**Caltrans**																	
307	Caltrans	SJV	ELLINGTON	11TH AVE	SR155				1	1	1	1	1	1	1	1	1	1
308	Caltrans	SJV	I-5	LAVAL	LAVAL	Interchange	KER08RTP002	$11,300,000	x	x	x	x	x	x	x	x	x	x
309	Caltrans	SJV	I-5	COUNTY LINE	LAVAL				4	4	4	4	4	4	4	4	4	4
310	Caltrans	SJV	I-5	LAVAL	SR99				4	4	4	4	4	4	4	4	4	4
311	Caltrans	SJV	I-5	SR99	SR166				2	2	2	2	2	2	2	2	2	2
312	Caltrans	SJV	I-5	SR166	OLD RIVER RD				2	2	2	2	2	2	2	2	2	2
313	Caltrans	SJV	I-5	OLD RIVER RD	SR223				2	2	2	2	2	2	2	2	2	2
314	Caltrans	SJV	I-5	SR223	SR119				2	2	2	2	2	2	2	2	2	2
315	Caltrans	SJV	I-5	SR119	SR43				2	2	2	2	2	2	2	2	2	2
316	Caltrans	SJV	I-5	SR43	STOCKDALE				2	2	2	2	2	2	2	2	2	2
317	Caltrans	SJV	I-5	STOCKDALE	SR58				2	2	2	2	2	2	2	2	2	2
318	Caltrans	SJV	I-5	SR58	7TH STANDARD				2	2	2	2	2	2	2	2	2	2
319	Caltrans	SJV	I-5	7TH STANDARD	ROWLEE				2	2	2	2	2	2	2	2	2	2
320	Caltrans	SJV	I-5	ROWLEE	LERDO HWY				2	2	2	2	2	2	2	2	2	2
321	Caltrans	SJV	I-5	LERDO HWY	SR46				2	2	2	2	2	2	2	2	2	2
322	Caltrans	SJV	I-5	SR46	TWISSELMAN				2	2	2	2	2	2	2	2	2	2
323	Caltrans	SJV	I-5	TWISSELMAN	COUNTY LINE				2	2	2	2	2	2	2	2	2	2
324	Caltrans	IWV	SR14	SR395	POOLE				2	[redacted]					2	[redacted]	2	2
325	Caltrans	IWV	SR14	POOLE	INYOKERN	Add Lanes	KER08RTP006	$42,000,000	1						2		2	2
326	Caltrans	IWV	SR14	INYOKERN	SR178	Add Lanes	KER08RTP006	$42,000,000	1						2		2	2
327	Caltrans	IWV	SR14	SR178	6 mile s of 178	Add Lanes	KER08RTP017	$42,000,000	1						2		2	2
328	Caltrans	IWV	SR14	6 mile s of 178	REDROCK RANDSBURG	Add Lanes	KER08RTP024	$32,000,000	1						2		2	2
329	Caltrans	MD	SR14	REDROCK RANDSBURG	JAWBONE CANYON				2						2		2	2
330	Caltrans	MD	SR14	JAWBONE CANYON	CALIFORNIA CITY				2						2		2	2
331	Caltrans	MD	SR14	CALIFORNIA CITY	SR58BYPASS				2						2		2	2
332	Caltrans	MD	SR14	SR58BYPASS	DEAVER				2						2		2	2
333	Caltrans	MD	SR14	DEAVER	SR58				2						2		2	2
334	Caltrans	MD	SR14	ALTUS	SR58				2						2		2	2
335	Caltrans	MD	SR14	CAMELOT	ALTUS				2						2		2	2
336	Caltrans	MD	SR14	PURDY	CAMELOT				2						2		2	2
337	Caltrans	MD	SR14	SILVER QUEEN	PURDY				2						2		2	2
338	Caltrans	MD	SR14	BACKUS	SILVER QUEEN				2						2		2	2
339	Caltrans	MD	SR14	DAWN	BACKUS				2						2		2	2
340	Caltrans	MD	SR14	ROSAMOND	DAWN				2						2		2	2
341	Caltrans	MD	SR14	A AVE	ROSAMOND				2						2		2	2
342	Caltrans	SJV	SR119	SR33	GARDENER FIELD				1	1	1	1	1	1	1	1	1	1
343	Caltrans	SJV	SR119	GARDENER FIELD	2ND ST				1	1	1	1	1	1	1	1	1	1
344	Caltrans	SJV	SR119	2ND ST	ASH				1	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

									Year number of lanes modeled (each direction)									
SORT KEY	AGENCY	AIR BASIN	STREET	BEGIN	END	Type of Imprvmnt.	RTP PROJECT ID/Other ID	COST (RTP, Other)	17	18	19	20	21	23	25	31	35	40
345	Caltrans	SJV	SR119	ASH	HARRISON				1	1	1	1	1	1	1	1	1	1
346	Caltrans	SJV	SR119	HARRISON	MIDWAY				1	1	1	1	1	1	1	1	1	1
347	Caltrans	SJV	SR119	MIDWAY	ELK HILLS				1	1	1	1	1	1	1	1	1	1
348	Caltrans	SJV	SR119	ELK HILLS	CHERRY AVE				1	1	1	1	1	1	1	1	1	1
349	Caltrans	SJV	SR119	CHERRY AVE	TUPMAN	Add Lanes	KER08RTP022	$115,000,000	1	1	1	1	1	1	2	2	2	2
350	Caltrans	SJV	SR119	TUPMAN	SR43				1	1	1	1	1	1	1	1	1	1
351	Caltrans	SJV	SR119	SR43	I-5				1	1	1	1	1	1	1	1	1	1
352	Caltrans	SJV	SR119	I-5	NORD	Add Lanes	KER08RTP099		1	1	1	1	1	1	1	2	2	2
353	Caltrans	SJV	SR119	NORD	HEATH	Add Lanes	KER08RTP099		1	1	1	1	1	1	1	2	2	2
354	Caltrans	SJV	SR119	HEATH	RENFRO	Add Lanes	KER08RTP099		1	1	1	1	1	1	1	2	2	2
355	Caltrans	SJV	SR119	RENFRO	ALLEN	Add Lanes	KER08RTP099		1	1	1	1	1	1	1	2	2	2
356	Caltrans	SJV	SR119	ALLEN	BARLOW	Add Lanes	KER08RTP099		1	1	1	1	1	1	1	2	2	2
357	Caltrans	SJV	SR119	BARLOW	BUENA VISTA BLVD	Add Lanes	KER08RTP099		1	1	1	1	1	1	1	2	2	2
358	Caltrans	SJV	SR119	BUENA VISTA BLVD	GREEN	Add Lanes	Local		1	1	1	1	1	1	1	2	2	2
359	Caltrans	SJV	SR119	GREEN	OLD RIVER RD	Add Lanes	Local		1	1	1	1	1	1	1	2	2	2
360	Caltrans	SJV	SR119	OLD RIVER RD	PROGRESS	Add Lanes	Local		1	1	1	1	1	1	1	2	2	2
361	Caltrans	SJV	SR119	PROGRESS	GOSFORD	Add Lanes	Local		1	1	1	1	1	1	1	2	2	2
362	Caltrans	SJV	SR119	GOSFORD	ASHE	Add Lanes	Local		1	1	1	1	1	1	1	2	2	2
363	Caltrans	SJV	SR119	ASHE	STINE RD	Add Lanes	Local		1	1	1	1	1	1	1	2	2	2
364	Caltrans	SJV	SR119	STINE RD	VAN HORN	Add Lanes	Local		1	1	1	1	1	1	1	2	2	2
365	Caltrans	SJV	SR119	VAN HORN	WIBLE RD	Add Lanes	Local		1	1	1	1	1	1	1	2	2	2
366	Caltrans	SJV	SR119	WIBLE RD	SR99	Add Lanes	Local		1	1	1	1	1	1	1	2	2	2
367	Caltrans	SJV	SR155	SR99	FREMONT				1	1	1	1	1	1	1	1	1	1
368	Caltrans	SJV	SR155	FREMONT	HIGH				1	1	1	1	1	1	1	1	1	1
369	Caltrans	SJV	SR155	HIGH	LEXINGTON				1	1	1	1	1	1	1	1	1	1
370	Caltrans	SJV	SR155	LEXINGTON	MAST AVE				1	1	1	1	1	1	1	1	1	1
371	Caltrans	SJV	SR155	MAST AVE	BROWNING				1	1	1	1	1	1	1	1	1	1
372	Caltrans	SJV	SR155	BROWNING	BOWMAN RD	Add Lanes	Local		1	1	1	1	1	1	1	2	2	2
373	Caltrans	SJV	SR155	BOWMAN RD	FAMOSO PORTERVILLE	Add Lanes	Local		1	1	1	1	1	1	1	2	2	2
374	Caltrans	SJV	SR155	FAMOSO PORTERVILLE	SR65				1	1	1	1	1	1	1	1	1	1
375	Caltrans	SJV	SR155	SR65	WOODY GRANITE				1	1	1	1	1	1	1	1	1	1
376	Caltrans	SJV	SR155	WOODY GRANITE	GRANITE				1	1	1	1	1	1	1	1	1	1
377	Caltrans	SJV	SR155	GRANITE	JACK RANCH				1	1	1	1	1	1	1	1	1	1
378	Caltrans	SJV	SR155	JACK RANCH	RANCHERIA RD				1	1	1	1	1	1	1	1	1	1
379	Caltrans	MD	SR155	RANCHERIA	WOFFORD				1	[redacted]					1	[redacted]	1	1
380	Caltrans	MD	SR155	WOFFORD	SAWMILL				2						2		2	2
381	Caltrans	MD	SR155	SAWMILL	SR178				1						1		1	1
382	Caltrans	SJV	SR166	SR33	OLD RIVER RD				1	1	1	1	1	1	1	1	1	1
383	Caltrans	SJV	SR166	OLD RIVER RD	I-5				1	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

									Year number of lanes modeled (each direction)									
SORT KEY	AGENCY	AIR BASIN	STREET	BEGIN	END	Type of Imprvmnt.	RTP PROJECT ID/Other ID	COST (RTP, Other)	17	18	19	20	21	23	25	31	35	40
384	Caltrans	SJV	SR166	I-5	SR99				1	1	1	1	1	1	1	1	1	1
385	Caltrans	SJV	SR178	SR58/SR99	BUCK OWENS	Add Lanes	KER08RTP014	$55,000,000	3	3/5	3/5	3/5	3/5	3/5	3/5	3/5	3/5	3/5
386	Caltrans	SJV	SR178	BUCK OWENS	OAK	Add Lanes	KER08RTP014	$55,000,000	3	4	4	4	4	4	4	4	4	4
387	Caltrans	SJV	SR178	OAK	OAK	Intersection	KER08RTP014	$55,000,000	2	4	4	4	4	4	4	4	4	4
388	Caltrans	SJV	SR178	OAK	BEECH	Add Lanes	KER08RTP014	$55,000,000	2	3	3	3	3	3	3	3	3	3
389	Caltrans	SJV	SR178	BEECH	PINE ST	Add Lanes	KER08RTP014	$55,000,000	2	3	3	3	3	3	3	3	3	3
390	Caltrans	SJV	SR178	PINE ST	BAY ST	Add Lanes	KER08RTP014	$55,000,000	2	3	3	3	3	3	3	3	3	3
391	Caltrans	SJV	SR178	BAY ST	D ST	Add Lanes	KER08RTP014	$55,000,000	2	3	3	3	3	3	3	3	3	3
392	Caltrans	SJV	SR178	D ST	F ST	Add Lanes	KER08RTP014	$55,000,000	3	4	4	4	4	4	4	4	4	4
393	Caltrans	SJV	SR178	F ST	H ST	Add Lanes	KER08RTP014	$55,000,000	3	4	4	4	4	4	4	4	4	4
394	Caltrans	SJV	SR178	H ST	CHESTER	Add Lanes	KER08RTP014	$55,000,000	3	4	4	4	4	4	4	4	4	4
395	Caltrans	SJV	SR178	CHESTER	M ST	Add Lanes	KER08RTP014	$55,000,000	3	4	4	4	4	4	4	4	4	4
396	Caltrans	SJV	SR178	M ST	SR204				3	3	3	3	3	3	3	3	3	3
397	Caltrans	SJV	SR178	SR204	ALTA VISTA	Add Lanes	KER08RTP026	$140,500,000	3	3	3	3	3	3	3	4	4	4
398	Caltrans	SJV	SR178	ALTA VISTA	BEALE	Add Lanes	KER08RTP026	$140,500,000	3	3	3	3	3	3	3	4	4	4
399	Caltrans	SJV	SR178	BEALE	HALEY	Add Lanes	KER08RTP026	$140,500,000	3	3	3	3	3	3	3	4	4	4
400	Caltrans	SJV	SR178	HALEY	MT VERNON	Add Lanes	KER08RTP026	$140,500,000	3	3	3	3	3	3	3	4	4	4
401	Caltrans	SJV	SR178	MT VERNON	OSWELL	Add Lanes	KER08RTP026	$140,500,000	3	3	3	3	3	3	3	4	4	4
402	Caltrans	SJV	SR178	OSWELL	FAIRFAX				2	2	2	2	2	2	2	2	2	2
403	Caltrans	SJV	SR178	FAIRFAX	MORNING DR		KER08RTP111		3	3	3	3	3	3	3	3	3	3
404	Caltrans	SJV	SR178	MORNING DR	VINELAND	Add Lanes	[illegible]	$58,800,000	2	2	2	2	2	2	2	3	3	3
405	Caltrans	SJV	SR178	VINELAND	SR184	Add Lanes	KER08RTP017	$231,500,000	3	3	3	3	3	3	3	3	3	3
406	Caltrans	SJV	SR178	SR184	MASTERSON Street	Add Lanes	KER08RTP071	$231,500,000	3	3	3	3	3	3	3	3	3	3
407	Caltrans	SJV	SR178	MASTERSON Street	COMANCHE	Add Lanes	KER08RTP071	$231,500,000	2	2	2	2	2	2	2	2	3	3
408	Caltrans	SJV	SR178	COMANCHE	MIRAMONTE	Add Lanes	KER08RTP071	$231,500,000	2	2	2	2	2	2	2	2	3	3
409	Caltrans	SJV	SR178	MIRAMONTE	RANCHERIA RD		KER08RTP084		1	1	1	1	1	1	1	1	2	2
410	Caltrans	SJV/MD	SR178	RANCHERIA RD	SR155				2	2	2	2	2	2	2	2	2	2
411	Caltrans	MD	SR178	SR155	LAKE ISABELLA BLVD				1	[redacted]					1	[redacted]	1	1
412	Caltrans	MD	SR178	LAKE ISABELLA BLVD	SIERRA WY				1						1		1	1
413	Caltrans	MD	SR178	SIERRA WY	KELSO VALLEY				1						1		1	1
414	Caltrans	MD/IWV	SR178	KELSO VALLEY	SR14				1						1		1	1
415	Caltrans	IWV	SR178	SR14	SR395				1						1		1	1
416	Caltrans	IWV	SR178	SR395	JACKS RANCH				2						2		2	2
417	Caltrans	IWV	SR178	JACKS RANCH	BRADY				2						2		2	2
418	Caltrans	IWV	SR178	BRADY	MAHAN				2						2		2	2
419	Caltrans	IWV	SR178	MAHAN	DOWNS				2						2		2	2
420	Caltrans	IWV	SR178	DOWNS	NORMA				2						2		2	2
421	Caltrans	IWV	SR178	NORMA	CHINA LAKE				2						2		2	2
422	Caltrans	IWV	SR178	INYOKERN	WARD				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	STREET	BEGIN	END	Type of Imprvmnt	RTP PROJECT ID/Other ID	COST (RTP, Other)	Year number of lanes modeled (each direction)									
									17	18	19	20	21	23	25	31	35	40
423	Caltrans	IWV	SR178	WARD	DRUMMOND				2						2		2	2
424	Caltrans	IWV	SR178	DRUMMOND	LAS FLORES				2						2		2	2
425	Caltrans	IWV	SR178	LAS FLORES	RIDGECREST BLVD				2						2		2	2
426	Caltrans	IWV	SR178	CHINA LAKE	GATEWAY				2						2		2	2
427	Caltrans	IWV	SR178	GATEWAY	RICHMOND				2						2		2	2
428	Caltrans	IWV	SR178	RICHMOND	COUNTY LINE				1						1		1	1
429	Caltrans	SJV	SR184	MESA MARIN DR	SR178	Add Lanes	KER08RTP101		1	1	1	1	1	1	1	2	2	2
430	Caltrans	SJV	SR184	VINELAND	MESA MARIN DR	Add Lanes	KER08RTP101		1	1	1	1	1	1	1	2	2	2
431	Caltrans	SJV	SR184	MONICA ST	VINELAND	Add Lanes	KER08RTP101		1	1	1	1	1	1	1	2	2	2
432	Caltrans	SJV	SR184	SHALANE	MONICA ST	Add Lanes	KER08RTP101		1	1	1	1	1	1	1	2	2	2
433	Caltrans	SJV	SR184	MORNING DR	SHALANE	Add Lanes	KER08RTP101		1	1	1	1	1	1	1	2	2	2
434	Caltrans	SJV	SR184	NILES	PIONEER				1	1	1	1	1	1	1	2	2	2
435	Caltrans	SJV	SR184	PIONEER	MILLS				1	1	1	1	1	1	1	2	2	2
436	Caltrans	SJV	SR184	MILLS	EDISON				1	1	1	1	1	1	1	2	2	2
437	Caltrans	SJV	SR184	EDISON	BRUNDAGE				2	2	2	2	2	2	2	2	2	2
438	Caltrans	SJV	SR184	BRUNDAGE	SR58				2	2	2	2	2	2	2	2	2	2
439	Caltrans	SJV	SR184	SR58	KERRNITA		KER08RTP100		2	2	2	2	2	2	2	2	2	2
440	Caltrans	SJV	SR184	KERRNITA	REDBANK		KER08RTP100		1	1	1	1	1	1	1	2	2	2
441	Caltrans	SJV	SR184	REDBANK	WILSON		KER08RTP100		1	1	1	1	1	1	1	2	2	2
442	Caltrans	SJV	SR184	WILSON	MULLER		KER08RTP100		1	1	1	1	1	1	1	2	2	2
443	Caltrans	SJV	SR184	MULLER	WHITE LN		KER08RTP100		1	1	1	1	1	1	1	2	2	2
444	Caltrans	SJV	SR184	WHITE LN	HERMOSA		KER08RTP100		1	1	1	1	1	1	1	2	2	2
445	Caltrans	SJV	SR184	HERMOSA	FAIRVIEW RD		KER08RTP100		1	1	1	1	1	1	1	2	2	2
446	Caltrans	SJV	SR184	FAIRVIEW RD	PANAMA LN		KER08RTP100		1	1	1	1	1	1	1	2	2	2
447	Caltrans	SJV	SR184	PANAMA LN	KAM AVE		KER08RTP100		1	1	1	1	1	1	1	1	2	2
448	Caltrans	SJV	SR184	KAM AVE	MOUNTAIN VIEW		KER08RTP100		1	1	1	1	1	1	1	1	2	2
449	Caltrans	SJV	SR184	MOUNTAIN VIEW	MC KEE		KER08RTP100		1	1	1	1	1	1	1	1	2	2
450	Caltrans	SJV	SR184	MC KEE	SR119/PANAMA RD		KER08RTP100		1	1	1	1	1	1	1	1	2	2
451	Caltrans	SJV	SR184	SR119/PANAMA RD	HALL				2	2	2	2	2	2	2	2	2	2
452	Caltrans	SJV	SR184	HALL	DI GIORGIO				2	2	2	2	2	2	2	2	2	2
453	Caltrans	SJV	SR184	DI GIORGIO	TRI DUNCON				1	1	1	1	1	1	1	1	2	2
454	Caltrans	SJV	SR184	TRI DUNCON	BUENA VISTA BLVD				1	1	1	1	1	1	1	1	2	2
455	Caltrans	SJV	SR184	BUENA VISTA BLVD	SUNSET BLVD				1	1	1	1	1	1	1	1	2	2
456	Caltrans	SJV	SR184	SUNSET BLVD	SR223				1	1	1	1	1	1	1	1	2	2
457	Caltrans	MD	SR202	SR58	TEHACHAPI BLVD				2						2		2	2
458	Caltrans	MD	SR202	TEHACHAPI BLVD	RED APPLE				2						2		2	2
459	Caltrans	MD	SR202	RED APPLE	VALLEY BLVD				2						2		2	2
460	Caltrans	MD	SR202	VALLEY BLVD	GOLDEN HILLS				1						1		2	2
461	Caltrans	MD	SR202	GOLDEN HILLS	WOODFORD TEHACHAPI				1						1		1	1

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

									Year number of lanes modeled (each direction)										
SORT KEY	AGENCY	AIR BASIN	STREET	BEGIN	END	Type of Imprvmnt.	RTP PROJECT ID/Other ID	COST (RTP, Other)	17	18	19	20	21	23	25	31	35	40
462	Caltrans	MD	SR202	WOODFORD TEHACHAPI	SCHOUT				1						1		1	1
463	Caltrans	MD	SR202	SCHOUT	BANDUCCI				1						1		1	1
464	Caltrans	MD	SR202	BANDUCCI	CUMMINGS VALLEY				1						1		1	1
465	Caltrans	MD	SR202	CUMMINGS VALLEY	BEAR VALLEY				1						1		1	1
466	Caltrans	MD	SR202	BEAR VALLEY	GIRAUDO				1						1		1	1
467	Caltrans	SJV	SR204	UNION	Q ST				3	3	3	3	3	3	3	3	3	3
468	Caltrans	SJV	SR204	Q ST	M ST				3	3	3	3	3	3	3	3	3	3
469	Caltrans	SJV	SR204	M ST	CHESTER				3	3	3	3	3	3	3	3	3	3
470	Caltrans	SJV	SR204	CHESTER	F ST				2	2	2	2	2	2	2	3	3	3
471	Caltrans	SJV	SR204	F ST	SR99				2	2	2	2	2	2	2	3	3	3
472	Caltrans	SJV	SR223	I-5	OLD RIVER RD				1	1	1	1	1	1	1	1	1	1
473	Caltrans	SJV	SR223	OLD RIVER RD	WIBLE RD				1	1	1	1	1	1	1	1	1	1
474	Caltrans	SJV	SR223	WIBLE RD	SR99				1	1	1	1	1	1	1	1	1	1
475	Caltrans	SJV	SR223	SR99	UNION				1	1	1	1	1	1	1	1	1	1
476	Caltrans	SJV	SR223	UNION	FAIRFAX				1	1	1	1	1	1	1	1	1	1
477	Caltrans	SJV	SR223	FAIRFAX	SR184				1	1	1	1	1	1	1	1	1	1
478	Caltrans	SJV	SR223	SR184	VINELAND				1	1	1	1	1	1	1	1	1	1
479	Caltrans	SJV	SR223	VINELAND	EDISON				1	1	1	1	1	1	1	1	1	1
480	Caltrans	SJV	SR223	EDISON	MALAGA				1	1	1	1	1	1	1	1	1	1
481	Caltrans	SJV	SR223	MALAGA	COMANCHE				1	1	1	1	1	1	1	1	1	1
482	Caltrans	SJV	SR223	COMANCHE	CAMPUS				2	2	2	2	2	2	2	2	2	2
483	Caltrans	SJV	SR223	CAMPUS	TEJON				2	2	2	2	2	2	2	2	2	2
484	Caltrans	SJV	SR223	TEJON	TOWER LINE				1	1	1	1	1	1	1	1	1	1
485	Caltrans	SJV	SR223	TOWER LINE	GENERAL BEALE				1	1	1	1	1	1	1	1	1	1
486	Caltrans	SJV	SR223	GENERAL BEALE	SR58				1	1	1	1	1	1	1	1	1	1
487	Caltrans	SJV	SR33	BARKER	TWISSELMAN				1	1	1	1	1	1	1	1	1	1
488	Caltrans	SJV	SR33	TWISSELMAN	SR46				1	1	1	1	1	1	1	1	1	1
489	Caltrans	SJV	SR33	SR46	LERDO HWY				1	1	1	1	1	1	1	1	1	1
490	Caltrans	SJV	SR33	LERDO HWY	LOST HILLS				1	1	1	1	1	1	1	1	1	1
491	Caltrans	SJV	SR33	LOST HILLS	LOKERN				1	1	1	1	1	1	1	1	1	1
492	Caltrans	SJV	SR33	LOKERN	SR58				1	1	1	1	1	1	1	1	1	1
493	Caltrans	SJV	SR33	SR58	SR58				1	1	1	1	1	1	1	1	1	1
494	Caltrans	SJV	SR33	SR58	BILL KIRBY				1	1	1	1	1	1	1	1	1	1
495	Caltrans	SJV	SR33	BILL KIRBY	MIDWAY				1	1	1	1	1	1	1	1	1	1
496	Caltrans	SJV	SR33	MIDWAY	ASH				1	1	1	1	1	1	1	1	1	1
497	Caltrans	SJV	SR33	ASH	HILLARD				1	1	1	1	1	1	1	1	1	1
498	Caltrans	SJV	SR33	HILLARD	10TH ST				2	2	2	2	2	2	2	2	2	2
499	Caltrans	SJV	SR33	10TH ST	6TH ST				2	2	2	2	2	2	2	2	2	2
500	Caltrans	SJV	SR33	6TH ST	2ND ST				2	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

									Year number of lanes modeled (each direction)									
SORT KEY	AGENCY	AIR BASIN	STREET	BEGIN	END	Type of Imprvmnt	RTP PROJECT ID/Other ID	COST (RTP, Other)	17	18	19	20	21	23	25	31	35	40
501	Caltrans	SJV	SR33	2ND ST	MAIN ST				1	1	1	1	1	1	1	1	1	1
502	Caltrans	SJV	SR33	MAIN ST	SR119				1	1	1	1	1	1	1	1	1	1
503	Caltrans	SJV	SR33	SR119	WOOD				1	1	1	1	1	1	1	1	1	1
504	Caltrans	SJV	SR33	WOOD	CADET				1	1	1	1	1	1	1	1	1	1
505	Caltrans	SJV	SR33	CADET	BUSH				1	1	1	1	1	1	1	1	1	1
506	Caltrans	SJV	SR33	BUSH	SR166				1	1	1	1	1	1	1	1	1	1
507	Caltrans	SJV	SR33	SR166	CERRO NOROESTE				1	1	1	1	1	1	1	1	1	1
508	Caltrans	SJV	SR33	CERRO NOROESTE	COUNTY LINE				1	1	1	1	1	1	1	1	1	1
509	Caltrans	IWV	SR395	COUNTY LINE	SR14				2	[redacted]					2	[redacted]	2	2
510	Caltrans	IWV	SR395	SR14	INYOKERN				1						1		2	2
511	Caltrans	IWV	SR395	INYOKERN	BOWMAN RD	Passing Lane	KER08RTP089	$20,000,000	1						2		2	2
512	Caltrans	IWV	SR395	BOWMAN RD	CHINA LAKE	Passing Lane	KER08RTP089	$20,000,000	1						2		2	2
513	Caltrans	IWV	SR395	CHINA LAKE	SEARLES				1						1		2	2
514	Caltrans	MD	SR395	SEARLES	GARLOCK				1						1		2	2
515	Caltrans	MD	SR395	GARLOCK	JOBERG				1						1		2	2
516	Caltrans	MD	SR395	JOBERG	COUNTY LINE				1						1		2	2
517	Caltrans	SJV	SR43	COUNTY LINE	CECIL AVE				1	1	1	1	1	1	1	1	1	1
518	Caltrans	SJV	SR43	CECIL AVE	SR155				1	1	1	1	1	1	1	1	1	1
519	Caltrans	SJV	SR43	SR155	POND				1	1	1	1	1	1	1	1	1	1
520	Caltrans	SJV	SR43	POND	SHERWOOD				1	1	1	1	1	1	1	1	1	1
521	Caltrans	SJV	SR43	SHERWOOD	SR46				1	1	1	1	1	1	1	1	1	1
522	Caltrans	SJV	SR43	SR46	5TH ST				1	1	1	1	1	1	1	1	1	1
523	Caltrans	SJV	SR43	5TH ST	6TH ST				1	1	1	1	1	1	1	1	1	1
524	Caltrans	SJV	SR43	6TH ST	7TH ST				1	1	1	1	1	1	1	1	1	1
525	Caltrans	SJV	SR43	7TH ST	POSO DR				1	1	1	1	1	1	1	1	1	1
526	Caltrans	SJV	SR43	POSO DR	FILBURN				2	2	2	2	2	2	2	2	2	2
527	Caltrans	SJV	SR43	FILBURN	JACKSON				2	2	2	2	2	2	2	2	2	2
528	Caltrans	SJV	SR43	JACKSON	KIMBERLINA RD				2	2	2	2	2	2	2	2	2	2
529	Caltrans	SJV	SR43	KIMBERLINA	POPLAR				2	2	2	2	2	2	2	2	2	2
530	Caltrans	SJV	SR43	POPLAR	SHAFTER				2	2	2	2	2	2	2	2	2	2
531	Caltrans	SJV	SR43	SHAFTER	CENTRAL				2	2	2	2	2	2	2	2	2	2
532	Caltrans	SJV	SR43	CENTRAL	LERDO HWY				2	2	2	2	2	2	2	2	2	2
533	Caltrans	SJV	SR43	LERDO HWY	LOS ANGELES				1	1	1	1	1	1	1	1	1	2
534	Caltrans	SJV	SR43	LOS ANGELES	7TH STANDARD				1	1	1	1	1	1	1	1	1	2
535	Caltrans	SJV	SR43	7TH STANDARD	BAKER				1	1	1	1	1	1	1	1	1	1
536	Caltrans	SJV	SR43	BAKER	SNOW				1	1	1	1	1	1	1	1	1	1
537	Caltrans	SJV	SR43	SNOW	KRATZMEYER				1	1	1	1	1	1	1	1	1	1
538	Caltrans	SJV	SR43	KRATZMEYER	REINA				1	1	1	1	1	1	1	1	1	1
539	Caltrans	SJV	SR43	REINA	HAGEMAN				1	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

									Year number of lanes modeled (each direction)									
SORT KEY	AGENCY	AIR BASIN	STREET	BEGIN	END	Type of Imprvmnt.	RTP PROJECT ID/Other ID	COST (RTP, Other)	17	18	19	20	21	23	25	31	35	40
540	Caltrans	SJV	SR43	HAGEMAN	SR58				1	1	1	1	1	1	1	1	1	1
541	Caltrans	SJV	SR43	SR58	PALM				1	1	1	1	1	1	1	1	1	1
542	Caltrans	SJV	SR43	PALM	BRIMHALL				1	1	1	1	1	1	1	1	1	1
543	Caltrans	SJV	SR43	BRIMHALL	STOCKDALE				1	1	1	1	1	1	1	1	1	1
544	Caltrans	SJV	SR43	STOCKDALE	PANAMA LN				1	1	1	1	1	1	1	1	1	1
545	Caltrans	SJV	SR43	PANAMA LN	I-5				1	1	1	1	1	1	1	1	1	1
546	Caltrans	SJV	SR43	I-5	SR119				1	1	1	1	1	1	1	1	1	1
547	Caltrans	SJV	SR46	COUNTY LINE	KECKS	Add Lanes	KER08RTP003	$232,000,000	2	2	2	2	2	2	2	2	2	2
548	Caltrans	SJV	SR46	KECKS	BITTERWATER VALLEY	Add Lanes	KER08RTP003	$232,000,000	2	2	2	2	2	2	2	2	2	2
549	Caltrans	SJV	SR46	BITTERWATER VALLEY	SR33	Add Lanes	KER08RTP003	$232,000,000	2	2	2	2	2	2	2	2	2	2
550	Caltrans	SJV	SR46	SR33	Beginning of Segment 4B	Add Lanes	KER08RTP003	$232,000,000	1	1	1	1	1	1	1	1	2	2
551	Caltrans	SJV	SR46	Beginning of Segment 4B	LOST HILLS RD				1	1	1	1	1	1	1	1	1	2
552	Caltrans	SJV	SR46	LOST HILLS RD	I-5	Add Lanes	KER08RTP010	$97,000,000	1	2	2	2	2	2	2	2	2	2
553	Caltrans	SJV	SR46	I-5	CORCORAN				1	1	1	1	1	1	1	1	1	1
554	Caltrans	SJV	SR46	CORCORAN	ROWLEE				1	1	1	1	1	1	1	1	1	1
555	Caltrans	SJV	SR46	ROWLEE	WILDWOOD				1	1	1	1	1	1	1	1	1	1
556	Caltrans	SJV	SR46	WILDWOOD	SCOFIELD				1	1	1	1	1	1	1	1	1	1
557	Caltrans	SJV	SR46	SCOFIELD	LEONARD				1	1	1	1	1	1	1	1	1	1
558	Caltrans	SJV	SR46	LEONARD	WESTERN				1	1	1	1	1	1	1	1	1	1
559	Caltrans	SJV	SR46	WESTERN	MAGNOLIA				1	1	1	1	1	1	1	1	1	1
560	Caltrans	SJV	SR46	MAGNOLIA	CENTRAL				1	1	1	1	1	1	1	1	1	1
561	Caltrans	SJV	SR46	CENTRAL	PALM				1	1	1	1	1	1	1	1	1	1
562	Caltrans	SJV	SR46	PALM	GRIFFITH				1	1	1	1	1	1	1	1	1	1
563	Caltrans	SJV	SR46	GRIFFITH	F ST				1	1	1	1	1	1	1	1	1	1
564	Caltrans	SJV	SR46	F ST	SR43				1	1	1	1	1	1	1	1	1	1
565	Caltrans	SJV	SR46	SR43	ROOT				1	1	1	1	1	1	1	1	1	1
566	Caltrans	SJV	SR46	ROOT	SR99				1	1	1	1	1	1	1	1	1	1
567	Caltrans	SJV	SR58	COUNTY LINE	SR33				1	1	1	1	1	1	1	1	1	1
568	Caltrans	SJV	SR58	SR33	LOKERN				1	1	1	1	1	1	1	1	1	1
569	Caltrans	SJV	SR58	LOKERN	BUTTONWILLOW				1	1	1	1	1	1	1	1	1	1
570	Caltrans	SJV	SR58	BUTTONWILLOW	MEADOW ST				2	2	2	2	2	2	2	2	2	2
571	Caltrans	SJV	SR58	MEADOW ST	I-5				1	1	1	1	1	1	1	1	1	1
572	Caltrans	SJV	SR58	I-5	BRANDT				1	1	1	1	1	1	1	1	1	1
573	Caltrans	SJV	SR58	BRANDT	SR43				1	1	1	1	1	1	1	1	1	1
574	Caltrans	SJV	SR58	SR43	CHERRY		KER08RTP092		1	1	1	1	1	1	1	2	2	2
575	Caltrans	SJV	SR58	CHERRY	SUPERIOR		KER08RTP092		1	1	1	1	1	1	1	2	2	2
576	Caltrans	SJV	SR58	SUPERIOR	GREELEY		KER08RTP092		1	1	1	1	1	1	1	2	2	2
577	Caltrans	SJV	SR58	GREELEY	DRIVER		KER08RTP092		1	1	1	1	1	1	1	2	2	2
578	Caltrans	SJV	SR58	DRIVER	NORD		KER08RTP092		1	1	1	1	1	1	1	2	2	2

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

										Year number of lanes modeled (each direction)									
SORT KEY	AGENCY	AIR BASIN	STREET	BEGIN	END	Type of Imprvmnt.	RTP PROJECT ID/Other ID	COST (RTP, Other)	17	18	19	20	21	23	25	31	35	40
579	Caltrans	SJV	SR58	NORD	WEGIS		KER08RTP092		1	1	1	1	1	1	1	2	2	2
580	Caltrans	SJV	SR58	WEGIS	HEATH		KER08RTP092		1	1	1	1	1	1	1	2	2	2
581	Caltrans	SJV	SR58	HEATH	RENFRO		KER08RTP092		1	1	1	1	1	1	1	2	3	3
582	Caltrans	SJV	SR58	RENFRO	JENKINS		KER08RTP092		1	1	1	1	1	1	1	2	3	3
583	Caltrans	SJV	SR58	JENKINS	ALLEN		KER08RTP092		1	1	1	1	1	1	1	2	3	3
584	Caltrans	SJV	SR58	ALLEN	OLD FARM	Add Lanes	KER08RTP090	$8,800,000	3	3	3	3	3	3	3	3	3	3
585	Caltrans	SJV	SR58	OLD FARM	JEWETTA	Add Lanes	KER08RTP090	$8,800,000	3	3	3	3	3	3	3	3	3	3
586	Caltrans	SJV	SR58	JEWETTA	VERDUGO	Add Lanes	KER08RTP090	$8,800,000	3	3	3	3	3	3	3	3	3	3
587	Caltrans	SJV	SR58	VERDUGO	CALLOWAY	Add Lanes	KER08RTP090	$8,800,000	3	3	3	3	3	3	3	3	3	3
588	Caltrans	SJV	SR58	CALLOWAY	MAIN PLAZA	Add Lanes	KER08RTP007	$29,000,000	3	3	3	3	3	3	3	3	3	3
589	Caltrans	SJV	SR58	MAIN PLAZA	COFFEE		KER08RTP007	$29,000,000	3	3	3	3	3	3	3	3	3	3
590	Caltrans	SJV	SR58	COFFEE	PATTON		KER08RTP007	$29,000,000	3	3	3	3	3	3	3	3	3	3
591	Caltrans	SJV	SR58	PATTON	WEAR	Add Lanes	KER08RTP007	$29,000,000	3	3	3	3	3	3	3	3	3	3
592	Caltrans	SJV	SR58	WEAR	FRUITVALE	Add Lanes	KER08RTP007	$29,000,000	3	3	3	3	3	3	3	3	3	3
593	Caltrans	SJV	SR58	FRUITVALE	MOHAWK	Add Lanes	KER08RTP007	$29,000,000	3	3	3	3	3	3	3	3	3	3
594	Caltrans	SJV	SR58	MOHAWK	LANDCO	Add Lanes	KER08RTP007	$29,000,000	3	3	3	3	3	3	3	3	3	3
595	Caltrans	SJV	SR58	LANDCO	GIBSON	Add Lanes	KER08RTP007	$29,000,000	3	3	3	3	3	3	3	3	3	3
596	Caltrans	SJV	SR58	GIBSON	SR99	Add Lanes	KER08RTP007	$29,000,000	3	3	3	3	3	3	3	3	3	3
597	Caltrans	SJV	SR58	REAL	SR99				2	0	0	0	0	0	0	0	0	0
598	Caltrans	SJV	SR58	SR99	H STREET		KER08RTP070	$47,400,000	3	var.	var.	2-5	var.	2-5	2-5	var.	3-6	3-6
598A	Caltrans	SJV	SR58 (GAP CLOSURE)-EB	SR 99 OFF-RAMP	SR 99 ON-RAMP		KER08RTP070	$47,400,000	0	2	2	2	2	2	2	3	3	3
598B	Caltrans	SJV	SR58 (GAP CLOSURE)-EB	SR 99 ON-RAMP	H STREET OFF-RAMP		KER08RTP070	$47,400,000	3	5	5	5	5	5	5	6	6	6
598C	Caltrans	SJV	SR58 (GAP CLOSURE)-WB	H ON-RAMP	SR 99 NB		KER08RTP070	$47,400,000	3	4	4	4	4	4	4	5	5	5
598D	Caltrans	SJV	SR58 (GAP CLOSURE)-WB	SR 99 NB	SR 99 SB		KER08RTP070	$47,400,000	3	3	3	3	3	3	3	4	4	4
598E	Caltrans	SJV	SR58 (GAP CLOSURE)-WB	SR 99 SB	SR 99 ON-RAMP NB		KER08RTP070	$47,400,000	0	2	2	2	2	2	2	3	3	3
599	Caltrans	SJV	SR58	H STREET	CHESTER		KER08RTP070	$47,400,000	3	3	3	3	3	3	3	4	4	4
599A	Caltrans	SJV	SR58 (GAP CLOSURE)-EB	H STREET OFF RAMP	CHESTER ON-RAMP		KER08RTP070	$47,400,000	3	3	3	3	3	3	3	4	4	4
599B	Caltrans	SJV	SR58 (GAP CLOSURE)-WB	CHESTER OFF-RAMP	H STREET ON-RAMP		KER08RTP070	$47,400,000	3	3	3	3	3	3	3	4	4	4
600	Caltrans	SJV	SR58	CHESTER	UNION		KER08RTP070	$47,400,000	3	4	4	4	4	4	4	5	5	5
600A	Caltrans	SJV	SR58 (GAP CLOSURE)-EB	CHESTER ON-RAMP	UNION OFF-RAMP		KER08RTP070	$47,400,000	3	4	4	4	4	4	4	5	5	5
600B	Caltrans	SJV	SR58 (GAP CLOSURE)-WB	UNION ON-RAMP	CHESTER OFF-RAMP		KER08RTP070	$47,400,000	3	4	4	4	4	4	4	5	5	5
601	Caltrans	SJV	SR58	UNION	COTTONWOOD	Add Lanes	KER08RTP070	$47,400,000	3	3	3	3	3	3	3	4	4	4
602	Caltrans	SJV	SR58	COTTONWOOD	MT VERNON				3	3	3	3	3	3	3	4	4	4
603	Caltrans	SJV	SR58	MT VERNON	OSWELL				3	3	3	3	3	3	3	4	4	4
604	Caltrans	SJV	SR58	OSWELL	FAIRFAX				3	3	3	3	3	3	3	4	4	4
605	Caltrans	SJV	SR58	FAIRFAX	SR184				3	3	3	3	3	3	3	3	3	3
606	Caltrans	SJV	SR58	SR184	EDISON				2	2	2	2	2	2	2	2	2	2
607	Caltrans	SJV	SR58	EDISON	COMANCHE				2	2	2	2	2	2	2	2	2	2
608	Caltrans	SJV	SR58	COMANCHE	TOWER LINE				2	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	STREET	BEGIN	END	Type of Imprvmnt.	RTP PROJECT ID/Other ID	COST (RTP, Other)	Year number of lanes modeled (each direction)									
									17	18	19	20	21	23	25	31	35	40
609	Caltrans	SJV	SR58	TOWER LINE	GENERAL BEALE				2	2	2	2	2	2	2	2	2	2
610	Caltrans	SJV	SR58	GENERAL BEALE	BEND RD	Truck Lanes	SHOPP		2	2	2	2	2	2	2	3	3	3
611	Caltrans	SJV	SR58	BEND RD	BEALVILLE	Truck Lanes	SHOPP		2	2	2	2	2	2	2	3	3	3
612	Caltrans	SJV	SR58	BEALVILLE	BROOM RANCH				2	2	2	2	2	2	2	2	2	2
613	Caltrans	MD	SR58	BROOM RANCH	SR 202				2	[redacted]					2	[redacted]	2	2
614	Caltrans	MD	SR58	SR202	MILL				2						2		2	2
615	Caltrans	MD	SR58	MILL	DENNISON				2						2		2	2
616	Caltrans	MD	SR58	DENNISON	TEHACHAPI BLVD				2						2		2	2
617	Caltrans	MD	SR58	TEHACHAPI BLVD	SAND CANYON				2						2		2	2
618	Caltrans	MD	SR58	SAND CANYON	RANDSBURG CUTOFF				2						2		2	2
619	Caltrans	MD	SR58	RANDSBURG CUTOFF	SR14				2						2		2	2
620	Caltrans	MD	SR58	SR14	20 MULE TEAM PARKWAY				2						2		2	2
621	Caltrans	MD	SR58	20 MULE TEAM PARKWAY	OLD 58				2						2		2	2
622	Caltrans	MD	SR58	OLD 58	CALIFORNIA CITY				2						2		2	2
623	Caltrans	MD	SR58	CALIFORNIA CITY	MUROC				2						2		2	2
624	Caltrans	MD	SR58	MUROC	CLAY MINE				2						2		2	2
625	Caltrans	MD	SR58	CLAY MINE	20 MULE TEAM PARKWAY				2						2		2	2
626	Caltrans	MD	SR58	20 MULE TEAM	GEPHART				2						2		2	2
627	Caltrans	MD	SR58	GEPHART	BORAX				2						2		2	2
628	Caltrans	MD	SR58	BORAX	COUNTY LINE				2						2		2	2
629	Caltrans	SJV	SR65	COUNTY LINE	SR155				1	1	1	1	1	1	1	1	1	1
630	Caltrans	SJV	SR65	SR155	SHERWOOD				1	1	1	1	1	1	1	1	1	1
631	Caltrans	SJV	SR65	SHERWOOD	FAMOSO RD				1	1	1	1	1	1	1	1	1	1
632	Caltrans	SJV	SR65	FAMOSO RD	MERCED AVE				1	1	1	1	1	1	1	1	1	1
633	Caltrans	SJV	SR65	MERCED AVE	LERDO HWY				1	1	1	1	1	1	1	1	1	1
634	Caltrans	SJV	SR65	LERDO HWY	JAMES				1	1	1	1	1	1	1	1	1	1
635	Caltrans	SJV	SR65	JAMES	7TH STANDARD	Add Lanes	KER08RTP094		1	1	1	1	1	2	2	2	2	2
636	Caltrans	SJV	SR65	7TH STANDARD	SR99				2	2	2	2	2	2	2	2	2	2
637	Caltrans	SJV	SR99	COUNTY LINE	CECIL AVE				3	3	3	3	3	3	3	3	3	3
638	Caltrans	SJV	SR99	CECIL	SR155				3	3	3	3	3	3	3	3	3	3
639	Caltrans	SJV	SR99	SR155	WOOLLOMES				3	3	3	3	3	3	3	3	3	3
640	Caltrans	SJV	SR99	WOOLLOMES	POND				3	3	3	3	3	3	3	3	3	3
641	Caltrans	SJV	SR99	POND	SHERWOOD				3	3	3	3	3	3	3	3	3	3
642	Caltrans	SJV	SR99	SHERWOOD	SR46				3	3	3	3	3	3	3	3	3	3
643	Caltrans	SJV	SR99	SR46	KIMBERLINA RD				3	3	3	3	3	3	3	3	3	3
644	Caltrans	SJV	SR99	KIMBERLINA RD	MERCED AVE				3	3	3	3	3	3	3	3	3	3
645	Caltrans	SJV	SR99	MERCED	LERDO HWY				3	3	3	3	3	3	3	3	3	3
646	Caltrans	SJV	SR99	LERDO HWY	7TH STANDARD				3	3	3	3	3	3	3	3	3	3
647	Caltrans	SJV	SR99	7TH STANDARD	SR65		KER08RTP104	$91,100,000	3	3	3	3	3	3	3	3	4	4

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

									Year number of lanes modeled (each direction)									
SORT KEY	AGENCY	AIR BASIN	STREET	BEGIN	END	Type of Imprvmnt.	RTP PROJECT ID/Other ID	COST (RTP, Other)	17	18	19	20	21	23	25	31	35	40
648	Caltrans	SJV	SR99	SR65	OLIVE		KER08RTP104	$91,100,000	3	3	3	3	3	3	3	3	4	4
649	Caltrans	SJV	SR99	SNOW RD	SNOW RD	New Intercha	KER08RTP115	$138,200,000	-	-	-	-	-	-	-	-	x	x
650	Caltrans	SJV	SR99	OLIVE	OLIVE	Ramp Improv	KER08RTP021	$108,000,000	-	-	-	-	-	-	-	-	x	x
651	Caltrans	SJV	SR99	OLIVE	SR204		KER08RTP104	$12,000,000	5	5	5	5	5	5	5	5	5	5
652	Caltrans	SJV	SR99	SR204	AIRPORT				4	4	4	4	4	4	4	4	4	4
653	Caltrans	SJV	SR99	AIRPORT	SR58(24TH ST)				4	4	4	4	4	4	4	4	4	4
654	Caltrans	SJV	SR99	SR58(24TH ST)	CALIFORNIA				4	4	4	4	4	4	4	4	4	4
655	Caltrans	SJV	SR99	CALIFORNIA	STOCKDALE				4	4	4	4	4	4	4	4	4	4
656	Caltrans	SJV	SR99	STOCKDALE	MING				4	4	4	4	4	4	4	4	4	4
657	Caltrans	SJV	SR99	MING	Wilson Road				4	4	4	4	4	4	4	4	4	4
658	Caltrans	SJV	SR99	Wilson Road	WHITE LN	Add Lanes	KER08RTP077	$52,000,000	4	4	4	4	4	4	4	4	4	4
659	Caltrans	SJV	SR99	WHITE LN	PANAMA LN	Add Lanes	KER08RTP077	$52,000,000	4	4	4	4	4	4	4	4	4	4
660	Caltrans	SJV	SR99	PANAMA LN	HOSKING	Add Lanes	KER08RTP077	$52,000,000	4	4	4	4	4	4	4	4	4	4
661	Caltrans	SJV	SR99	HOSKING	HOSKING	Interchange I	KER08RTP009	$35,000,000	2	2	2	2	2	2	2	2	3	3
662	Caltrans	SJV	SR99	SR119	HOSKING	Add Lanes	KER08RTP077	$52,000,000	4	4	4	4	4	4	4	4	4	4
663	Caltrans	SJV	SR99	SR223	SR119				3	3	3	3	3	3	3	3	3	3
664	Caltrans	SJV	SR99	HERRING RD	SR223				3	3	3	3	3	3	3	3	3	3
665	Caltrans	SJV	SR99	COPUS RD	HERRING RD				3	3	3	3	3	3	3	3	3	3
666	Caltrans	SJV	SR99	SR166	COPUS RD				3	3	3	3	3	3	3	3	3	3
667	Caltrans	SJV	SR99	I-5	SR166				3	3	3	3	3	3	3	3	3	3
668	Caltrans	MD	TUCKER RD	RED APPLE	VALLEY				2						2		2	2
669	Caltrans	MD	VALLEY BL	TUCKER	REEVES	Add Lanes	Local		2						2		2	2
670	Caltrans	MD	VALLEY BL	REEVES	GOLDEN HILLS	Add Lanes	Local		2						2		2	2
671	**Kern County**																	
672	Kern County	SJV	7th STANDARD RD	SR 43/Enos Lane	SANTA FE WAY	Add Lanes	KER08RTP113	$11,500,000	1	1	1	1	1	1	1	1	1	1
673	Kern County	SJV	7th STANDARD RD	ZERKER RD	ALLEN	Add Lanes	KER08RTP005	$57,000,000	2	2	2	2	2	2	2	2	2	2
674	Kern County	SJV	7th STANDARD RD	ALLEN	OLD FARM	Add Lanes	KER08RTP005	$57,000,000	2	2	2	2	2	2	2	2	2	2
675	Kern County	SJV	7th STANDARD RD	OLD FARM	JEWETTA	Add Lanes	KER08RTP005	$57,000,000	2	2	2	2	2	2	2	2	2	2
676	Kern County	SJV	7th STANDARD RD	CALLOWAY	RIVERLAKES	Add Lanes	KER08RTP005	$57,000,000	2	2	2	2	2	2	2	2	2	2
677	Kern County	SJV	7th STANDARD RD	RIVERLAKES	COFFEE	Add Lanes	KER08RTP005	$57,000,000	2	2	2	2	2	2	2	2	2	2
678	Kern County	SJV	7th STANDARD RD	COFFEE	SR99				2	2	2	2	2	2	2	2	2	2
679	Kern County	SJV	7th STANDARD RD	SR99	SR99				2	2	2	2	2	2	2	2	2	2
680	Kern County	SJV	7th STANDARD RD	SR99	SR65				2	2	2	2	2	2	2	2	2	2
681	Kern County	SJV	7th STANDARD RD	SR65	PEGASUS				2	2	2	2	2	2	2	2	2	2
682	Kern County	SJV	7th STANDARD RD	PEGASUS	WINGS WAY				2	2	2	2	2	2	2	2	2	2
683	Kern County	SJV	7th STANDARD RD	WINGS WAY	AIRPORT	Add Lanes	Local		1	1	1	2	2	2	2	2	2	2
684	Kern County	SJV	7th STANDARD RD	AIRPORT	MC CRAY				2	2	2	2	2	2	2	2	2	2
685	Kern County	SJV	7th STANDARD RD	MC CRAY	CHESTER				2	2	2	2	2	2	2	2	2	2
686	Kern County	MD	90TH WEST	ROSAMOND	HOLIDAY	Add Lanes	Local		1						1		1	1

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

									Year number of lanes modeled (each direction)									
SORT KEY	AGENCY	AIR BASIN	STREET	BEGIN	END	Type of Imprvmnt	RTP PROJECT ID/Other ID	COST (RTP, Other)	17	18	19	20	21	23	25	31	35	40
687	Kern County	MD	90TH WEST	HOLIDAY	GASKELL	Add Lanes	Local		1						1		1	1
688	Kern County	MD	90TH WEST	GASKELL	A AVE	Add Lanes	Local		1						1		1	1
689	Kern County	SJV	AIRPORT	7TH STANDARD	DAY	Add Lanes	Local		1	1	1	1	1	1	1	1	1	1
690	Kern County	SJV	AIRPORT	DAY	SKYWAY	Add Lanes	Local		1	1	1	1	1	1	1	1	1	1
691	Kern County	SJV	AIRPORT	SKYWAY	NORRIS				2	2	2	2	2	2	2	2	2	2
692	Kern County	SJV	AIRPORT	NORRIS	DECATUR/OLIVE	Add Lanes	Local		2	2	2	3	3	3	3	3	3	3
693	Kern County	SJV	AIRPORT	DECATUR/OLIVE	ROBERTS LN	Add Lanes	Local		2	2	2	3	3	3	3	3	3	3
694	Kern County	SJV	AIRPORT	ROBERTS LN	STATE RD				2	2	2	3	3	3	3	3	3	3
695	Kern County	SJV	ALLEN	NORIEGA	HAGEMAN				1	2/1	2/1	2/1	2/1	2/1	2/1	2/1	2/1	2/1
696	Kern County	SJV	ALLEN	HAGEMAN	MEACHAM	Add Lanes	Local		2	2	2	2	2	2	2	2	2	2
697	Kern County	SJV	ALLEN	MEACHAM	SR58	Add Lanes	Local		2	2	2	2	2	2	2	2	2	2
698	Kern County	SJV	ASHE RD	SR 119	REMERO RD				1	1	1	1	1	1	2	2	2	2
699	Kern County	SJV	BRECKENRIDGE RD	SR 184/Morning Drive	VINELAND RD				1	1	1	1	1	1	1	2	2	2
700	Kern County	SJV	BRECKENRIDGE RD	VINELAND RD	Edison /Masterson				1	1	1	1	1	1	1	1	1	1
701	Kern County	SJV	BRECKENRIDGE RD	Edison /Masterson	BEAUJOLIAS				1	1	1	1	1	1	1	1	1	1
702	Kern County	SJV	BRECKENRIDGE RD	BEAUJOLIAS	COMANCHE DR				1	1	1	1	1	1	1	1	1	1
703	Kern County	SJV	CALLOWAY	7TH STANDARD	ETCHART	Add Lanes	Local		1	1	1	1	1	1	2	2	2	2
704	Kern County	SJV	CALLOWAY	SR58	HOLLAND ST	Add Lanes	Local		3	3	3	3	3	3	3	3	3	3
705	Kern County	SJV	CALLOWAY	ROSEDALE HWY	GREENACRES DR	Add lane	Local	$920, 402	2/6	2/6	2/6	2/6	2/6	2/6	2/6	2/6	2/6	2/6
706	Kern County	SJV	CALLOWAY	HOLLAND ST	SLIKKER				2	2	2	2	2	2	2	2	2	2
707	Kern County	SJV	CALLOWAY	SLIKKER	BRIMHALL	Add Lanes	Local		2	2	2	2	2	2	2	2	2	2
708	Kern County	SJV	CALIFORNIA	WASHINGTON	MT VERNON				2	2	2	2	2	2	2	2	2	2
709	Kern County	SJV	CALIFORNIA	MT VERNON	EDISON				2	2	2	2	2	2	2	2	2	2
710	Kern County	SJV	CHASE AVE	Masterson Street	COMANCHE DR				0	0	0	0	0	0	1	1	1	1
711	Kern County	SJV	CHINA GRADE	CHESTER	MANOR				2	2	2	2	2	2	2	2	2	2
712	Kern County	SJV	CHINA GRADE	MANOR	MONTE CRISTO	Add Lanes	Local		1	1	1	1	1	1	1	2	2	2
713	Kern County	SJV	CHINA GRADE	MONTE CRISTO	CHINA GRADE LOOP/ROUND MOUNTA	Add Lanes	Local		1	1	1	1	1	1	1	2	2	2
714	Kern County	SJV	CHINA GRADE	CHINA GRADE LOOP/ROUND MOUNTAIN	ALFRED HARRELL	Add Lanes	Local		1	1	1	1	1	1	1	2	2	2
715	Kern County	IWV	CHINA LAKE BL	SPRINGER	MAHAN				1						1		1	1
716	Kern County	IWV	CHINA LAKE BL	MAHAN	SR395				1						1		1	1
717	Kern County	SJV	COFFEE	SNOW	NORRIS	Add Lanes	Local		1	1	1	2	2	2	2	2	2	2
718	Kern County	SJV	COMANCHE DR	Alfred Harrell Highway	SR 58				1	1	1	1	1	1	1	2	2	2
719	Kern County	SJV	COMANCHE DR	SR 58	MULLER				1	1	1	1	1	1	1	2	2	2
720	Kern County	SJV	EDISON RD	SR 178	BRECKENRIDGE RD				0	0	0	0	0	0	0	1	2	2
721	Kern County	SJV	EDISON RD	BRECKENRIDGE RD	Edison Highway				0	0	0	0	0	0	0	1	1	1
722	Kern County	SJV	FAIRFAX RD	SR 58	REDBANK RD				1	1	1	2	2	2	2	2	2	2
723	Kern County	SJV	FRUITVALE AVE	SNOW	NORRIS				1	1	1	2	2	2	2	2	2	2
724	Kern County	SJV	FRUITVALE AVE	HAGEMAN RD	SR 58/Rosedale Highway				1	1	1	1	1	1	1	2	2	2
725	Kern County	SJV	GILMORE	FRUITVALE AVE	LANDCO				0	0	0	0	0	0	0	1	1	1

Appendix B - Highway Project Listing on Regionally Significant Route Segments and Year Number of Lanes Modeled																				
									Year number of lanes modeled (each direction)											
SORT KEY	AGENCY	AIR BASIN	STREET	BEGIN	END	Type of Imprvmnt.	RTP PROJECT ID/Other ID	COST (RTP, Other)	17	18	19	20	21	23	25	31	35	40
726	Kern County	SJV	GOSFORD	SR119	CURNOW				1	1	1	1	1	1	1	1	1	1
727	Kern County	SJV	HAGEMAN	NORD RD	WEGIS AVE				1	1	1	1	2	2	2	2	2	2
728	Kern County	SJV	HAGEMAN	WEGIS AVE	HEATH RD				1	1	1	1	1	1	1	2	2	2
729	Kern County	SJV	HAGEMAN	HEATH RD	RUDD				1	1	1	1	1	1	1	2	2	2
730	Kern County	SJV	HAGEMAN	RUDD	RENFRO				1	1	1	1	1	1	1	1	1	1
731	Kern County	SJV	HAGEMAN	RENFRO	JENKINS				1	1	1	1	1	1	2	2	2	2
732	Kern County	SJV	HAGEMAN	JENKINS	SANTA FE				2	2	2	2	2	2	2	2	3/2	3/2
733	Kern County	SJV	HAGEMAN	SANTA FE	ALLEN				3/2	3/2	3/2	3/2	3/2	3/2	3/2	3/2	3/2	3/2
734	Kern County	SJV	HEATH RD	HAGEMAN RD	SR 58/Rosedale Highway				1	1	1	2	2	2	2	2	2	2
735	Kern County	SJV	HEATH RD	SR 58/Rosedale Highway	Stockdale Highway				1	1	1	1	1	1	1	2	2	2
736	Kern County	SJV	MANOR	MC CRAY	CHESTER				2	2	2	2	2	2	2	2	2	2
737	Kern County	SJV	MANOR	CHESTER	DAY				2	2	2	2	2	2	2	2	2	2
738	Kern County	SJV	MANOR	DAY	CHINA GRADE LOOP				2	2	2	2	2	2	2	2	2	2
739	Kern County	SJV	MANOR	CHINA GRADE LOOP	NORRIS				2	2	2	2	2	2	2	2	2	2
740	Kern County	SJV	MANOR	NORRIS	ROBERTS LN				2	2	2	2	2	2	2	2	2	2
741	Kern County	SJV	MEACHAM	RENFRO RD	JENKINS RD				1	1	1	1	1	1	1	2	2	2
742	Kern County	SJV	MEACHAM	JENKINS RD	ALLEN				1	1	1	2	2	2	2	2	2	2
743	Kern County	SJV	MOHAWK	HAGEMAN	DOWNING				1	1	1	1	2	2	2	2	3	3
744	Kern County	SJV	MOHAWK	DOWNING	SR58				2	2	2	2	2	2	2	2	3	3
745	Kern County	SJV	MT VERNON	SR178	BERNARD				2	2	2	2	2	2	2	2	2	2
746	Kern County	SJV	MT VERNON	BERNARD	COLLEGE				2	2	2	2	2	2	2	2	2	2
747	Kern County	SJV	MT VERNON	COLLEGE	FLOWER				2	2	2	2	2	2	2	2	2	2
748	Kern County	SJV	MT VERNON	FLOWER	NILES				2	2	2	2	2	2	2	2	2	2
749	Kern County	SJV	MT VERNON	NILES	KENTUCKY				2	2	2	2	2	2	2	2	2	2
750	Kern County	SJV	MT VERNON	KENTUCKY	EDISON HWY				2	2	2	2	2	2	2	2	2	2
751	Kern County	SJV	MT VERNON	EDISON HWY	CALIFORNIA				2	2	2	2	2	2	2	2	2	2
752	Kern County	SJV	MT VERNON	CALIFORNIA	VIRGINIA				2	2	2	2	2	2	2	2	2	2
753	Kern County	SJV	MT VERNON	VIRGINIA	BRUNDAGE				2	2	2	2	2	2	2	2	2	2
754	Kern County	SJV	NO. CHESTER	BEARDSLEY	ROBERTS LN				2	2	2	2	2	2	2	2	2	2
755	Kern County	SJV	NO. CHESTER	ROBERTS LN	DECATUR				2	2	2	2	2	2	2	2	2	2
756	Kern County	SJV	NO. CHESTER	DECATUR	NORRIS				2	2	2	2	2	2	2	2	2	2
757	Kern County	SJV	NO. CHESTER	NORRIS	CHINA GRADE LOOP				2	2	2	2	2	2	2	2	2	2
758	Kern County	SJV	NO. CHESTER	CHINA GRADE LOOP	DAY				2	2	2	2	2	2	2	2	2	2
759	Kern County	SJV	NO. CHESTER	DAY	MANOR				2	2	2	2	2	2	2	2	2	2
760	Kern County	SJV	NILES	MONTEREY	MT VERNON				2	2	2	2	2	2	2	2	2	2
761	Kern County	SJV	NILES	MT VERNON	OSWELL				2	2	2	2	2	2	2	2	2	2
762	Kern County	SJV	NILES	OSWELL	STERLING RD				2	2	2	2	2	2	2	2	2	2
763	Kern County	SJV	NILES	STERLING RD	FAIRFAX				2	2	2	2	2	2	2	2	2	2
764	Kern County	SJV	NILES	FAIRFAX	BRENTWOOD				2	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

									Year number of lanes modeled (each direction)									
SORT KEY	AGENCY	AIR BASIN	STREET	BEGIN	END	Type of Imprvmnt.	RTP PROJECT ID/Other ID	COST (RTP, Other)	17	18	19	20	21	23	25	31	35	40
765	Kern County	SJV	NILES	BRENTWOOD	PARK DR				2	2	2	2	2	2	2	2	2	2
766	Kern County	SJV	NILES	PARK DR	SR184				2	2	2	2	2	2	2	2	2	2
767	Kern County	SJV	NORRIS RD	CHESTER AVE	MANOR				1	1	1	1	1	1	1	2	2	2
768	Kern County	SJV	NORRIS RD	SR 99	AIRPORT DR				1	1	1	1	1	1	1	2	2	2
769	Kern County	MD	OLD 58	ROSEWOOD	SR58BYPASS				2						2		2	2
770	Kern County	MD	OLD 58	ARROYO	ROSEWOOD				2						2		2	2
771	Kern County	MD	OLD 58	SR14	ARROYO				2						2		2	2
772	Kern County	MD	OLD 58	SR14	UNITED				2						2		2	2
773	Kern County	MD	OLD 58	UNITED	5TH ST				2						2		2	2
774	Kern County	MD	OLD 58	5TH	SR58BYPASS				2						2		2	2
775	Kern County	SJV	OLD RIVER	MCCUTCHEN(HOSKING)	SR119				1	1	1	1	1	1	1	1	1	1
776	Kern County	SJV	OLD RIVER	SR119	CURNOW				1	1	1	1	1	1	1	1	1	1
777	Kern County	SJV	OSWELL	BERNARD	COLLEGE	Add Lanes	Local		2	2	2	2	2	2	2	2	2	2
778	Kern County	SJV	OSWELL	COLLEGE	NILES	Add Lanes	Local		2	2	2	2	2	2	2	2	2	2
779	Kern County	SJV	OSWELL	NILES	KENTUCKY	Add Lanes	Local		2	2	2	2	2	2	2	2	2	2
780	Kern County	SJV	OSWELL	KENTUCKY	PIONEER DR	Add Lanes	Local		2	2	2	2	2	2	2	2	2	2
781	Kern County	SJV	OSWELL	PIONEER DR	EDISON HWY	Add Lanes	Local		2	2	2	2	2	2	2	2	2	2
782	Kern County	SJV	OSWELL	EDISON HWY	VIRGINIA	Add Lanes	Local		2	2	2	2	2	2	2	2	2	2
783	Kern County	SJV	OSWELL	VIRGINIA	BRUNDAGE	Add Lanes	Local		2	2	2	2	2	2	2	2	2	2
784	Kern County	SJV	OSWELL	WHITE LN	PANAMA LN				0	0	0	0	0	0	0	1	1	1
785	Kern County	SJV	PANAMA LN	SR 43/ENOS LN	RENFRO				1	1	1	1	1	1	1	2	2	2
786	Kern County	SJV	PANAMA LN	RENFRO	ALLEN	Add Lanes	Local		1	1	1	1	1	1	1	2	2	2
787	Kern County	SJV	PANAMA RD	UNION	SR184				1	1	1	1	1	1	1	1	1	1
788	Kern County	MD	RANDSBURG CUTOFF	SR14	SR58BYPASS				1						1		1	1
789	Kern County	SJV	PATTON WAY	MEANY	SR 58/Rosedale Highway				1	1	1	1	1	1	1	1	2	2
790	Kern County	SJV	QUAIL CREEK RD	NORRIS	SNOW ROAD				1	1	1	1	1	1	2	2	2	2
791	Kern County	SJV	REDBANK	FAIRFAX	SR 184/Weedpatch Highway				1	1	1	2	2	2	2	2	2	2
792	Kern County	SJV	RENFRO RD	REINA	JOHNSON RD				1	1	1	1	1	1	1	2	2	2
793	Kern County	MD	ROSAMOND BL	TEHACHAPI WILLOW SPRINGS	80TH ST				1						1		1	1
794	Kern County	MD	ROSAMOND BL	80TH ST	70TH ST				1						1		1	1
795	Kern County	MD	ROSAMOND BL	70TH ST	65TH ST				1						1		1	1
796	Kern County	MD	ROSAMOND BL	65TH ST	60TH ST				1						1		1	1
797	Kern County	MD	ROSAMOND BL	60TH ST	50TH ST	Add Lanes	Local		1						1		1	1
798	Kern County	MD	ROSAMOND BL	50TH ST	40TH ST	Add Lanes	Local		1						1		1	1
799	Kern County	MD	ROSAMOND BL	40TH ST	30TH ST	Add Lanes	Local		2						2		3	3
800	Kern County	MD	ROSAMOND BL	30TH ST	25TH ST	Add Lanes	Local		2						2		3	3
801	Kern County	MD	ROSAMOND BL	25TH ST	SR14	Add Lanes	Local		2						2		3	3
802	Kern County	MD	ROSAMOND BL	SR14	20TH ST	Add Lanes	Local		2						2		3	3
803	Kern County	MD	ROSAMOND BL	20TH ST	SIERRA HWY	Add Lanes	Local		2						2		3	3

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

									Year number of lanes modeled (each direction)									
SORT KEY	AGENCY	AIR BASIN	STREET	BEGIN	END	Type of Imprvmnt	RTP PROJECT ID/Other ID	COST (RTP, Other)	17	18	19	20	21	23	25	31	35	40
804	Kern County	MD	ROSAMOND BL	SIERRA HWY	15TH ST	Add Lanes	Local		2						2		3	3
805	Kern County	MD	ROSAMOND BL	15TH ST	10TH ST	Add Lanes	Local		2						2		3	3
806	Kern County	SJV	SNOW RD	Allen Road	OLD FARM RD				1/2	1/2	1/2	1/2	1/2	1/2	2	2	2	2
807	Kern County	SJV	SNOW RD	OLD FARM RD	JEWETTA AVE				1/2	1/2	1/2	1/2	1/2	1/2	2	2	2	2
808	Kern County	SJV	SNOW RD	CALLOWAY DR	QUAIL CREEK RD				1	1	1	1	1	1	2	2	2	2
809	Kern County	SJV	SNOW RD	QUAIL CREEK RD	COFFEE RD				1	1	1	1	1	1	2	2	2	2
810	Kern County	SJV	SNOW RD	FRUITVALE AVE	Golden State Highway				1	1	1	2	2	2	2	2	2	2
811	Kern County	SJV	SO.CHESTER	WILSON	MING				2	2	2	2	2	2	2	2	2	2
812	Kern County	SJV	TAFT HWY	SR99	H ST	Add Lanes	Local		1	2	2	2	2	2	2	2	2	2
813	Kern County	SJV	TAFT HWY	H ST	UNION				1	2	2	2	2	2	2	2	2	2
814	Kern County	MD	TEHACHAPI WILLOW SPRINGS	IRONE	ROSAMOND				1						1		1	1
815	Kern County	MD	TEHACHAPI WILLOW SPRINGS	HAMILTON	IRONE				1						1		1	1
816	Kern County	MD	TEHACHAPI WILLOW SPRINGS	HIGHLINE	DENNISON				1						1		1	1
817	Kern County	MD	TEHACHAPI WILLOW SPRINGS	ABAJO	HIGHLINE				1						1		1	1
818	Kern County	SJV	UNION	BELLE TERRACE	MING	Add Lanes	Local		2	2	2	2	2	2	2	2	2	2
819	Kern County	SJV	UNION	WHITE LN	PACHECO	Add Lanes	Local		2	2	2	2	2	2	2	3	3	3
820	Kern County	SJV	UNION	HOSKING	MC KEE	Add Lanes	Local		2	2	2	2	2	2	2	3	3	3
821	Kern County	SJV	UNION	MC KEE	SR119	Add Lanes	Local		2	2	2	2	2	2	2	3	3	3
822	Kern County	SJV	VERDUGO LN	MEACHAM	ROSEDALE HIGHTWAY				1	1	1	1	1	1	1	1	1	1
823	Kern County	SJV	VINELAND RD	SR 58	EDISON HIGHWAY				1	1	1	1	1	1	1	1	2	2
824	Kern County	SJV	VINELAND RD	EDISON HIGHWAY	Eucalyptus Drive				1	1	1	1	1	1	1	1	2	2
825	Kern County	SJV	VINELAND RD	Eucalyptus Drive	PIONEER DR				1	1	1	1	1	1	1	1	2	2
826	Kern County	SJV	VINELAND RD	PIONEER DR	SR 184/Morning Drive				0	0	0	0	0	0	0	0	1	1
827	Kern County	SJV	WHITE LN(MULLER RD)	OSWELL	FAIRFAX				1	1	1	1	1	1	1	2	2	2
828	**California City**																	
829	California City	MD	CAL CITY BL	SR14	RAILROAD				1						1		1	1
830	California City	MD	CAL CITY BL	RAILROAD	BARON BLVD				1						1		1	1
831	California City	MD	CAL CITY BL	BARON BLVD	NEURALIA				2						2		2	2
832	California City	MD	CAL CITY BL	NEURALIA	HACIENDA				2						2		2	2
833	California City	MD	CAL CITY BL	RANDSBURG MOJAVE	HACIENDA				2						2		2	2
834	California City	MD	CAL CITY BL	REDWOOD	RANDSBURG MOJAVE				2						2		2	2
835	California City	MD	CAL CITY BL	CARSON	REDWOOD				1						1		1	1
836	**Ridgecrest**																	
837	Ridgecrest	IWV	CHINA LAKE BL	RIDGECREST BLVD	UPJOHN				2						2		2	2
838	Ridgecrest	IWV	CHINA LAKE BL	UPJOHN	BOWMAN RD				2						2		2	2
839	Ridgecrest	IWV	CHINA LAKE BL	BOWMAN RD	COLLEGE HEIGHTS				2						2		2	2
840	Ridgecrest	IWV	CHINA LAKE BL	COLLEGE HEIGHTS	DOLPHIN				2						2		2	2
841	Ridgecrest	IWV	CHINA LAKE BL	DOLPHIN	DOWNS				1						1		2	2
842	Ridgecrest	IWV	CHINA LAKE BL	DOWNS	SPRINGER				1						1		1	1

Appendix B - Highway Project Listing on Regionally Significant Route Segments and Year Number of Lanes Modeled																				
									Year number of lanes modeled (each direction)											
SORT KEY	AGENCY	AIR BASIN	STREET	BEGIN	END	Type of Imprvmnt	RTP PROJECT ID/Other ID	COST (RTP, Other)	17	18	19	20	21	23	25	31	35	40		
843	**Shafter**																			
844	Shafter	SJV	LERDO HWY	POPLAR	SHAFTER				1	1	1	1	1	1	1	1	1	1		
845	Shafter	SJV	LERDO HWY	SHAFTER	SR43				1	1	1	1	1	1	1	1	1	1		
846	Shafter	SJV	LERDO HWY	SR43	MANNEL				2	2	2	2	2	2	2	2	2	2		
847	Shafter	SJV	LERDO HWY	MANNEL	BEECH				2	2	2	2	2	2	2	2	2	2		
848	Shafter	SJV	LERDO HWY	BEECH	CHERRY		Local		2	2	2	2	2	2	2	2	2	2		
849	Shafter	SJV	LERDO HWY	CHERRY	ZACHARY	Add Lanes	Local		2	2	2	2	2	2	2	3	3	3		
850	Shafter	SJV	LERDO HWY	ZACHARY	ZERKER	Add Lanes	Local		2	2	2	2	2	2	2	3	3	3		
851	Shafter	SJV	LERDO HWY	ZERKER	SR99	Add Lanes			2	2	2	2	2	2	2	3	3	3		

Transportation Project Listing - Exempt Projects

Jurisdiction/ Agency	TIP Project ID	CTIPS ID (If available)	Description	Est. Cost	Exempt Code (per CTIPS)	Air Basins
Arvin	KER151001	20400000768	IN ARVIN: T02 VARIOUS LOCATIONS; CONSTRUCT SIDEWALK IMPROVEMENTS	$680,000	3.02	San Joaquin
Bakersfield	KER140507	20400000735	IN BAKERSFIELD: GROUPED PROJECTS FOR SAFETY IMPROVEMENTS - SAFER ROADS	$929,300	5.07	San Joaquin
Bakersfield	KER140508	20400000736	IN BAKERSFIELD: MOHAWK ST FROM TRUXTUN AVE TO CALIFORNIA AVE; CONSTRUCT MEDIAN ISLAND	$300,000	5.01	San Joaquin
Bakersfield	KER151002	20400000769	IN BAKERSFIELD: FRANK WEST ELEMENTARY SCHOOL; SAFE ROUTES TO SCHOOL IMPROVEMENTS	$312,000	3.02	San Joaquin
Bakersfield	KER151009	20400000794	IN BAKERSFIELD: A STREET: BETWEEN BRUNDAGE LANE AND SAN EMIDIO ST; CONSTRUCT SIDEWALK IMPROVEMENTS	$1,110,000	3.02	San Joaquin
Bakersfield	KER160506	20400000815	IN BAKERSFIELD ON TRUXTUN AVE.: BETWEEN EMPIRE DR. AND OAK ST.; OPERATIONAL IMPROVEMENTS	$4,645,500	5.01	San Joaquin
Cal. City	KER160510	20400000819	IN CALIFORNIA CITY ON MENDIBURU RD.: FROM HACIENDA BLVD. TO NEURALIA RD.; SURFACE UNPAVED STREET	$1,636,727	1.10	Mojave Desert
Delano	KER150810	20400000787	IN DELANO: OPERATING ASSISTANCE	$1,831,237	2.01	San Joaquin
Delano	KER150811	20400000788	IN DELANO: PURCHASE OF THREE REPLACEMENT GAS DIAL-A-RIDE VANS	$165,000	2.10	San Joaquin
Delano	KER150812	20400000789	IN DELANO: PURCHASE OF THREE REPLACEMENT GAS DIAL-A-RIDE VANS	$165,000	2.10	San Joaquin
Delano	KER150813	20400000790	IN DELANO: OPERATING ASSISTANCE	$1,874,766	2.01	San Joaquin
Delano	KER150814	20400000791	IN DELANO: PURCHASE OF ONE REPLACEMENT CNG DIAL-A-RIDE BUS	$110,000	2.10	San Joaquin
Delano	KER150815	20400000792	IN DELANO: PURCHASE OF ONE REPLACEMENT CNG DIAL-A-RIDE BUS	$110,000	2.10	San Joaquin
GET	KER140502	20400000730	IN BAKERSFIELD: ON THE CALIFORNIA STATE UNIVERSITY, BAKERSFIELD CAMPUS; CONSTRUCTION OF A PUBLIC TRANSIT CENTER	$1,345,100	5.06	San Joaquin
GET	KER140503	20400000731	IN BAKERSFIELD: EXPANSION OF PASSIVE SOLAR ELECTRIC CONVERSION SYSTEM	$1,624,300	2.06	San Joaquin

Transportation Project Listing - Exempt Projects

Jurisdiction/ Agency	TIP Project ID	CTIPS ID (If available)	Description	Est. Cost	Exempt Code (per CTIPS)	Air Basins
GET	KER150806	20400000783	IN BAKERSFIELD: PURCHASE OF 24 REPLACEMENT CNG BUSES	$14,400,000	2.10	San Joaquin
GET	KER150807	20400000784	IN BAKERSFIELD: PURCHASE OF FIVE REPLACEMENT CNG PARATRANSIT BUSES	$675,000	2.10	San Joaquin
GET	KER150808	20400000785	IN BAKERSFIELD: PREVENTIVE MAINTENANCE	$7,221,690	2.01	San Joaquin
GET	KER150809	20400000786	IN BAKERSFIELD: PREVENTIVE MAINTENANCE	$7,582,775	2.01	San Joaquin
GET	KER160504	20400000813	IN BAKERSFIELD: PURCHASE TWO REPLACEMENT 40' ELECTRIC BUSES	$1,500,000	2.10	San Joaquin
KCOG	KER140101	20400000713	PLANNING, PROGRAMMING AND MONITORING	$797,000	4.01	Various
KCOG	KER160405	20400000809	IN KERN COUNTY: REGIONAL TRAFFIC COUNT PROGRAM	$180,000	4.01	Various
KCOG	KER160501	20400000810	IN KERN COUNTY: COMMUTEKERN'S RIDESHARE PROGRAM	$475,306	3.01	Various
KCSS	KER160505	20400000814	IN BAKERSFIELD: CNG SCHOOL BUS REPLACEMENT	$925,000	2.10	San Joaquin
Kern Co.	KER151004	20400000771	IN KERN COUNTY: MOJAVE; CONSTRUCT PEDESTRIAN IMPROVEMENTS	$640,000	3.02	Mojave Desert
Kern Co.	KER151011	20400000796	IN MOJAVE: VARIOUS STREETS IN DOWNTOWN AREA; CONSTRUCT PEDESTRIAN IMPROVEMENTS	$1,246,000	3.02	Mojave Desert
Kern Co.	KER151012	20400000797	IN LAMONT: VARIOUS STREETS; CONSTRUCT PEDESTRIAN IMPROVEMENTS	$1,980,000	3.02	San Joaquin
Kern Co.	KER160503	20400000812	IN MOJAVE: CONSTRUCT TRANSIT CENTER	$1,000,000	5.06	Mojave Desert
Kern Co.	KER160511	20400000820	IN ROSAMOND ON DAWN RD: BETWEEN 30TH ST WEST TO SIERRA HWY; SURFACE UNPAVED STREET	$900,000	1.10	Mojave Desert
Kern Co.	KER160512	20400000821	IN ROSAMOND ON 40 ST WEST: BETWEEN SWEESTER RD. TO FAVORITO RD.; SURFACE UNPAVED STREET	$400,000	1.10	Mojave Desert
Kern Co.	KER161001	20400000802	IN KERN COUNTY: KERN RIVER PARKWAY; CONSTRUCT BIKE TRAIL WESTERN EXTENSION PHASE I	$4,349,000	3.02	San Joaquin
McFarland	KER151013	20400000798	IN MCFARLAND: KERN AVENUE ELEMENTARY SR2S CONNECTIVITY	$293,000	3.02	San Joaquin

Transportation Project Listing - Exempt Projects

Jurisdiction/ Agency	TIP Project ID	CTIPS ID (If available)	Description	Est. Cost	Exempt Code (per CTIPS)	Air Basins
McFarland	KER160403	20400000805	IN MCFARLAND: SOUTHSIDE OF W. KERN AVE; 3RD ST TO 4TH ST; LANDSCAPING AND PEDESTRIAN IMPROVEMENTS	$374,402	4.09	San Joaquin
Ridgecrest	KER160509	20400000818	IN RIDGECREST ON SUNLAND ST: BOWMAN AVE TO DOLPHIN AVE; SURFACE UNPAVED STREET	$763,716	1.10	Indian Wells
Shafter	KER160404	20400000806	IN SHAFTER: GROUPED PROJECT FOR NON-CAPACITY WIDENING (NO ADDITIONAL TRAVEL LANES)	$509,690	1.19	San Joaquin
State	KER160201	20400000824	GROUPED PROJECTS FOR SHOULDER IMPROVEMENTS - SHOPP ROADSIDE PRESERVATION PROGRAM	$1,581,000	4.09	Various
State	KER160202	20400000826	GROUPED PROJECTS FOR BRIDGE REHABILITATION AND RECONSTRUCTION - SHOPP PROGRAM	$43,020,000	1.19	Various
State	KER160203	20400000827	GROUPED PROJECTS FOR SAFETY IMPROVEMENTS - SHOPP COLLISION REDUCTION PROGRAM	$32,779,000	1.09	Various
State	KER160204	20400000828	GROUPED PROJECTS FOR EMERGENCY REPAIR - SHOPP EMERGENCY RESPONSE PROGRAM	$28,089,000	1.12	Various
State	KER160205	20400000829	GROUPED PROJECTS FOR PAVEMENT RESURFACING AND/OR REHABILITATION - SHOPP ROADWAY PRESERVATION PROGRAM	$109,020,000	1.10	Various
State	KER160206	20400000830	GROUPED PROJECTS FOR PAVEMENT RESURFACING AND/OR REHABILITATION ON THE STATE HIGHWAY SYSTEM - HIGHWAY MAINTENANCE ($1,226,373 toll credits as part of match)	$10,692,000	1.10	Various
Tehachapi	KER151014	20400000799	IN TEHACHAPI: SECTIONS OF H ST AND TEHACHAPI BLVD FROM MILL ST TO DENNISON RD; CONSTRUCT PEDESTRIAN AND RAIL CROSSING IMPROVEMENTS	$2,242,000	3.02	Mojave Desert
Tehachapi	KER160502	20400000811	IN TEHACHAPI: TEHACHAPI BLVD BETWEEN MILL ST AND PAULEY ST; CONSTRUCT PARK-AND-RIDE	$1,667,270	5.06	Mojave Desert
Various	KER060601	20400000418	GROUPED PROJECTS FOR BRIDGE REHABILITATION AND RECONSTRUCTION - HIGHWAY BRIDGE PROGRAM (HBP). NON-CAPACITY PROJECTS ONLY. (40 CFR TABLES 2&3) (INCLUDES SEISMIC RETROFIT)	$3,830,500	1.19	Various

Transportation Project Listing - Exempt Projects

Jurisdiction/ Agency	TIP Project ID	CTIPS ID (If available)	Description	Est. Cost	Exempt Code (per CTIPS)	Air Basins
Various	KER140601	20400000710	GROUPED PROJECTS FOR SAFETY IMPROVEMENTS - HIGHWAY SAFETY IMPROVEMENT PROGRAM (HSIP). NON-CAPACITY INCREASING PROJECTS ONLY. (40 CFR TABLES 2&3) ($481,126 toll credits as part of match)	$7,484,166	1.06	Various
Various	KER160402	20400000804	VARIOUS LOCATIONS: GROUPED PROJECT FOR PAVEMENT RESURFACING AND/OR REHABILITATION (NON-CAPACITY PROJECTS ONLY)	$33,197,326	1.10	Various
Various	KER160507	20400000816	IN BAKERSFIELD: GROUPED PROJECTS FOR INTERSECTION SIGNALIZATION	$2,065,000	5.02	San Joaquin
Various	KER160508	20400000817	IN KERN COUNTY: GROUPED PROJECTS FOR SHOULDER IMPROVEMENTS	$16,525,320	1.04	San Joaquin
Various	KER160601	20400000831	GROUPED PROJECTS FOR RAILROAD/HIGHWAY CROSSING	$1,374,250	1.01	Various
Various	KER160801	20400000801	GROUPED PROJECTS FOR PURCHASE OF NEW BUSES AND RAIL CARS TO REPLACE EXISTING VEHICLES OR FOR MINOR EXPANSIONS OF THE FLEET	$419,484	2.10	Various
Various	KER160802	20400000825	GROUPED PROJECTS FOR OPERATING ASSISTANCE TO TRANSIT AGENCIES	$15,071,495	2.01	Various
Various	KER161002	20400000807	GROUPED PROJECTS FOR BICYCLE AND PEDESTRIAN FACILITIES - NON-MOTORIZED	$1,945,924	3.02	Various
Various	KER161003	20400000808	GROUPED PROJECTS FOR BICYCLE AND PEDESTRIAN FACILITIES - MOTORIZED	$321,533	3.02	Various
Wasco	KER141008	20400000776	IN WASCO: TERESA BURKE ELEMENTARY SCHOOL & FILBURN AVE; CONSTRUCT BIKE & PEDESTRIAN IMPROVEMENTS	$1,794,000	3.02	San Joaquin
Wasco	KER151007	20400000774	IN WASCO: JOHN L PRUEITT SCHOOL; CONSTRUCT BIKE & PEDESTRIAN IMPROVEMENTS	$473,000	3.02	San Joaquin
Wasco	KER160513	20400000822	IN WASCO: PURCHASE ONE REPLACEMENT CNG SANITATION TRUCK	$350,000	4.01	San Joaquin
Wasco	KER160514	20400000822	IN WASCO: PURCHASE ONE REPLACEMENT CNG STREET SWEEPER	$350,000	4.01	San Joaquin

APPENDIX C

CONFORMITY ANALYSIS DOCUMENTATION

EMFAC Emissions (tons/day)

KERN (SJV)

Pollutant	Source	Description	2017	2018	2020	2023	2025	2031	2035	2040
Carbon Monoxide	EMFAC 2014 (Winter Run)	CO Total Exhaust (All Vehicles Total)	40.9	37.9			24.4		19.0	18.1
		Conformity Total	41	38			24		19	18
			2017		2020	2023		2031		2040
Ozone	EMFAC 2014 (Summer Run)	ROG Total Exhaust (All Vehicles Total)	6.86		5.67	4.81		4.09		3.54
		Rule 9410 (ETR)	-0.14		-0.19	-0.18		-0.18		-0.18
		Conformity Total	6.72		5.48	4.64		3.92		3.36
Ozone	EMFAC 2014 (Summer Run)	NOx Total Exhaust (All Vehicles Total)	26.66		22.21	12.70		10.75		10.29
		Rule 9410 (ETR)	-0.16		-0.13	-0.10		-0.10		-0.10
		Conformity Total	26.50		22.09	12.60		10.65		10.19

Note: State control measures (RFG, Moyer, AB1493 and Smog Check) and District Rule 9310 (School Bus) have been incorporated in EMFAC2014.

Pollutant	Source	Description	2020	2025	2035	2040
PM-10	EMFAC 2014 (Annual Run)	PM-10 Total (All Vehicles Total)	1.63	1.69	1.90	1.98
		* includes tire & brake wear				
		Conformity Total	1.63	1.69	1.90	1.98
PM-10	EMFAC 2014 (Annual Run)	NOx Total Exhaust (All Vehicles Total)	23.26	12.80	10.90	10.68
		Conformity Total	23.26	12.80	10.90	10.68

Note: State control measures (Reflash, Idling, and Moyer) have been incorporated in EMFAC2014.

			2017	2018		2021	2025	2035	2040
PM2.5 Annual	EMFAC 2014 (Annual Run)	PM2.5 Total Exhaust (All Vehicles Total)	0.80	0.77		0.71	0.71	0.78	0.80
(1997 and 2012		* includes tire & brake wear							
standards)									
		Conformity Total	0.80	0.80		0.70	0.70	0.80	0.80
PM2.5 Annual	EMFAC 2014 (Annual Run)	NOx Total Exhaust (All Vehicles Total)	27.97	26.53		21.27	12.80	10.90	10.68
(1997 and 2012									
standards)									
		Conformity Total	28.00	26.50		21.30	12.80	10.90	10.70
Note: State control measures (Moyer, AB1493 and Smog Check) and District Rule 9310 (School Bus) have been incorporated in EMFAC2014. District Rule 9410 (ETR) was not included in the RFP demonstration for the 2015 PM2.5 Plan.									

			2017		2019		2025	2035	2040
PM2.5 24-hour	EMFAC 2014 (Winter Run)	PM2.5 Total Exhaust (All Vehicles Total)	0.80		0.76		0.71	0.78	0.80
(2006 standard)		* includes tire & brake wear							
		Conformity Total	0.80		0.80		0.70	0.80	0.80
PM2.5 24-hour	EMFAC 2014 (Winter Run)	NOx Total Exhaust (All Vehicles Total)	28.67		25.63		13.09	11.09	10.85
(2006 standard)									
		Conformity Total	28.70		25.60		13.10	11.10	10.90
Note: State control measures (Moyer, AB1493 and Smog Check) and District Rule 9310 (School Bus) have been incorporated in EMFAC2014. District Rule 9410 (ETR) was not included in the RFP demonstration for the 2012 PM2.5 Plan.									

EMFAC Emissions (tons/day)						
KERN - MD						
Pollutant	**Source**	**Description**				
			2017	2025	2035	2040
Ozone	EMFAC 2014 (Summer Run)	ROG Total Exhaust (All Vehicles Total)	1.35	0.80	0.56	0.58
		Conformity Total	1.35	0.80	0.56	0.58
Ozone	EMFAC 2014 (Summer Run)	NOx Total Exhaust (All Vehicles Total)	4.23	1.90	1.51	1.71
		Conformity Total	4.23	1.90	1.51	1.71
Note: State control measures (Reflash, Public Fleet, Idling, AB 1493 and Moyer) have been incorporated in EMFAC2014.						

Paved Road Dust Emissions (tons/day)

KERN 2020

			VMT Daily	VMT (million/year)	Base Emissions (PM10 tpy)	Rain Adj. Emissions (PM10 tpy)	Rain Adj. Emissions (PM10 tons/day)	District Rule 8061/ISR Control Rates	Control-Adjusted Emissions
Enter Freeway VMT ==>		Freeway	10,638,280	3,883	296.695	289.158	0.792	0.147	0.676
Enter Arterial VMT ==>		Arterial	10,327,517	3,770	479.291	467.115	1.280	0.337	0.848
Enter Collector VMT ==>		Collector	457,927	167	21.252	20.712	0.057	0.666	0.019
		Urban	736,226	269	255.976	249.473	0.683	0.679	0.219
Enter Total of Urban and Rural Local VMT Here =>	1,502,503	Rural	766,276	280	1152.486	1123.209	3.077	0.090	2.800
		Totals	22,926,227	8,368	2205.699	2149.666	5.889		4.563

KERN 2025

			VMT Daily	VMT (million/year)	Base Emissions (PM10 tpy)	Rain Adj. Emissions (PM10 tpy)	Rain Adj. Emissions (PM10 tons/day)	District Rule 8061/ISR Control Rates	Control-Adjusted Emissions
Enter Freeway VMT ==>		Freeway	11,924,704	4,353	332.572	324.124	0.888	0.147	0.757
Enter Arterial VMT ==>		Arterial	11,506,301	4,200	533.997	520.431	1.426	0.337	0.945
Enter Collector VMT ==>		Collector	525,745	192	24.399	23.780	0.065	0.666	0.022
		Urban	859,888	314	298.971	291.376	0.798	0.679	0.256
Enter Total of Urban and Rural Local VMT Here =>	1,754,874	Rural	894,986	327	1346.066	1311.871	3.594	0.090	3.271
		Totals	25,711,624	9,385	2536.006	2471.582	6.771		5.252

KERN 2035

			VMT Daily	VMT (million/year)	Base Emissions (PM10 tpy)	Rain Adj. Emissions (PM10 tpy)	Rain Adj. Emissions (PM10 tons/day)	District Rule 8061/ISR Control Rates	Control-Adjusted Emissions
Enter Freeway VMT ==>		Freeway	14,570,397	5,318	406.359	396.036	1.085	0.147	0.926
Enter Arterial VMT ==>		Arterial	12,770,195	4,661	592.653	577.597	1.582	0.337	1.049
Enter Collector VMT ==>		Collector	654,278	239	30.364	29.593	0.081	0.666	0.027
		Urban	1,014,478	370	352.720	343.760	0.942	0.679	0.302
Enter Total of Urban and Rural Local VMT Here =>	2,070,363	Rural	1,055,885	385	1588.060	1547.718	4.240	0.090	3.859
		Totals	30,065,234	10,974	2970.157	2894.704	7.931		6.163

KERN 2040

			VMT Daily	VMT (million/year)	Base Emissions (PM10 tpy)	Rain Adj. Emissions (PM10 tpy)	Rain Adj. Emissions (PM10 tons/day)	District Rule 8061/ISR Control Rates	Control-Adjusted Emissions
Enter Freeway VMT ==>		Freeway	15,297,690	5,584	426.643	415.804	1.139	0.147	0.972
Enter Arterial VMT ==>		Arterial	13,491,298	4,924	626.119	610.213	1.672	0.337	1.108
Enter Collector VMT ==>		Collector	662,392	242	30.741	29.960	0.082	0.666	0.027
		Urban	1,069,876	391	371.981	362.531	0.993	0.679	0.319
Enter Total of Urban and Rural Local VMT Here =>	2,183,420	Rural	1,113,544	406	1674.780	1632.234	4.472	0.090	4.069
		Totals	31,634,801	11,547	3130.263	3050.743	8.358		6.496

DO NOT CHANGE ANY ITEMS BELOW THIS LINE

KERN

HPMS Local Urban/Rural Percent
From 1998 Assembly of Statistical Reports - Caltrans
49.0% Urban
51.0% Rural
100.0% Total

Road Type	Base EF (lb PM10/ VMT
Freeway	0.000152818
Arterial	0.000254296
Collector	0.000254296
Local	0.00190513
Rural	0.008241141

KERN

	January	February	March	April	May	June	July	August	September	October	November	December	Total/Average
Rain Days	7.2	6.6	6.0	4.0	1.8	0.0	0	0	1.0	1.4	3.8	5.0	**36.8**
Total Days	31	28	31	30	31	30	31	31	30	31	30	31	**365**
Rain Reduction Factor	0.94	0.94	0.95	0.97	0.99	1.00	1.00	1.00	0.99	0.99	0.97	0.96	**0.97**

Paved Road Dust Emissions (tons/day)

KERN -- IWV 2017

			VMT Daily	VMT (million/year)	Base Emissions (PM10 tpy)	Rain Adj. Emissions (PM10 tpy)	Rain Adj. Emissions (PM10 tons/day)
Enter Freeway VMT ==>		Freeway	0	0	0.000	0.000	0.000
Enter Arterial VMT ==>		Arterial	444,340	162	20.621	20.098	0.055
Enter Collector VMT ==>		Collector	37,452	14	1.738	1.694	0.005
		Urban	51,676	19	17.967	17.511	0.048
Enter Total of Urban and Rural Local VMT Here =>	105,461	Rural	53,785	20	80.894	78.839	0.216
		Totals	587,254	214	121.220	118.141	0.324

KERN 2025

			VMT Daily	VMT (million/year)	Base Emissions (PM10 tpy)	Rain Adj. Emissions (PM10 tpy)	Rain Adj. Emissions (PM10 tons/day)
Enter Freeway VMT ==>		Freeway	0	0	0.000	0.000	0.000
Enter Arterial VMT ==>		Arterial	492,804	180	22.871	22.290	0.061
Enter Collector VMT ==>		Collector	32,500	12	1.508	1.470	0.004
		Urban	55,224	20	19.201	18.713	0.051
Enter Total of Urban and Rural Local VMT Here =>	112,702	Rural	57,478	21	86.448	84.252	0.231
		Totals	638,007	233	130.027	126.724	0.347

KERN 2035

			VMT Daily	VMT (million/year)	Base Emissions (PM10 tpy)	Rain Adj. Emissions (PM10 tpy)	Rain Adj. Emissions (PM10 tons/day)
Enter Freeway VMT ==>		Freeway	0	0	0.000	0.000	0.000
Enter Arterial VMT ==>		Arterial	623,538	228	28.938	28.203	0.077
Enter Collector VMT ==>		Collector	33,715	12	1.565	1.525	0.004
		Urban	62,971	23	21.894	21.338	0.058
Enter Total of Urban and Rural Local VMT Here =>	128,512	Rural	65,541	24	98.574	96.070	0.263
		Totals	785,765	287	150.971	147.135	0.403

KERN 2040

			VMT Daily	VMT (million/year)	Base Emissions (PM10 tpy)	Rain Adj. Emissions (PM10 tpy)	Rain Adj. Emissions (PM10 tons/day)
Enter Freeway VMT ==>		Freeway	0	0	0.000	0.000	0.000
Enter Arterial VMT ==>		Arterial	710,877	259	32.991	32.153	0.088
Enter Collector VMT ==>		Collector	35,209	13	1.634	1.593	0.004
		Urban	69,945	26	24.319	23.701	0.065
Enter Total of Urban and Rural Local VMT Here =>	142,744	Rural	72,799	27	109.491	106.710	0.292
		Totals	888,830	324	168.435	164.156	0.450

DO NOT CHANGE ANY ITEMS BELOW THIS LINE

KERN

HPMS Local Urban/Rural Percent
From 1998 Assembly of Statistical Reports - Caltrans
49.0% Urban
51.0% Rural
100.0% Total

Road Type	Base EF (lb PM10/ VMT
Freeway	0.000152818
Arterial	0.000254296
Collector	0.000254296
Local	0.00190513
Rural	0.008241141

KERN

	January	February	March	April	May	June	July	August	September	October	November	December	Total/Average
Rain Days	7.2	6.6	6.0	4.0	1.8	0.0	0	0	1.0	1.4	3.8	5.0	**36.8**
Total Days	31	28	31	30	31	30	31	31	30	31	30	31	**365**
Rain Reduction Factor	0.94	0.94	0.95	0.97	0.99	1.00	1.00	1.00	0.99	0.99	0.97	0.96	**0.97**

Unpaved Road Dust Emissions (tons/day)

KERN 2020

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

KERN 2025

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

KERN 2035

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

KERN 2040

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

DO NOT CHANGE ANY ITEMS BELOW THIS LINE

KERN	January	February	March	April	May	June	July	August	September	October	November	December	Total/Average
Rain Days	7.2	6.6	6.0	4.0	1.8	0.0	0	0	1.0	1.4	3.8	5.0	**36.8**
Total Days	31	28	31	30	31	30	31	31	30	31	30	31	**365**
Rain Reduction Factor	0.77	0.76	0.81	0.87	0.94	1.00	1.00	1.00	0.97	0.95	0.87	0.84	**0.90**

Unpaved Road Dust Emissions (tons/day)

KERN -- IWV 2017

	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

KERN -- IWV 2040

	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		2040	
	Year	Lane Miles	Year	Lane Miles	Year	Lane Miles	Year	Lane Miles
Baseline	2005	4790	2020	5634	2025	5738	2035	6874
Horizon	2020	5634	2025	5738	2035	6874	2040	6889
Difference	15	844	5	104	10	1136	5	15
Lane Miles per Year		56		21		114		3
Acres Disturbed		218		81		441		12
Acre-Months		3928		1452		7931		209
Emissions (tons/year)		432.128		159.744		872.448		23.040
Annual Average Day Emissions (tons)		1.184		0.438		2.390		0.063
District Rule 8021 Control Rates		0.290		0.290		0.290		0.290
Total Emissions (tons per day)		**0.841**		**0.311**		**1.697**		**0.045**

Road Construction Dust

KERN - INDIAN WELLS VALLEY

Description	2017		2025		2035		2040	
	Year	Lane Miles	Year	Lane Miles	Year	Lane Miles	Year	Lane Miles
Baseline	2005	266	2017	357	2025	406	2035	431
Horizon	2017	357	2025	406	2035	431	2040	431
Difference	12	91	8	49	10	25	5	0
Lane Miles per Year		8		6		3		0
Acres Disturbed		29		24		10		0
Acre-Months		529		428		175		0
Emissions (tons/year)		58.240		47.040		19.200		0.000
Total Emissions (tons per day)		**0.160**		**0.129**		**0.053**		**0.000**

PM10 Emission Trading Worksheet

KERN (SJV) CONFORMITY ESTIMATES (tons/day)

	2020		2025		2035		2040	
	PM10	NOx	PM10	NOx	PM10	NOx	PM10	NOx
Total On-Road Exhaust	1.630	23.259	1.691	12.797	1.904	10.896	1.984	10.678
Paved Road Dust	4.563		5.252		6.163		6.496	
Unpaved Road Dust	0.343		0.343		0.343		0.343	
Road Construction Dust	0.841		0.311		1.697		0.045	
Total	**7.377**	**23.259**	**7.597**	**12.797**	**10.107**	**10.896**	**8.868**	**10.678**

Difference (2020 Budget - 2020)

	PM10	NOx
2020 Budgets	7.4	23.3
2020	7.4	23.3
Difference	**0.0**	**0.0**
* 1.5 (Adjustment to NOx Budget)	0.0	

NOTE: ONLY IMPLEMENT TRADING IF

Difference (2020 Budget - 2025)

	PM10	NOx
2020 Budgets	7.4	23.3
2025	7.6	12.8
Difference	**-0.2**	**10.5**
* 1.5 (Adjustment to NOx Budget)	0.3	

NOTE: ONLY IMPLEMENT TRADING IF

Difference (2020 Budget - 2035)

	PM10	NOx
2020 Budgets	7.4	23.3
2035	10.1	10.9
Difference	**-2.7**	**12.4**
* 1.5 (Adjustment to NOx Budget)	4.1	

NOTE: ONLY IMPLEMENT TRADING IF

Difference (2020 Budget - 2040)

	PM10	NOx
2020 Budgets	7.4	23.3
2040	8.9	10.7
Difference	**-1.5**	**12.6**
* 1.5 (Adjustment to NOx Budget)	2.3	

NOTE: ONLY IMPLEMENT TRADING IF

1:1.5 PM10 to NOx Trading

Adjusted 2020 Budget	**7.4**	**23.3**
2020 Conformity Total	**7.4**	**23.3**
Difference	**0.0**	**0.0**

TRADING WAS NOT IMPLEMENTED

NOTE: FINAL DIFFERENCE MUST BE POSITIVE

Adjusted 2020 Budget	**7.6**	**23.0**
2025 Conformity Total	**7.6**	**12.8**
Difference	**0.0**	**10.2**

NOTE: FINAL DIFFERENCE MUST BE POSITIVE

Adjusted 2020 Budget	**10.1**	**19.3**
2035 Conformity Total	**10.1**	**10.9**
Difference	**0.0**	**8.4**

NOTE: FINAL DIFFERENCE MUST BE POSITIVE

Adjusted 2020 Budget	**8.9**	**21.1**
2040 Conformity Total	**8.9**	**10.7**
Difference	**0.0**	**10.4**

NOTE: FINAL DIFFERENCE MUST BE POSITIVE

2017 FTIP Conformity Results Summary -- Kern (SJV)

Pollutant	Scerio	Emissions Total	DID YOU PASS?
		CO (tons/day)	CO
Carbon Monoxide	2010 Budget	180	
	2017	41	YES
	2018 Budget	180	
	2018	38	YES
	2025	24	YES
	2035	19	YES
	2040	18	YES

		ROG (tons/day)	NOx (tons/day)	ROG	NOx
Ozone	2017 Budget	6.9	26.8		
	2017	6.7	26.5	YES	YES
	2020 Budget	5.7	22.4		
	2020	5.5	22.1	YES	YES
	2023 Budget	4.8	12.9		
	2023	4.6	12.6	YES	YES
	2031	3.9	10.6	YES	YES
	2040	3.4	10.2	YES	YES

PM-10	Total On-Road Exhaust		Paved Road Dust		Unpaved Road Dust		Road Construction Dust		Total	
	PM-10	Nox	PM-10	Nox	PM-10	Nox	PM-10	Nox	PM-10	Nox
2020	1.630	23.259	4.563		0.343		0.841		**7.4**	**23.3**
2025	1.691	12.797	5.252		0.343		0.311		**7.6**	**12.8**
2035	1.904	10.896	6.163		0.343		1.697		**10.1**	**10.9**
2040	1.984	10.678	6.496		0.343		0.045		**8.9**	**10.7**

		PM-10 (tons/day)	NOx (tons/day)		PM-10	NOx
PM-10	2020 Budget	7.4	23.3			
	2020	7.4	23.3		**YES**	**YES**
	Adjusted 2020 Budget	7.6	23.0			
	2025	7.6	12.8		**YES**	**YES**
	Adjusted 2020 Budget	10.1	19.3			
	2035	10.1	10.9		**YES**	**YES**
	Adjusted 2020 Budget	8.9	21.1			
	2040	8.9	10.7		**YES**	**YES**

		PM2.5 (tons/day)	NOx (tons/day)		PM2.5	NOx
1997 24-Hour and 1997 & 2012 Annual PM2.5 Standards	2014 Budget	1.2	43.8			
	2017	0.8	28.0		**YES**	**YES**
	2014 Budget	1.2	43.8			
	2018	0.8	26.5		**YES**	**YES**
	2014 Budget	1.2	43.8			
	2021	0.7	21.3		**YES**	**YES**
	2014 Budget	1.2	43.8			
	2025	0.7	12.8		**YES**	**YES**
	2014 Budget	1.2	43.8			
	2035	0.8	10.9		**YES**	**YES**
	2014 Budget	1.2	43.8			
	2040	0.8	10.7		**YES**	**YES**

		PM2.5 (tons/day)	NOx (tons/day)		PM2.5	NOx
2006 PM2.5 Winter 24-Hour Standard	2017 Budget	0.8	28.8			
	2017	0.8	28.7		**YES**	**YES**
	2017 Budget	0.8	28.8			
	2019	0.8	25.6		**YES**	**YES**
	2017 Budget	0.8	28.8			
	2025	0.7	13.1		**YES**	**YES**
	2017 Budget	0.8	28.8			
	2035	0.8	11.1		**YES**	**YES**
	2017 Budget	0.8	28.8			
	2040	0.8	10.9		**YES**	**YES**

2017 FTIP Conformity Results Summary -- Kern (MD)

		ROG (tons/day)	NOx (tons/day)		ROG	NOx
Ozone	2008 Budget	5.0	18.0			
	2017	1.3	4.2		**YES**	**YES**
	2025	0.8	1.9		**YES**	**YES**
	2035	0.6	1.5		**YES**	**YES**
	2040	0.6	1.7		**YES**	**YES**

PM-10	Paved Road Dust	Unpaved Road Dust	Road Construction Dust	**Total**
	PM-10	PM-10	PM-10	**PM-10**
2017	0.324	0.467	0.160	**1.0**
2025	0.347	0.467	0.129	**0.9**
2035	0.403	0.467	0.053	**0.9**
2040	0.450	0.467	0.000	**0.9**

2017 FTIP Conformity Results Summary -- Kern (Indian Wells Valley)

		PM-10 (tons/day)	**PM-10**
PM-10	2013 Budget	1.7	
	2017	1.0	**YES**
	2013 Budget	1.7	
	2025	0.9	**YES**
	2013 Budget	1.7	
	2035	0.9	**YES**
	2013 Budget	1.7	
	2040	0.9	**YES**

APPENDIX D

TIMELY IMPLEMENTATION DOCUMENTATION FOR

TRANSPORTATION CONTROL MEASURES

Kern Council of Governments
2002 RACM Timely Implementation Documentation

RACM Commitment	Agency	Commitment Description	Commitment Schedule	Commitment Funding	TIP	TIP Project ID	Project Description	Implementation Status	2017 FTIP Conformity Analysis
								(as of 8/15)	(as of 7/16)
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 Council of Governments
2002 RACM Timely Implementation Documentation

RACM Commitment	Agency	Commitment Description	Commitment Schedule	Commitment Funding	TIP	TIP Project ID	Project Description	Implementation Status	2017 FTIP Conformity Analysis
								(as of 8/15)	(as of 7/16)
					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 Council of Governments
2002 RACM Timely Implementation Documentation

RACM Commitment	Agency	Commitment Description	Commitment Schedule	Commitment Funding	TIP	TIP Project ID	Project Description	Implementation Status	2017 FTIP Conformity Analysis
								(as of 8/15)	(as of 7/16)
					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 Council of Governments
2002 RACM Timely Implementation Documentation

RACM Commitment	Agency	Commitment Description	Commitment Schedule	Commitment Funding	TIP	TIP Project ID	Project Description	Implementation Status	2017 FTIP Conformity Analysis
								(as of 8/15)	(as of 7/16)
					2000	KER970508	SIGNALIZATION: TRUNK LINE COMMUNICATIONS/SYNCHRO. - 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.	Complete	Complete
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 Council of Governments
2002 RACM Timely Implementation Documentation

RACM Commitment	Agency	Commitment Description	Commitment Schedule	Commitment Funding	TIP	TIP Project ID	Project Description	Implementation Status	2017 FTIP Conformity Analysis
								(as of 8/15)	(as of 7/16)
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 Council of Governments
2002 RACM Timely Implementation Documentation

RACM Commitment	Agency	Commitment Description	Commitment Schedule	Commitment Funding	TIP	TIP Project ID	Project Description	Implementation Status	2017 FTIP Conformity Analysis
								(as of 8/15)	(as of 7/16)
					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	Area Vehicle Locator (Phase 1)	Complete	Complete
						KER990527	Area Vehicle Locator (Phase 2)		
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 Council of Governments
2002 RACM Timely Implementation Documentation

RACM Commitment	Agency	Commitment Description	Commitment Schedule	Commitment Funding	TIP	TIP Project ID	Project Description	Implementation Status	2017 FTIP Conformity Analysis
								(as of 8/15)	(as of 7/16)
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 Council of Governments
2002 RACM Timely Implementation Documentation

RACM Commitment	Agency	Commitment Description	Commitment Schedule	Commitment Funding	TIP	TIP Project ID	Project Description	Implementation Status	2017 FTIP Conformity Analysis
								(as of 8/15)	(as of 7/16)
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)	Implementation Status	2017 FTIP Conformity Analysis
				(as of 8/15)	(as of 7/16)
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)	Commitment Complete.	Commitment Complete.
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	Implementation of the Bikeway Master Plan continues to occur along with updates to the Kern County General Plan. The Bikeway Master Plan was approved regionally by the Kern Council of Governments October 2012.	Implementation of the Bikeway Master Plan continues to occur along with updates to the Kern County General Plan. The Bikeway Master Plan was approved regionally by the Kern Council of Governments October 2012.
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.

Kern Council of Governments
2002 RACM Timely Implementation Documentation

RACM Commitment	Agency	Measure Title	Measure Description (not verbatim)	Implementation Status	2017 FTIP Conformity Analysis
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 MEETING PROCESS DOCUMENTATION

NOTICE OF PUBLIC HEARING ON THE
DRAFT 2017 FEDERAL TRANSPORTATION IMPROVEMENT PROGRAM,
THE DRAFT 2014 REGIONAL TRANSPORTATION PLAN AMENDMENT 1,
AND THE CORRESPONDING DRAFT CONFORMITY ANALYSIS

NOTICE IS HEREBY GIVEN that the Kern Council of Governments (Kern COG) will hold a public hearing on July 21, 2016 @ 6:30 P.M. at Kern COG's office, 1401 19st Street, Suite 300, Bakersfield, CA 93301 regarding the Draft 2017 Federal Transportation Improvement Program (2017 FTIP), the Draft 2014 Regional Transportation Plan Amendment 1 (2014 RTP Amendment 1), and the corresponding Draft Conformity Analysis. The purpose of this public hearing is to receive public comments on these documents.

- The 2017 FTIP is a near-term listing of capital improvement and operational expenditures utilizing federal and state monies for transportation projects in Kern County during the next four years.
- The 2014 RTP is a long-term strategy to meet Kern County's transportation needs out to the year 2040. Amendment 1 contains project information updates to the Thomas Roads Improvement Program and State Transportation Improvement Program.
- The corresponding Conformity Analysis contains two options that both support a finding that the 2017 FTIP and 2014 RTP Amendment 1 meet the air quality conformity requirements for carbon monoxide, ozone and particulate matter.

Individuals with disabilities may call Kern COG at (661) 861-2191 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 participate speaking any language with available professional translation services.

A 30-day public review and comment period will begin July 6, 2016 and conclude August 4, 2016. The draft document is available for review at Kern COG's office and on Kern COG's website at www.kerncog.org.

Public comments are welcomed at the hearing, or may be submitted in writing by 5 P.M. August 4, 2016 to Ahron Hakimi at the address below.

After considering the comments, 2017 FTIP, 2014 RTP Amendment 1, and only one Conformity Analysis option will be considered for adoption, by resolution, by the Kern

COG at a regularly scheduled meeting to be held on September 15, 2016. The documents will then be submitted to state and federal agencies for approval.

Ahron Hakimi, Executive Director
Kern Council of Governments
1401 19th Street, Suite 300
Bakersfield, CA 93301
(661) 861-2191

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

RESOLUTION NO. 16-35

In the Matter of:

2017 Federal Transportation Improvement Program and 2014 Regional Transportation Plan Amendment 1, 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, a 2014 Regional Transportation Plan Amendment 1 has been prepared in full compliance with federal guidance; and

WHEREAS, a 2014 Regional Transportation Plan Amendment 1 has been prepared in accordance with state guidelines adopted by the California Transportation Commission; and

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

WHEREAS, the 2017 Federal Transportation Improvement Program (2017 FTIP) has been prepared to comply with Federal and State requirements for local projects and through a cooperative process between the Federal Highway Administration (FHWA), the Federal Transit Administration (FTA), the State Department of Transportation (Caltrans), principal elected officials of general purpose local governments and their staffs, and public owner operators of mass transportation services acting through Kern COG forum and general public involvement; and

WHEREAS, the 2017 FTIP program listing is consistent with: 1) the 2014 Regional Transportation Plan Amendment 1; 2) the 2016 State Transportation Improvement Program; and 3) the Conformity Analysis for the 2017 FTIP and 2014 RTP Amendment 1; and

WHEREAS, the 2017 FTIP contains the MPO's certification of the transportation planning process assuring that all federal requirements have been fulfilled; and

WHEREAS, the 2017 FTIP and 2014 RTP Amendment 1 meets all applicable transportation planning requirements per 23 CFR Part 450.

WHEREAS, projects submitted in the 2017 FTIP and 2014 RTP Amendment 1 must be financially constrained and the financial plan affirms that funding is available; and

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

WHEREAS, the Conformity Analysis for the for the 2017 FTIP and 2014 RTP Amendment 1 supports a finding that the 2017 FTIP and 2014 RTP Amendment 1 meet the air quality conformity requirements for carbon monoxide, ozone and particulate matter; and

WHEREAS, the 2017 FTIP and 2014 RTP Amendment 1 do not interfere with the timely implementation of the Transportation Control Measures; and

WHEREAS, the 2017 FTIP and 2014 RTP Amendment 1 conform to the applicable SIPs; and

WHEREAS, the documents have been widely circulated and reviewed by Kern COG's 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 July 21, 2016 to hear and consider comments on the 2017 FTIP and 2014 RTP Amendment 1 and corresponding Conformity Analysis;

NOW, THEREFORE, BE IT RESOLVED, that Kern COG adopts the 2017 FTIP, 2014 RTP Amendment 1, and corresponding Conformity Analysis effective upon the effective date of EPA Federal Register titled *Approval and Promulgation of Air Quality State Implementation Plans; California; San Joaquin Valley; Moderate Area Plan for the 2006 PM2.5 NAAQS.*

BE IT FURTHER RESOLVED, that Kern COG finds that the 2017 FTIP and 2014 RTP Amendment 1 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 15th DAY OF SEPTEMBER 2016.

AYES: Flores, B. Smith, Wood, Pascual, Wilke, Sanders, Prout, Krier, P. Smith, Wegman, Couch, Miller, Parra

NOES: None

ABSTAIN: None

ABSENT: Cantu, Scrivner

Jennifer A. Wood, Chair
Kern Council of Governments

ATTEST:

I hereby certify that the foregoing is a true copy of a resolution of the Kern Council of Governments duly adopted at a regular meeting thereof held on the 15th day of September 2016.

Ahron Hakimi, Executive Director
Kern Council of Governments

SEP 19 2016
Date

APPENDIX F

RESPONSE TO PUBLIC COMMENTS

No comments received.