FINAL 2015 OZONE CONFORMITY ANALYSIS FOR THE 2019 FEDERAL TRANSPORTATION IMPROVEMENT PROGRAM AND THE 2018 REGIONAL TRANSPORTATION PLAN

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KINGS COUNTY ASSOCIATION OF GOVERNMENTS

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TABLE OF CONTENTS

APPENDICES

TABLES

EXECUTIVE SUMMARY

This report presents the Conformity Analysis for the 2019 Federal Transportation Improvement Program and the 2018 Regional Transportation Plan addressing the 2015 8-Hour Ozone Standards. The Kings County Association of Governments (KCAG) is the designated Metropolitan Planning Organization (MPO) in Kings County, California, and is responsible for regional transportation planning.

On October 26, 2015, EPA published a final rule strengthening the 8-hour primary and secondary ozone standards to 0.070 ppm. Then on June 4, 2018 EPA issued final designations classifying the San Joaquin Valley as "extreme" nonattainment for the 2015 ozone standard with an attainment deadline of 2038. Conformity for a given pollutant and standard applies one year after the effective date or August 3, 2019. It is important to note that the 2015 ozone standard nonattainment area boundary for the San Joaquin Valley is exactly the same as the nonattainment area boundary for the 2008 ozone standard.

In accordance with Section 93.109(c)(2) of the conformity rule and the 2015 Ozone Transportation Conformity Guidance, if an ozone nonattainment area has adequate or approved SIP budgets that address 2008 ozone standard, it must use the budget test until new 2015 ozone standard budgets are found adequate or approved. The 2015 Ozone Implementation Rule did not revoke 2008 standard requirements, therefore this conformity analysis addresses both 2015 and 2008 ozone standards.

The 2015 Ozone Conformity Analysis includes new analysis years 2020, 2023, 2026, and 2029 in line with the recently approved 2008 ozone standard budgets developed as part of the *2018 Updates to the California State Implementation Plan* (2018 SIP Update). In addition, this conformity analysis addresses the 2015 ozone standard attainment year 2037.

For this conformity determination, there are:

- No revisions to the TIP/RTP, including no additions or deletions of regionally significant projects,
- No changes in the design concept and scope of existing regionally significant projects, that require a new regional emissions analysis,
- No revisions that delay or accelerate the completion of regionally significant projects across conformity analysis years, and
- No changes to the time frame of the transportation plan.

This analysis demonstrates that the criteria specified in the transportation conformity regulations for a conformity determination are satisfied by the 2019 FTIP and the 2018 RTP; a finding of conformity is therefore supported. The 2015 Ozone Conformity Analysis was approved by the KCAG Transportation Policy Committee on March 27, 2019. Federal approval is anticipated on or before April 30, 2019. FHWA/FTA last issued a finding of conformity for the 2019 FTIP and the 2018 RTP on December 3, 2018

The 2019 FTIP and the 2018 RTP have been financially constrained in accordance with the requirements of 40 CFR 93.108 and consistent with the U.S. DOT metropolitan planning

regulations (23 CFR Part 450). A discussion of financial constraint and funding sources is included in the appropriate documents.

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

CONFORMITY REQUIREMENTS

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

The conformity regulation applies nationwide to "all nonattainment and maintenance areas for transportation-related criteria pollutants for which the area is designated nonattainment or has a maintenance plan" (40 CFR 93.102). Currently, the San Joaquin Valley (or portions thereof) is designated as nonattainment with respect to Federal air quality standards for ozone, and particulate matter under 2.5 microns in diameter (PM2.5); and has a maintenance plan for particulate matter under 10 microns in diameter (PM-10). Therefore, transportation plans and programs for the nonattainment areas for the Kings County area must satisfy the requirements of the Federal transportation conformity regulation. Note that the urbanized/metropolitan areas of Kern, Fresno, Stanislaus and San Joaquin Counties have attained the CO standard and maintained attainment for 20 years. In accordance with Section 93.102(b)(4), conformity requirements for the CO standard stop applying 20 years after EPA approves an attainment redesignation request or as of June 1, 2018. Therefore, future conformity analyses for the FTIP and RTP no longer include a CO conformity demonstration.

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

(1) the TIP and RTP must pass an emissions budget test using a budget that has been found to be adequate by EPA for transportation conformity purposes, or an interim emission test;

(2) the latest planning assumptions and emission models specified for use in conformity determinations must be employed;

(3) the TIP and RTP must provide for the timely implementation of transportation control measures (TCMs) specified in the applicable air quality implementation plans; and

(4) interagency and public consultation.

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

The final determination of conformity for the TIP and RTP is the responsibility of FHWA, and FTA within the U.S. DOT.

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

CONFORMITY TESTS

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

RESULTS OF THE CONFORMITY ANALYSIS

A regional emissions analysis was conducted for the years 2019, 2020, 2021, 2023, 2026, 2029, 2031, 2037 and 2042 for each applicable pollutant. All analyses were conducted using the latest planning assumptions and emissions models. The major conclusions of the KCAG 2015 Ozone Conformity Analysis are:

- For 2008 and 2015 8-hour ozone, the total regional on-road vehicle-related emissions (ROG and NOx) associated with implementation of the 2019 FTIP and the 2018 RTP for all years tested are projected to be less than the approved emissions budgets specified in the *2018 Updates to the California State Implementation Plan* for the San Joaquin Valley (2018 SIP Update). 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 2019 FTIP and the 2018 RTP for all years tested are either (1) projected to be less than the approved emissions budgets, or (2) less than the emission budgets using the approved PM-10 and 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 annual and 24-hour and 2012 annual PM2.5 standards, the total regional on-road vehicle-related emissions associated with implementation of the 2019 FTIP and the 2018 RTP 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 2019 FTIP and the 2018 RTP 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 2019 FTIP and the 2018 RTP will not impede and will support timely implementation of the TCMs that have been adopted as part of applicable air quality implementation plans. The current status of TCM implementation is documented in Chapter 4 of this report. Since the local SJV procedures (e.g., Air District Rule 9120 Transportation Conformity) have not been approved by EPA, consultation has been conducted in accordance with Federal requirements.

REPORT ORGANIZATION

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

Appendix E includes public hearing documentation conducted on the 2015 Ozone Conformity Analysis for the 2019 FTIP and 2018 RTP on January 23, 2019. 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 2015 Ozone Conformity Analysis for and the 2019 FTIP and 2018 RTP was prepared based on these criteria and tests. Presented first is a review of the development of the applicable conformity regulation and guidance procedures, followed by summaries of conformity regulation requirements, air quality designation status, conformity test requirements, and analysis years for the Conformity Analysis.

The Kings County Association of Governments (KCAG) is the designated Metropolitan Planning Organization (MPO) for Kings County in the San Joaquin Valley. As a result of this designation KCAG prepares the TIP, RTP, and associated conformity analyses. The TIP serves as a detailed four year (FY 2018/19 – 2021/22) programming document for the preservation, expansion, and management of the transportation system. The 2018 RTP has a 2042 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 NAAQS. 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 February 16, 2018, the U.S. Court of Appeals ruled against parts of the EPA's 2015 Ozone Implementation Rule related to the revocation of the 1997 ozone standard and the relevant "anti-backsliding" requirements. However, according to *Transportation Conformity Guidance for the South Coast II Court Decision*, nonattainment areas with existing 2008 ozone conformity budgets are not required to address the 1997 ozone standards for conformity purposes.

On December 6, 2018, EPA published the *Implementation of the 2015 National Ambient Air Quality Standards for Ozone: Nonattainment Area State Implementation Plan Requirements* final rule, effective February 4, 2019 (EPA, 2018). The rule clarified that nonattainment areas must continue to demonstrate conformity to the 2008 ozone standards.

On August 24, 2016, EPA published 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 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. The Transportation Conformity Guidance for 2015 Ozone NAAQS Nonattainment Areas released in June, 2018 incorporates the 2012 Multi-Jurisdictional Guidance by reference.

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 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 November 2018 (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. Since EPA has not yet approved EMFAC2017 for conformity use, EMFAC2014 was used in the 2015 Ozone Conformity Analysis as 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 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. The conformity analysis is required to be publicly available and an opportunity for public review and comment is provided. KCAG 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.

Kings County 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 2015 ozone conformity analysis for the 2019 FTIP and 2018 RTP includes analyses 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, 2008 and 2015 standards), 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). Note that the urbanized/metropolitan areas of Kern, Fresno, Stanislaus and San Joaquin Counties have attained the CO standard and maintained attainment for 20 years. In accordance with Section 93.102(b)(4), conformity requirements for the CO standard stop applying 20 years after EPA approves an attainment redesignation request or as of June 1, 2018.

State Implementation Plans have been prepared to address ozone, PM-10 and PM2.5:

- 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. EPA found the new ozone budgets adequate on June 29, 2017 (effective July 14, 2017). In response to recent court decisions regarding the baseline RFP year, ARB adopted the revised 2008 ozone conformity budgets as part of the *2018 Updates to the California State Implementation Plan* (2018 SIP Update) on October 25, 2018. EPA found the budgets adequate on March 25, 2019.

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

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

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

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 February 16, 2018, the U.S. Court of Appeals ruled against parts of the EPA's 2015 Ozone Implementation Rule related to the revocation of the 1997 ozone standard and the relevant "anti-backsliding" requirements. However, according to the *Transportation Conformity Guidance for the South Coast II Court Decision*, nonattainment areas with existing 2008 ozone conformity budgets are not required to address the 1997 ozone standards for conformity purposes.

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.

On June 4, 2018 EPA published final designations classifying the San Joaquin Valley as "extreme" nonattainment for 2015 ozone with an attainment deadline of 2038, effective August 3, 2018. Transportation conformity applies one year after the effective date or August 3, 2019. It is

important to note that the 2015 ozone standard nonattainment area boundary for the San Joaquin Valley is exactly the same as the nonattainment area boundary for the 2008 ozone standard.

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 PM2.5 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 PM2.5 standard.

On July 29, 2016, 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 PM 2.5 standards, must 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 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.

OZONE (2008 AND 2015 STANDARDS)

The San Joaquin Valley currently violates both the 2008 and 2015 ozone standards; thus the conformity determination includes all corresponding analyses (see discussion under Air Quality Designations Applicable to the San Joaquin Valley above). Under the existing conformity regulations, 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'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. Current federal guidance does not require 2008 ozone nonattainment areas to address the 1997 ozone standard for conformity purposes.

On March 25, 2019, EPA published a final rule finding the 2008 ozone conformity budgets adequate as contained in the *2018 Updates to the California State Implementation Plan.* The EPA final rule 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.

In accordance with Section 93.109(c)(2) of the conformity rule and the 2015 Ozone Transportation Conformity Guidance, if a 2015 ozone nonattainment area has adequate or approved SIP budgets that address the 2008 ozone standard, it must use the budget test until new 2015 ozone standard budgets are found adequate or approved. It is important to note that the boundaries for the 2015 ozone standard and 2008 ozone standard are identical. In addition, the 2015 Ozone Implementation Rule did not revoke 2008 standard requirements. Consequently, for this conformity analysis, the SJV MPOs will conduct demonstrations for both 2008 and 2015 ozone standards using subarea emissions budgets as established in the *2018 Updates to the California State Implementation Plan.*

The conformity budgets from Table 1 of the March 25, 2019 Federal Register are provided in Table 1-1 below. These budgets will be used to compare to emissions resulting from the 2019 FTIP and the 2018 RTP.

Table 1-1:
On-Road Motor Vehicle 2008 and 2015 Ozone Standard Emissions Budgets
(summer tons/day)

County	2020		2023		2026		2029		2031	
	ROG	NOx	ROG	NOx	ROG	NOx	ROG	NOx	ROG	NOx
Fresno	6.7	23.9	5.5	14.1	4.9	13.2	4.5	12.4	4.2	12.1
Kern (SJV)	5.4	20.9	4.5	14.5	4.2	14.4	4.0	14.3	3.9	14.3
Kings	1.2	4.5	1.0	2.7	0.9	2.6	0.8	2.6	0.8	2.6
Madera	1.5	4.3	1.1	2.7	1.0	2.5	0.9	2.4	0.8	2.3
Merced	2.2	8.8	1.7	6.0	1.5	5.9	1.3	5.6	1.2	5.4
San Joaquin	4.7	11.2	3.9	7.4	3.5	7.0	3.1	6.6	2.8	6.3
Stanislaus	3.1	8.8	2.6	5.6	2.2	4.9	2.0	4.5	1.8	4.3
Tulare	3.0	7.6	2.4	4.6	2.1	4.0	1.8	3.7	1.7	3.5

[(a)] Note that 2008 ozone budgets were established by rounding up each county's emissions totals to the nearest tenth of a ton.

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 2 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 July 8, 2016, 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 1-2:
On-Road Motor Vehicle PM-10 Emissions Budgets
(tons per average annual day)

County	2020[(b)]	
	PM-10	**NOx**
Fresno	7.0	25.4
Kern[(a)]	7.4	23.3
Kings	1.8	4.8
Madera	2.5	4.7
Merced	3.8	8.9
San Joaquin	4.6	11.9
Stanislaus	3.7	9.6
Tulare	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).

The 2018 PM2.5 Plan addressing 1997, 2006 and 2012 PM2.5 standards is anticipated to be submitted to EPA in the winter of 2019. Since no new PM2.5 budgets are available at this time, existing budgets in the approved PM2.5 plans will continue to be used as described below.

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 1-3 below and will be used to compare emissions resulting from the 2019 FTIP and the 2018 RTP.

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 1-3:
On-Road Motor Vehicle 1997 (24-hour and annual) and 2012 (annual) PM2.5 Standard Emissions Budgets
(tons per average annual day)

	2012[(a)]		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

[(a)] 2012 budgets are not in the timeframe of this conformity analysis.

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 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 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 1-4 below and will be used to compare emissions resulting from the 2019 FTIP and the 2018 RTP.

Table 1-4:
On-Road Motor Vehicle 2006 24-Hour PM2.5 Standard Emissions Budgets
(tons per average winter day)

	2017	
County	**PM2.5**	**NOx**
Fresno	1.0	32.1
Kern (SJV)	0.8	28.8
Kings	0.2	5.9
Madera	0.2	6.0
Merced	0.3	11.0
San Joaquin	0.6	15.5
Stanislaus	0.4	12.3
Tulare	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 PM2.5 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 PM2.5 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) and the trading mechanism.

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.

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. Table 1-5 below provides a summary of conformity analysis years that apply to this conformity analysis.

Table 1-5:
San Joaquin Valley Conformity Analysis Years

Pollutant	Budget Years[1]	Attainment/ Maintenance Year	Intermediate Years	RTP Horizon Year
2008 and 2015 Ozone	2011/2017/2020/2023/ 2026/2029	2031/2037[2]	NA	2042
PM-10	NA	2020	2029/2037	2042
1997 and 2012 PM2.5	NA	2014/2021[3]	2029/2037	2042
2006 24-hour PM2.5	2014/2017	2019[4]	2029/2037	2042

[1]Budget years that are not in the time frame of the transportation plan/conformity analysis are not included as analysis years (e.g., 2011, 2014, 2017), although they may be used to demonstrate conformity.
[2]2031 is the attainment year for the 2008 ozone standard. 2037 is the attainment year for the 2015 ozone standard.
[3] 2014 is the attainment year for the 1997 PM2.5 standards. 2021 is the attainment year for the 2012 PM2.5 standards.
[4]The 2006 PM2.5 standard must be met as expeditiously as practicable, but no later than December 31, 2019.

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 (i.e. 2031).

For the 2015 ozone standard, the San Joaquin Valley has been classified as an extreme nonattainment area with an attainment date of August 3, 2038. In accordance with the December 2018 final rule, *Implementation of the 2015 National Ambient Air Quality Standards for Ozone: Nonattainment Area State Implementation Plan Requirements*, the attainment year of 2037 must be modeled. When using the budget test, the attainment year of the 2015 ozone standard must be analyzed (i.e. 2037).

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, the 2012 PM2.5 Plan was approved by EPA, effective September 30, 2016, inclusive of the revised conformity budgets and trading mechanism for the 2006 24-hour PM2.5 standard. 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.

CHAPTER 2:
LATEST PLANNING ASSUMPTIONS AND TRANSPORTATION MODELING

For this conformity determination, there are:

- No revisions to the TIP/RTP, including no additions or deletions of regionally significant projects,
- No changes in the design concept and scope of existing regionally significant projects, that require a new regional emissions analysis,
- No revisions that delay or accelerate the completion of regionally significant projects across conformity analysis years, and
- No changes to the time frame of the transportation plan.

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 November 2018.

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.

For travel forecasts, KCAG uses a transportation model in the Cube Voyager software system. The model was validated in 2017 for the 2015 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 KCAG Conformity Analysis

Assumption	Year and Source of Data (MPO action)	Modeling	Next Scheduled Update
Population	Base Year : 2010 United States Census, 2010 to 2015 building permits Projections: California Department of Finance (DOF) 2014 population forecasts for control totals, city and county general plans for spatial allocation	Census block data were aggregated to the TAZ level for input into the CUBE model for the base year validation.	New data from the 2020 Census is expected to be adopted by KCAG in 2022.
Employment	Base Year: 2015 InfoUSA business inventory, 2015 California Employment Development Department (EDD) control totals Projections: California Department of Finance (DOF) 2014 population forecasts for growth rates, city and county general plans for spatial allocation	The employment site data were aggregated to the TAZ level for input into the CUBE model for the base year validation.	Updated employment growth rates are anticipated to be included in the next transportation model update in 2022.
Traffic Counts	Approximately 35 traffic counts were collected in 2015.	The CUBE model was validated using these traffic counts.	Traffic counts are updated every five years, if funds are available.

Assumption	Year and Source of Data (MPO action)	Modeling	Next Scheduled Update
Vehicle Miles of Travel	The KCAG policy Board accepted the 2017 transportation model validation for the 2015 base year in June 2018.	The CUBE transportation model is used to estimate VMT in Kings County.	VMT is an output of the transportation model. VMT is affected by the TIP/RTP project updates and is included in each new conformity analysis.
Speeds	The input highway speeds were checked and updated for the 2017 model validation. Speed distributions were updated in EMFAC2014, using methodology approved by ARB and with information from the transportation model.	The Cube transportation model includes a feedback loop that assures congested speeds are consistent with travel speeds used for emissions analysis. EMFAC2014	A speed study will be conducted every five years, if adequate funds are available.

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:

POPULATION FORECAST

The population forecasts used for the King's County Regional Transportation Plan/Sustainable Communities Strategy were from the California Department of Finance (DOF) Demographic Research Unit, "Report P-1 (Total Population), State and County Population Projections, July 1, 2010-2060 (5-year increments)," December, 2014. The resulting population forecast is included in the Table 2-2.

EMPLOYMENT FORECAST

Several sources were compared for projections of employment growth, including the California Department of Transportation (Caltrans) "California County-Level Economic Forecast 2015-2040" (September, 2015) and a commercial economic forecast for Kings County purchased from Woods & Poole Economics, Inc. in 2015. The Caltrans and Woods & Poole forecasts were consistent in projecting non-military employment growth rates close to the DOF population growth rate forecasts. The KCAG employment forecasts were developed primarily from general plan land use data applying estimates of market absorption rates and/or past growth patterns. Then, these employment forecasts were adjusted based on the population growth rate forecasted by DOF. The resulting employment forecast is included in Table 2-2.

HOUSEHOLD FORECAST

The household forecasts are projected to follow the same growth pattern as the DOF population forecasts. Prior forecasts from the San Joaquin Valley Demographic Forecasts: 2010 to 2050 prepared by The Planning Center projected that household sizes in the San Joaquin Valley would increase steadily. However, DOF data from recent years (2011-2016) actually indicated a slight decrease in household size. Therefore, households were assumed to increase at the same rate as population for these forecasts. The resulting household forecast is included in Table 2-2.

B. TRANSPORTATION MODELING

The San Joaquin Valley Metropolitan Planning Organizations (MPOs) utilize the TP+/CUBE traffic modeling software. The Valley MPO 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 MPO 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 KCAG transportation modeling methodology meets those requirements.

The KCAG regional travel demand model uses Citilabs Cube modeling software and was revalidated to a base year of 2015 in November 2017. The KCAG regional travel demand model is a trip-based "four-step" travel model. It uses land use, socioeconomic, and road network data to estimate trips by mode and facility-specific roadway traffic volumes. The study area for the KCAG model covers all of Kings County including the cities of Armona, Avenal, Corcoran, Hanford, Kettleman City, Lemoore, Rancheria, and Stratford. The county is divided up into

approximately 1,300 traffic analysis zones. Link types include freeway, freeway ramp, other state route, expressway, arterial, collector, and local. 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 travel demand model estimates travel demand and traffic volumes for the A.M. three-hour peak period, P.M. three-hour peak period, midday five-hour period and the remaining night 11-hour off-peak period. Daily forecasts are calculated by summing the A.M. and P.M. three-hour peak periods, the midday five-hour period and the 11-hour night off-peak period. The model also generates traffic forecasts for the A.M. peak hour and the P.M. peak hour.

The travel forecasting for the 2018 RTP uses the VMIP1 version of the San Joaquin Valley travel modeling system, originally developed in 2012. An updated VMIP2 version of the travel model system was provided to KCAG in 2016, but this version of the model was not used, as it could not be validated to observed VMT or traffic counts within the time frame required for RTP development. Key assumptions have been applied from the VMIP2 update, in particular the auto operating cost inputs. External growth inputs were also adjusted since the original 2012 model development to be more consistent with current DOF population growth forecasts for San Joaquin Valley counties.

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:

KCAG completed the update of the traffic model to Citilabs Cube modeling software and revalidation to a new base year of 2015 in 2017. The model was validated by comparing its estimates of 2015 traffic conditions with more than 370 daily and 230 peak hour traffic counts. The 2015 base year validation is within one percent of the vehicle-miles of travel (VMT) reported in the Highway Performance Monitoring System (HPMS) and meets standard correlation coefficient criteria for replicating total daily traffic volumes on various links. The model validation also meets criteria established for percent error relative to traffic counts (percent root mean square error or RMSE) on 10 out of 12 volume groupings.

SPEEDS

The conformity regulation requires documentation of the use of capacity sensitive assignment methodology and emissions estimates based on a methodology that differentiates between peak and off-peak volumes and speeds, and bases speeds on final assigned volumes. In addition, documentation of the use of zone-to-zone travel impedances to distribute trips in reasonable agreement with the travel times estimated from final assigned traffic volumes. Where transit is a significant factor, document that zone-to-zone travel impedances used to distribute trips are used

to model mode split. Finally, document that reasonable methods were used to estimate traffic speeds and delays in a manner sensitive to the estimated volume of travel on each roadway segment represented in the travel model.

Supporting Documentation:

The Kings County travel demand model estimates congested travel speeds for each of the four traffic assignment periods (AM, PM, midday and night). The travel model is validated using input average free flow speeds (based primarily on posted speed limits rather than specific speed surveys) and common practice speed flow curves based on the *Highway Capacity Manual* which are used to estimate congested speeds and travel times. The KCAG travel model includes a three-iteration feedback loop that is intended to ensure that the congested travel speeds used as input to the air quality analysis are consistent with the travel speeds used throughout the model process.

TRANSIT

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

Supporting Documentation:

The KCAG model has a general representation of accessibility to fixed-route transit services in Kings County, including Kings Area Rural Transit (KART). KART is Kings County's public transportation provider. KART provides public transit service Monday thru Friday with limited service on Saturdays. KART provides transportation services to the cities of Armona, Avenal, Corcoran, Grangeville, Hardwick, Hanford, Kettleman City, Laton, Lemoore, and Stratford. Transit service is represented by an average frequency of peak and off-peak transit service accessible to each transportation analysis zone, rather than a coded transit network.

The mode choice model uses a multinomial logit formulation, which assigns the probability of using a particular travel mode based on attractiveness measure for that mode in relation to the sum of the attractiveness of the other mode. The model predicts the following seven modes:

1. Drive Alone
2. 2-Person vehicle
3. 3+-Person vehicle
4. Walk to Transit
5. Drive to Transit
6. Walk
7. Bike

Daily transit trips are calculated by the model, but are not assigned to a transit network. Similarly, the model estimates trips by bicycle and walk modes for each origin-destination pair but these trips are not assigned to the network.

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.

The KCAG model was revalidated to a 2015 base year for the 2018 RTP. The revalidation included new inventories of base year housing and employment, updates to the road network and transit coverage to reflect recent changes in the transportation system, and updated traffic counts to represent the 2015 base year. The KCAG model traffic validation is based on several criteria, including vehicle-miles of travel, total volume by road type, and percent of links within acceptable limits.

<u>Vehicle Miles of Travel</u>

Vehicle miles of travel (VMT) were estimated from the travel demand model by multiplying link volumes by link distances. The model estimates intrazonal trips (trips remaining within a TAZ) but does not assign these trips to the model road network. The intrazonal trips were multiplied by the estimated intrazonal distances to calculate intrazonal VMT.

The Caltrans HPMS 2015 estimate of VMT in Kings County was 4,041,290. The 2015 model base year estimated 3,992,788 VMT on the roadway links and 32,377 in intrazonal VMT for a

total of 4,025,165 VMT. The 2015 model estimate is 0.4% lower than the Caltrans 2015 HPMS VMT target, well within acceptable validation ranges.

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 2019 FTIP and the 2018 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 MPO 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.

C. TRAFFIC ESTIMATES

A summary of the population, employment, and travel characteristics for the KCAG 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	Employment	Average Weekday VMT (Millions)	Total Lane Miles
2019	164,996	49,300	4.2	N/A
2020	167,465	50,900	4.3	2,440
2021	170,043	50,900	4.3	N/A
2023	175,199	52,400	4.4	N/A
2026	182,796	54,700	4.7	N/A
2029	190,121	56,900	4.8	2,455
2031	195,091	58,300	5.0	N/A
2037	210,481	62,900	5.4	2,487
2042	223,124	66,700	5.9	2,491

D. VEHICLE REGISTRATIONS

KCAG 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.

E. 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.

OZONE

No committed control measures are included in the 2008 ozone standard conformity demonstration as part of the 2016 Ozone Plan.

PM-10

Committed control measures in the EPA approved 2007 PM-10 Maintenance Plan that reduce mobile source emissions are shown in Table 2-3. However, reductions from these control measures were not applied to this conformity analysis because they were not needed to demonstrate conformity.

Table 2-3:
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 (as revised) and 2012 PM2.5 Plan (as revised in 2015) that reduce mobile source emissions are shown in Table 2-4 and 2-5, respectively. However, reductions from these control measures were not applied to this conformity analysis because they were not needed to demonstrate conformity.

Table 2-4:
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 2-5:
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 ozone precursors and particulate matter is EMFAC2014. CARB emission factors for PM10 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 2016 Ozone Plan (2008 standard) was adopted by the Air District on June 16, 2016 and subsequently adopted by the ARB on July 21, 2016. EPA found the new ozone budgets adequate on June 29, 2017 (effective July 14, 2017). In response to recent court decisions regarding the baseline RFP year, ARB adopted the revised 2008 ozone conformity budgets as part of the *2018 Updates to the California State Implementation Plan* on October 25, 2018. EPA found the budgets adequate on March 25, 2019.

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

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

- 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 1-7.

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 was required for conformity analysis on or after December 14, 2017.

On March 1, 2018 ARB released the latest update to the EMFAC model – EMFAC2017v1.0.2. The model was submitted for EPA review in the fall of 2018 and has not yet been approved by EPA for conformity use, therefore this analysis uses EMFAC2014 for all conformity tests.

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 as appropriate.

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 Standard – Since EPA did not take action on the 2018 PM2.5 Plan, 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 established based on average annual daily emissions. The annual inventory methodology contained in the 2008 PM2.5 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 Standard – Since EPA did not take action on the 2018 PM2.5 Plan, the 2012 PM2.5 Plan (as revised in 2015) budgets will continue to be used in this conformity analysis. On January 20, 2016, EPA finalized reclassification of the San Joaquin Valley to Serious nonattainment for the 2006 24-hour PM2.5 Standard. 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 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. Since EPA has not did not take action on the 2018 PM2.5 Plan, the 2008 PM2.5 Plan (as revised in 2011) budgets will continue to be used in this conformity analysis.

1997 and 2012 PM2.5 TRADING MECHANISM

Since EPA did not take action on the 2018 PM2.5 Plan, 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 1 to 9 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

Since EPA did not take action on the 2018 PM2.5 Plan, consistent with the PM2.5 implementation rule, the 2012 PM2.5 Plan budgets and trading mechanism will continue to be used in this conformity analysis.

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. 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 originally provided for interagency consultation in May 2016. EPA, FHWA, and ARB concurred.

Documentation of the conformity analysis for the 2019 FTIP and 2018 RTP is provided in Appendix C, including:

- 2015 Ozone Conformity EMFAC Spreadsheet
- 2015 Ozone Conformity Paved Road Spreadsheet
- 2015 Ozone Conformity Unpaved Road Dust Spreadsheet
- 2015 Ozone Conformity Construction Spreadsheet
- 2015 Ozone Conformity Totals Spreadsheet
- 2015 Ozone 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 OZONE

The 2016 Ozone Plan does not include new 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 (effective September 30, 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 any additional TCMs for the San Joaquin Valley.

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

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

A new 2002 RACM TID Table was prepared in 2006 to address the more general RACM commitments that require additional timely implementation documentation per EPA. A brief summary of the commitment, including finite end dates if applicable, is included for each measure. The MPOs provided a status update regarding implementation in consultation with their member jurisdictions. If a specific project has been implemented, it is included in the Project TID Table under "Additional Projects Identified". This documentation was included in the Conformity Analysis for the 2007 TIP and 2004 RTP (as amended) that was approved by FHWA in October 2006. The 2002 RACM TID Table has been updated 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, KCAG undertook a process to identify and evaluate potential control measures that could be included in the 2018 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 2018 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. KCAG 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 approved since 2012. New PM-10 plans that have been reviewed include:

A. West Pinal County, AZ Moderate PM-10 Nonattainment Area SIP, submitted December 21, 2015 (EPA approval effective May 31, 2017). Contingency measures include paving or chemically stabilizing unpaved roads.

B. Owens Valley, CA Serious PM-10 Nonattainment Area SIP, submitted June 9, 2016 (EPA approval effective April 12, 2017). Road dust was determined to be below de minimis thresholds and no mobile source control measures were adopted.

C. Mammoth Lake, CA PM-10 Redesignation Request and Maintenance Plan, submitted October 21, 2014 (EPA approval effective November 4, 2015). The Mammoth Lake general plan places a cap on the growth of VMT. Contingency measures include improved street sweeping procedures and reduced use of volcanic cinders on roadways.

D. Las Vegas, NV Serious PM-10 Redesignation Request and Maintenance Plan, submitted September 7, 2012 (EPA approval effective November 5, 2014). Most stringent measures were introduced in 2001. Stabilization of unpaved roads including paving roads with volumes over 150 vehicles per day. Paved road sweeping and mitigation measures.

E. Payson, AZ PM-10 Limited Maintenance Plan submitted January 23, 2012 (EPA approval effective May 19, 2014). Contingency measures include paving or chemically stabilizing unpaved roads.

F. South Coast, CA PM-10 Redesignation Request and Maintenance Plan submitted April 28, 2010 (EPA approval effective July 26, 2013). No PM-10 specific dust control measures cited for mobile sources.

G. Juneau's Mendenhall Valley, AK PM-10 Limited Maintenance Plan submitted February 20, 2009 (EPA approval effective July 8, 2013). The attainment plan control measures included optimizing sanding and de-icing materials to minimize entrainment, spring street sweeping, and paving of dirt roads. No additional measures were identified for the LMP to continue attainment of the NAAQS. Contingency measures include paving of dirt roads and stabilization of unpaved shoulders.

H. Eugene-Springfield, OR PM-10 Redesignation Request and Limited Maintenance Plan submitted January 13, 2012 (EPA approval effective June 10, 2013). Motor vehicles were not identified as a significant source and no control measures were included for onroad mobile sources.

I. Sandpoint, ID PM-10 Limited Maintenance Plan submitted December 12, 2011 (EPA approval effective May 23, 2013). Ordinances require the application of certain types of sand in the winter along with increased street 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, KCAG considered priority funding allocations in the 2018 RTP 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

KCAG and its member agencies consider both short and long-term PM10 and PM 2.5 emission reductions to be a priority. Projects are programmed in the 2019 TIP with CMAQ apportionments estimated by Caltrans for FY 2018-19 through FY 2021-22 to seal unpaved

county roads, to include curb, gutter and sidewalks on roadway improvements, to purchase PM efficient street sweepers with CMAQ apportionments. Roadway maintenance (repaving and overlaying roadways is the highest percentage of funding in the 2019 TIP.

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 draft boilerplate conformity document was distributed for interagency consultation on December 6, 2018. Comments received have been addressed and incorporated into this version of the analysis.

The 2015 Ozone Conformity Analysis was developed in consultation with KCAG local partner agencies, including member jurisdictions, Caltrans, and local transit agencies.

The 2015 Ozone Conformity Analysis for the 2019 FTIP and 2018 RTP was released on January 11, 2019 for a 30-day public comment period, followed by Board adoption on March 27, 2019. Federal approval is anticipated on or before April 30, 2019.

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. KCAG has an adopted consultation process and policy for conformity analysis which includes a 30-day public notice and 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 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 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.

Ozone:

For 2008 and 2015 8-hour ozone, the applicable conformity test is the emissions budget test, using the *2018 Updates to the California State Implementation Plan* budgets for the San Joaquin Valley established for ROG and NOx for an average summer (ozone) season day. EPA found the budgets adequate on March 25, 2019. 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 revision including conformity budgets was 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:

Since EPA did not take action on the 2018 PM2.5 Plan, the 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. 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:

Since EPA did not take action on the 2018 PM2.5 Plan, the 2012 PM2.5 Plan (as revised in 2015) budgets will continue to be used in this conformity analysis. 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(c)(2), 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. Since EPA has not did not take action on the 2018 PM2.5 Plan, the 2008 PM2.5 Plan (as revised in 2011) budgets will continue to be used in this conformity analysis. 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.

As all requirements of the Transportation Conformity Regulation have been satisfied, a finding of conformity for the 2015 Ozone Conformity Analysis for the 2019 FTIP and the 2018 RTP is supported.

Table 6-1:
Conformity Results Summary

2015 Ozone Conformity Analysis Results Summary -- KINGS

		ROG (tons/day)	NOx (tons/day)	ROG	NOx
2008 and 2015 Ozone	2020 Budget	1.2	4.5		
	2020	1.2	4.5	YES	YES
	2023 Budget	1.0	2.7		
	2023	1.0	2.6	YES	YES
	2026 Budget	0.9	2.6		
	2026	0.9	2.4	YES	YES
	2029 Budget	0.8	2.6		
	2029	0.8	2.3	YES	YES
	2031 Budget	0.8	2.6		
	2031	0.8	2.2	YES	YES
	2037	0.7	2.2	YES	YES
	2042	0.6	2.2	YES	YES

		PM-10 (tons/day)	NOx (tons/day)	PM-10	NOx
PM-10	2020 Budget	1.8	4.8		
	2020	1.7	4.7	YES	YES
	2020 Budget	1.8	4.8		
	2029	1.8	2.3	YES	YES
	Adjusted 2020 Budget	2.0	4.5		
	2037	2.0	2.2	YES	YES
	Adjusted 2020 Budget	2.1	4.4		
	2042	2.1	2.3	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	0.299	4.660	0.916		0.419		0.077		**1.7**	**4.7**
2029	0.314	2.324	1.038		0.419		0.025		**1.8**	**2.3**
2037	0.346	2.186	1.167		0.419		0.060		**2.0**	**2.2**
2042	0.372	2.264	1.263		0.419		0.020		**2.1**	**2.3**

		PM2.5 (tons/day)	NOx (tons/day)	PM2.5	NOx
1997 24-Hour and 1997 & 2012 Annual PM2.5 Standards	2014 Budget	0.3	9.3		
	2021	0.1	4.3	**YES**	**YES**
	2014 Budget	0.3	9.3		
	2029	0.1	2.3	**YES**	**YES**
	2014 Budget	0.3	9.3		
	2037	0.1	2.2	**YES**	**YES**
	2014 Budget	0.3	9.3		
	2042	0.2	2.3	**YES**	**YES**

		PM2.5 (tons/day)	NOx (tons/day)	PM2.5	NOx
2006 PM2.5 Winter 24-Hour Standard	2017 Budget	0.2	5.9		
	2019	0.1	5.1	**YES**	**YES**
	2017 Budget	0.2	5.9		
	2029	0.1	2.4	**YES**	**YES**
	2017 Budget	0.2	5.9		
	2037	0.1	2.2	**YES**	**YES**
	2017 Budget	0.2	5.9		
	2042	0.2	2.3	**YES**	**YES**

REFERENCES

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

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

EPA, 2004a. *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.

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

EPA, 2012a. 40 CFR Part 93. *Transportation Conformity Rule Restructuring Amendments; Final Rule*. Federal Register, March 14, 2012, Vol. 77, No. 50, p. 14979.

EPA, 2012b. *Transportation Conformity Guidance for 2008 Ozone Nonattainment Areas*. U.S. Environmental Protection Agency. EPA-420-B-12-045. July 2012.

EPA, 2012c. *Guidance for Transportation Conformity Implementation in Multi-Jurisdictional Nonattainment and Maintenance Areas*. U.S. Environmental Protection Agency. EPA-420-B-12-046. July 2012.

EPA, 2015. *Implementation of the 2009 National Ambient Air Quality Standards for Ozone: State Implementation Plan Requirements*. Final Rule. U.S. Environmental Protection Agency. Vol. 80. No. 44. March 6, 2015.

EPA, 2016. *Fine Particulate Matter National Ambient Air Quality Standards: State Implementation Plan Requirements.* Final Rule. U.S. Environmental Protection Agency. PA-HQ-OAR-2013-0691. July 29, 2016.

EPA, 2018(a). *Implementation of the 2015 National Ambient Air Quality Standards for Ozone: Nonattainment Area State Implementation Plan Requirements.* Final Rule. U.S. Environmental Protection Agency. Vol. 83, No. 234, December 6, 2018.

EPA, 2018(b). *Transportation Conformity Guidance for the South Coast II Court Decision*. EPA-420-B-12-050. November 2018.

EPA, 2018(c). *Transportation Conformity Guidance for 2015 Ozone NAAQS Nonattainment Areas*. EPA-420-B-18-023. June 2018.

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

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

APPENDIX A

CONFORMITY CHECKLIST

CONFORMITY ANALYSIS DOCUMENTATION

Checklist for MPO TIPs/RTPs
January 2018

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.	8-10	
§93.102 (b)(2)(iii)	PM10 areas: document whether EPA or state has found VOC and/or NOx to be a significant contributor or if the SIP establishes a budget.	12	
§93.102 (b)(2)(iv)	PM2.5 areas: document if both EPA and the state have found that NOx is **not** a significant contributor or that the SIP does **not** establish a budget (otherwise, conformity applies for NOx).	N/A	"Significant contributor" language not used in document.
§93.102 (b)(2)(v)	PM2.5 areas: document whether EPA or state has found VOC, SO2, and/or NH3 to be a significant contributor or if the SIP establishes a budget.	32-34	
§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 made by DOT.	1, 45	
§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	Document that horizon years are no more than 10 years apart ((a)(1)(i)). Document that the first horizon year is no more than 10 years from the based year used to validate the transportation demand planning model ((a)(1)(ii)). Document that the attainment year is a horizon year, if in the timeframe of the plan ((a)(1)(iii)). Describe the regionally significant additions or modifications to the existing transportation network that are expected to be open to traffic in each analysis year ((a)(2)(ii)). 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.	16-17, 26, Appendix B	
§93.108	Document that the TIP/RTP is fiscally constrained (23 CFR 450).	1	
§93.109 (a, b)	Document that the TIP/RTP complies with any applicable conformity requirements of air quality implementation plans (SIPs) and court orders.	10-15, 27-29, 30-35, 38-39	

40 CFR	Criteria	Page	Comments
§93.109 (c,)	Provide either a table or text description that details, for each pollutant, precursor and applicable standard, whether the interim emissions test(s) 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.	10-16, 46-47	
§93.109(e)	CO or PM10: Document if the area has a limited maintenance plan and from where that information comes.	12	
§93.109(f)	Document if motor vehicle emissions are an insignificant contributor and in what SIP that determination is found.	N/A	
§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.	19-27	
EPA-DOT guidance	Document the use of planning assumptions less than five years old. If unable, include written justification for the use of older data. (December 2008 guidance)	19-21	
§93.110 (c,d,e,f)	Document any changes in transit operating policies and assumed ridership levels since the previous conformity determination (c). Document the assumptions about transit service, use of the latest transit fares, and road and bridge tolls (d). Document the use of the latest information on the effectiveness of TCMs and other SIP measures that have been implemented (e). Document the key assumptions and show that they were agreed to through Interagency and public consultation (f).	24, 36-43	
§93.111	Document the use of the latest emissions model approved by EPA. If the previous model was used and the grace period has ended, document that the analysis began before the end of the grace period.	21, 30	
§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.	44-45, Appendix E	
§93.113	Document timely implementation of all TCMs in approved SIPs. Document that implementation is consistent with schedules in the applicable SIP and document whether anything interferes with timely implementation. Document any delayed TCMs in the applicable SIP and describe the measures being taken to overcome obstacles to implementation.	36-43, Appendix D	

40 CFR	Criteria	Page	Comments
§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.	
For Areas with SIP Budgets:			
§93.118, §93.124	Document what the applicable budgets are, and for what years. Document if there are subarea budgets established, and for which areas (93.124(c)). Document if there is a safety margin established, and what are the budgets with the safety margin included. (93.124(a)). Document if there has been any trading among budgets, and if so, which SIP establishes the trading mechanism, and how it is used in the conformity analysis (93.124(b)). If there is more than one MPO in the area, document whether separate budgets are established for each MPO (93.124(d)).	11-18, Appendix C	
§93.118 (a, c, e)	Document that emissions from the transportation network for each applicable pollutant and precursor, including projects in any associated donut area that are in the 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.	46-49	
§93.118 (b)	Document for which years consistency with motor vehicle emissions budgets must be shown.	16-18	
§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.	16-18, 48-49, Appendix C	
For Areas without Applicable SIP Budgets:			
§93.119	Document whether the area must meet just one or both interim emissions tests. If both, document that it is the "less than" form of these tests (i.e., §93.119(b)(1) and (c)(1) vs. (b)(2), (c)(2), and (d)).	N/A	
§93.119[j] (a, b, c, d)	Document that emissions from the transportation network for each applicable pollutant and precursor, including projects in any associated donut area that are in the TIP and regionally significant non-Federal projects, are consistent with the requirements of the "Action/Baseline" or "Action/Baseline Year" emissions tests as applicable.	N/A	

40 CFR	Criteria	Page	Comments
§93.119 (e)	Document the appropriate baseline year.	N/A	
§93.119 (f)	Document the use of appropriate pollutants and if EPA or the state has made a finding that a particular precursor or component of PM10 is significant or insignificant.	N/A	
§93.119 (g)	Document the use of the appropriate analysis years in the regional emissions analysis for areas without applicable SIP budgets.	N/A	
§93.119 (h, i)	Document how the baseline and action scenarios are defined for each analysis year.	N/A	
For All Areas Where a Regional Emissions Analysis Is Needed			
§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 year it will be open to traffic. Document that VMT for non-regionally significant Federal projects is accounted for in the regional emissions analysis	26, Appendix 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 (a)(2). 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 (a)(3).	36-43, Appendix D	
§93.122 (a)(4,5,6,7)	For nonregulatory measures that are not included in the transportation plan and TIP, include written commitments from appropriate agencies (a)(4). Document that assumptions for measures outside the transportation system (e.g. fuels measures) are the same for baseline and action scenarios (a)(5). Document that factors such as ambient temperature are consistent with those used in the SIP unless modified through interagency consultation (a)(6). Document the method(s) used to estimate VMT on off-network roadways in the analysis (a)(7).	30-31, Appendix D	
§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	22-23	

40 CFR	Criteria	Page	Comments
	forecasts (for per capita vehicle-trips, VMT, trip lengths mode shares, time of day, etc.).		
§93.122 (b)(1)(ii) [ii]	Document the land use, population, employment, and other network-based travel model assumptions.	20-21	
§93.122 (b)(1)(iii) [ii]	Document how land use development scenarios are consistent with future transportation system alternatives, and the reasonable distribution of employment and residences for each alternative.	20-21	
§93.122 (b)(1)(iv) [ii]	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.	22-24	
§93.122 (b)(1)(v) [ii]	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.	22-25	
§93.122 (b)(1)(vi) [ii]	Document how travel models are reasonably sensitive to changes in time, cost, and other factors affecting travel choices.	22-25	
§93.122 (b)(2) [ii]	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.	23-24	
§93.122 (b)(3) [ii]	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.	22-23	
§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.	19-27	
§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.	27-35, Appendix C	
§93.122 (g)	If appropriate, document that the conformity determination relies on a previous regional emissions analysis and is consistent with that analysis, i.e. that:	N/A	
	(g)(1)(i): the new plan and TIP contain all the projects that must be started to achieve the highway and transit system envisioned by the plan.	N/A	
	(g)(1)(ii): all plan and TIP projects are included in the transportation plan with design concept and scope adequate to determine their contribution to emissions in the previous determination;	N/A	
	(g)(1)(iii): the design concept and scope of each regionally significant project in the new plan/TIP are not significantly different from that described in the previous;	N/A	

40 CFR	Criteria	Page	Comments
	(g)(1)(iv): the previous regional emissions analysis meets 93.118 or 93.119 as applicable.	N/A	
§93.126, §93.127, §93.128	Document all projects in the TIP/RTP that are exempt from conformity requirements or exempt from the regional emissions analysis. Indicate the reason for the exemption (Table 2, Table 3, traffic signal synchronization) and that the interagency consultation process found these projects to have no potentially adverse emissions impacts.	26, Appendix 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. Also note these procedures apply in any areas where the use of these procedures has been the previous practice of the MPO (40 CFR 93.122(d)).

APPENDIX B

TRANPORTATION PROJECT LISTING

Regionally Significant Project Listing

Jurisdiction/Agency	TIP/RTP	CTIPs Project ID	Description			Estimated Cost	Conformity Analysis Year (project open to traffic)								
	Project ID	(if available)	Type of Improvement	Facility Name/Route	Project Limits		2019	2020	2021	2023	2026	2029	2031	2037	2042

NONE

Federally-Funded Non-Regionally Significant Project Listing

Jurisdiction/Agency	TIP/RTP	CTIPs Project ID	Description			Estimated Cost	Conformity Analysis Year (project open to traffic)								
	Project ID	(if available)	Type of Improvement	Facility Name/Route	Project Limits		2019	2020	2021	2023	2026	2029	2031	2037	2042

None

Exempt Project Listing

Jurisdiction/ Agency	TIP/RTP Project ID	CTIPs Project ID (if available)	Facility Name/Route	Project Description	Project Limits	Estimated Cost	CTIPs Exemption Code
Kings County Area Public Transit Agency	FTA-5311A	11600000175		KCAPTA - FTA 5311 Non-urban (5311) Operating Assistance	Kings County Non-Urban Area	$22,840,000	2.01
Corcoran	FTA-5311B	11600000176		Corcoran Transit - FTA 5311 Non-urban Operating Assistance	Corcoran, City of	$4,683,000	2.01
County	KIN-HBP	21600000033		Bridge rehabilitation and repair	Kings County	$1,056,000	1.19
Kings County Area Public Transit Agency	KCAPTA031	21600000044		Kings County Area Public Transit Agency FTA-Urban (5307) Operating Assistance	Kings County Urban Area	$29,758,000	2.01
Caltrans	SHOPP-CR	21600000106		SHOPP Grouped Projects for Collision Reduction Program in Kings County at various locations. (Non-Capacity Increasing Projects)	Kings County	$18,676,000	1.09
Caltrans	SHOPP-BP	21600000113		At Various Locations, Grouped Projects for Bridge Rehabilitation and Reconstruction - SHOPP-AC Program (using toll credits)(Non-Capacity Increasing Projects)	Kings County	$2,300,000	1.19
Various Agencies	HSIP	21600000153		At Various Locations, Grouped Projects for Safety Improvements - HSIP Program	Various Agencies	$2,882,000	1.06
Various Agencies	GP-BIKE	21600000169		Bike and Ped Projects	Various Agencies	$1,591,000	3.02
Caltrans	CTMINOR	21600000183		Grouped Projects for Safety, Shoulder Improvements, Pavement Resurfacing and/or Rehabilitation - Minor Program.	Kings County	$2,460,000	1.06
Caltrans	GP-HM	21600000192		Pavement Resurfacing and/or Rehabilitation on the State Highway System	Kings County	$11,178,000	1.10
County	CM5945022	21600000194		Seal Unpaved Roadways as PM Control Measure	Kings County	$1,623,000	1.10
County	CM5945107	21600000200	17th Ave.	Install Traffic Signals	At Houston Ave.	$320,000	5.02
Lemoore	CM5115A	21600000201		Purchase Alt Fuel Vehicle	Lemoore, City of	$330,000	4.01
Lemoore	CM5115B	21600000202		Purchase Alt Fuel Vehicle	Lemoore, City of	$300,000	4.01
Corcoran	CM5223A	21600000203		Purchase PM 10, PM 2.5 Efficient Street Sweeper	Corcoran, City of	$260,000	4.01
Corcoran	CM5223B	21600000204	Benrus Ave., Anderson St., & Gabel Ave.	Surface Dirt Roads / Install Curb Gutter and Sidewalk	North to Orange & Benrus to 6 1/2 Ave.	$1,133,000	1.10
Kings County Area Public Transit Agency	CM6198-02	21600000205		At KCAPTA Avenal Transit Hub,Purchase and Install Electric Vehicle Charging Station	Avenal	$57,000	2.05
Hanford	CM5091B	21600000206	9th Ave.	Install Traffic Signal	At Lacey Blvd.	$550,000	5.02

Exempt Project Listing

Jurisdiction/ Agency	TIP/RTP Project ID	CTIPs Project ID (if available)	Facility Name/Route	Project Description	Project Limits	Estimated Cost	CTIPs Exemption Code
Hanford	CM5091D	21600000208	12th Ave.	Install Traffic Signals	At Hume Ave.	$453,000	5.02
Caltrans	SHOPP-ER	21600000210		Repair and Replace Stolen and Damaged Electrical Systems and Protect Electrical and Irrigation Facilities.	Various	$1,355,000	1.12
Caltrans	SHOPP-RP	31600000000		Pavement Resurfacing and/or Rehabilitation	Various	$29,225,000	1.10
Avenal	A1		Seventh Ave.	Overlay and improve curb/ramps	San Joaquin St. to SR 269	$355,000	1.10/3.02
Avenal	A2		Monterey St.	Overlay and improve curb/ramps	First Ave. to Fifth Ave.	$515,000	1.10/3.02
Avenal	A3		Mariposa St.	Overlay and improve curb/ramps	First Ave. to Fifth Ave.	$515,000	1.10/3.02
Avenal	A4		Avenal Cutoff Rd.	Overlay	SR 269 to CA Aqueduct overcross	$3,980,000	1.10
Hanford	H10		City wide	Electric charging station	PW Corp. Yard	$0	4.01
Hanford	H12		12th Ave.	Traffic Signal	12th Ave. / Hume Ave.	$500,000	5.02
Hanford	H14		E. Lacey Blvd.	Install Traffic Signals	At 9th Ave.	$500,000	5.02
Hanford	H16		Grangeville Blvd.	Rehabilitate / Overlay	Douty St. to 10th Ave.	$600,000	1.10
Hanford	H18		Redington St.	Rehabilitate / Overlay	Lacey Blvd. to Grangeville Blvd.	$600,000	1.10
Hanford	H22		Fargo Ave.	Install Traffic Signals and Pedestrian Facilities	12th Ave. to 13th Ave.	$1,000,000	5.02/3.02
Hanford	H23		Grangeville Blvd.	Rehabilitate / Overlay	11th Ave. to 12th Ave.	$1,000,000	1.10
Hanford	H26		12th Ave.	Install Traffic Signals and Pedestrian Facilities	Fargo Ave. to Flint Ave.	$1,000,000	5.02/3.02
Hanford	H27		10th Ave.	Rehabilitate / Overlay	SR 198 to Grangeville Blvd.	$1,500,000	1.10
Hanford	H29		Houston Ave.	Install Traffic Signals and Pedestrian Facilities	10th Ave. to 11th Ave.	$1,000,000	5.02/3.02
Hanford	H30		10th Ave.	Rehabilitate / Overlay	Grangeville to SR 43	$1,000,000	1.10
Hanford	H32		Houston Ave.	Install Traffic Signals and Pedestrian Facilities	11th Ave. to 12th Ave.	$1,000,000	5.02/3.02
Hanford	H33		Grangeville Blvd.	Rehabilitate / Overlay	10th Ave. to 9 ¼ Ave.	$1,500,000	1.10
Hanford	H35		Grangeville Blvd.	Install Traffic Signals and Pedestrian Facilities	9 ¼ Ave. to SR 43	$1,000,000	5.02/3.02
Hanford	H36		Fargo Ave.	Rehabilitate / Overlay	11th Ave. to Meadow View Ln.	$1,500,000	1.10
Hanford	H37		11th Ave.	Rehabilitate / Overlay	Grangeville Blvd. to Fargo Ave.	$1,500,000	1.10
Hanford	H39		9th Ave.	Install Traffic Signals and Pedestrian Facilities	Lacey Blvd. to Grangeville Blvd.	$1,500,000	5.02/3.02
Hanford	H4		13th Ave.	Traffic Signal	At Grangeville Blvd.	$900,000	5.02
Hanford	H40		11th Ave.	Rehabilitate / Overlay	Lacey Blvd. to Grangeville Blvd.	$1,500,000	1.10
Hanford	H41		11th Ave.	Rehabilitate / Overlay	Hfd.-Arm. Rd. to Lacey Blvd	$1,500,000	1.10
Hanford	H43		9th Ave.	Install Traffic Signals and Pedestrian Facilities	Grangeville Blvd. to Fargo Ave.	$1,500,000	5.02/3.02
Hanford	H44		11th Ave.	Rehabilitate / Overlay	Hfd.-Arm. Rd. to Houston Ave.	$1,500,000	1.10

Exempt Project Listing

Jurisdiction/ Agency	TIP/RTP Project ID	CTIPs Project ID (if available)	Facility Name/Route	Project Description	Project Limits	Estimated Cost	CTIPs Exemption Code
Hanford	H46		11th Ave.	Install Traffic Signals and Pedestrian Facilities	Houston Ave. to Idaho Ave.	$1,500,000	5.02/3.02
Hanford	H5		Hanford-Armona Rd.	Traffic Signal	At Irwin St.	$425,000	5.02
Hanford	H6		Houston Ave.	Traffic Signal	At 11th Ave.	$600,000	5.02
Hanford	H8		City wide	Bike facility improvements	Various	$500,000	3.02
Hanford	H9		11th Ave.	Rehabilitate / Overlay	Ivy St. to Grangeville Blvd.	$800,000	1.10
County	K1		Lacey Blvd.	Signals and bridge work	At 13th Ave.	$500,000	5.02/1.19
County	K11		Houston Ave.	Reconstruction	10th Ave. to 10 ½ Ave.	$275,000	1.10
County	K12		Grangeville Blvd.	Overlay	12 ½ Ave. to 15th Ave.	$536,000	1.10
County	K14		Jackson Ave.	Reconstruct 1.5 miles	SR 43 to 11th Ave.	$1,062,000	1.10
County	K15		Jackson Ave.	Reconstruct 1 mile	11th Ave. to 14th Ave.	$948,000	1.10
County	K16		Jackson Ave.	Overlay (widen to 28 feet)	14th Ave. to 17th Ave.	$853,000	1.10/1.19
County	K17		12th Ave.	Overlay	Hume Ave. to Idaho Ave.	$523,000	1.10
County	K18		Excelsior Ave.	Overlay	0.25 mile west of 12th Ave. to SR 43	$451,000	1.10
County	K19		Excelsior Ave.	Overlay	14 ½ Ave. to Kings River	$432,000	1.10
County	K20		Various	Overlay	12th Ave. to 14th Ave.	$327,000	1.10
County	K21		Grangeville Blvd.	Overlay	SR 41 to 22nd Ave.	$569,000	1.10
County	K23		Lacey Blvd.	Overlay	18th Ave. to SR 41	$345,000	1.10
County	K24		6th Ave.	Reconstruct 1.5 miles	Utica Ave. to Racine Ave.	$1,438,000	1.10
County	K25		Jersey Ave.	Overlay	18th and Jersey	$1,500,000	1.10
County	K26		Laurel Ave.	Overlay	SR 41 to 18th Ave.	$588,000	1.10
County	K27		14th Ave.	Overlay	Houston Ave. to Jersey Ave.	$850,000	1.10
County	K28		6th Ave.	Overlay	Kern County Line to ½ mile North	$286,000	1.10
County	K29		Utica Ave.	Reconstruct 1 mile	20th Ave. to 25th Ave.	$1,197,000	1.10
County	K3		Flint Ave.	Overlay	SR 43 to 12th Ave.	$425,000	1.10
County	K30		18th Ave.	Install left turn lane	Iona Ave. to Jersey Ave.	$1,491,000	5.01
County	K31		Front St.	Overlay	Hanford Armona Rd. to 14th Ave.	$157,000	1.10
County	K32		6th Ave.	Overlay	Fargo Ave. to Excelsior Ave.	$634,000	1.10
County	K33		Houston Ave.	Overlay	13th Ave. to 14th Ave.	$183,000	1.10
County	K34		Grangeville Blvd.	Reconstruct	SR 43 to 6th Ave.	$435,000	1.10
County	K35		Grangeville Blvd.	Overlay	5th Ave. to 6th Ave.	$493,000	1.10
County	K36		Grangeville Blvd.	Overlay	1st Ave. to 2 1/2 Ave.	$319,000	1.10
County	K37		Grangeville Blvd.	Reconstruct	2 1/2 Ave. to Highline Canal	$493,000	1.10
County	K38		Grangeville Blvd.	Overlay	Highline Canal to 5th Ave.	$319,000	1.10
County	K39		18th Ave.	Overlay	Laurel Ave. to Kansas Ave.	$341,000	1.10
County	K4		11th Ave.	Overlay	Houston Ave. to Idaho Ave.	$392,000	1.10
County	K40		10th Ave.	Overlay	Nevada Ave. to Pueblo Ave.	$850,000	1.10
County	K41		10th Ave.	Overlay	Redding Ave. to Seattle Ave.	$645,000	1.10
County	K42		10th Ave.	Overlay	Pueblo Ave. to Redding Ave.	$850,000	1.10
County	K43		10th Ave.	Seal Coat	Seattle Ave. to Utica Ave.	$654,000	1.10

Exempt Project Listing

Jurisdiction/ Agency	TIP/RTP Project ID	CTIPs Project ID (if available)	Facility Name/Route	Project Description	Project Limits	Estimated Cost	CTIPs Exemption Code
County	K44		14th Ave.	Overlay	Jersey Ave. to Kansas Ave.	$445,000	1.10
County	K45		Excelsior Ave.	Overlay	SR 41 to 22nd Ave.	$645,000	1.10
County	K46		Excelsior Ave.	Reconstruct 1 mile	SR 43 to 6th Ave.	$1,268,000	1.10
County	K47		Laurel Ave.	Overlay	Avenal Cut-Off Rd. to SR 41	$1,177,000	1.10
County	K48		Nevada Ave.	Overlay	Avenal Cut-Off Rd. to SR 41	$1,360,000	1.10
County	K49		Avenal Cut Off Rd.	Overlay	SR 198 to 25th Ave.	$588,000	1.10
County	K5		Kansas Ave.	Overlay	4th Ave. to SR 43	$994,000	1.10
County	K50		9th Ave.	Overlay	SR 198 to Houston Ave.	$218,000	1.10
County	K51		Utica Ave.	Overlay	11th Ave. to 16th Ave.	$902,000	1.10
County	K52		6th Ave.	Overlay	Utica Ave. to Virginia Ave.	$569,000	1.10
County	K53		6th Ave.	Overlay	Virginia Ave. to Xavier Ave	$645,000	1.10
County	K54		6th Ave.	Overlay	Kern County Xavier Ave.	$739,000	1.10
County	K55		Virginia Ave.	Overlay	4th Ave. to 6th Ave.	$850,000	1.10
County	K56		Utica Ave.	Overlay	16th Ave. to 20th Ave.	$807,000	1.10
County	K57		Utica Ave.	Overlay	6th Ave. to 11th Ave.	$1,125,000	1.10
County	K6		Kansas Ave.	Overlay	14th Ave. to 16th Ave.	$569,000	1.10
County	K7		14th Ave.	Overlay	School Street to Excelsior Ave.	$948,000	1.10
County	K8		Avenal Cutoff Rd.	Install right turn and acceleration lanes	Nevada Ave. to I-5	$1,035,000	5.01
County	K9		County Intersections	Install right turn lanes and flashing beacons	Various Locations	$326,000	5.01
Lemoore	L10		Olive Ave.	Overlay	B St. to Redwood Ln.	$65,000	1.10
Lemoore	L11		Oakdale Ln.	Overlay	Vine St. to Lum Ave.	$60,000	1.10
Lemoore	L12		E St.	Overlay	Fox St. to D St.	$60,000	1.10
Lemoore	L13		W. Deodar Ln.	Overlay	Spruce Ave. to Glendale Ave.	$100,000	1.10
Lemoore	L14		S. Byron Ave.	Overlay	Bush St. to south end	$45,000	1.10
Lemoore	L15		Cambridge Dr.	Overlay	Bush St. to Olive St.	$75,000	1.10
Lemoore	L16		E. D St.	Overlay	Lemoore Ave. to Smith St.	$50,000	1.10
Lemoore	L17		W. Burlwood Ln.	Overlay	Lemoore Ave. to Juniper Ln.	$90,000	1.10
Lemoore	L18		Bush St.	Overlay	Lemoore Ave. to D St.	$165,000	1.10
Lemoore	L19		W. D St.	Overlay	Bush St. to Olive St.	$200,000	1.10
Lemoore	L2		19th Ave.	Overlay	Bush St. to Cedar Ln.	$100,000	1.10
Lemoore	L20		Hanford Armona Rd.	Overlay	Lemoore Ave. to Liberty Dr.	$200,000	1.10
Lemoore	L21		Hanford Armona Rd.	Overlay	Liberty Dr. to 19th Ave.	$175,000	1.10
Lemoore	L22		Hanford Armona Rd.	Overlay	19th Ave. to SR 41	$200,000	1.10
Lemoore	L23		Iona Ave.	Overlay	Vine St. to 19th Ave.	$200,000	1.10
Lemoore	L24		Lemoore Ave.	Overlay	SR 198 to Bush St.	$200,000	1.10
Lemoore	L25		Lemoore Ave.	Overlay	UPRR to Cinnamon Dr.	$200,000	1.10
Lemoore	L3		Bush St.	Overlay	19 ½ Ave. to 19th Ave.	$125,000	1.10
Lemoore	L4		C St.	Overlay	Olive St. to Hill St.	$56,000	1.10
Lemoore	L5		Cedar Ln.	Overlay	19th Ave. to Mallard	$75,000	1.10
Lemoore	L6		Cinnamon Dr.	Overlay	Basil St. to Daphne Ln.	$120,000	1.10
Lemoore	L7		Vine St.	Overlay	Bush St. to SR 198	$106,000	1.10
Lemoore	L8		Hickory Dr.	Overlay	Vine St. to Oakdale Lane	$25,000	1.10

Exempt Project Listing

Jurisdiction/ Agency	TIP/RTP Project ID	CTIPs Project ID (if available)	Facility Name/Route	Project Description	Project Limits	Estimated Cost	CTIPs Exemption Code
Lemoore	L9		Silverado Dr.	Overlay	19th Ave. to Marin Dr.	$60,000	1.10
Corcoran	C1		Various	Pavement Maintenance Program	Various	$235,000	1.10
Corcoran	C2		Various	Pavement Maintenance Program	Various	$241,000	1.10
Corcoran	C3		Various	Pavement Maintenance Program	Various	$248,000	1.10
Corcoran	C4		Various	Pavement Maintenance Program	Various	$254,000	1.10
Corcoran	C5		Various	Pavement Maintenance Program	Various	$261,000	1.10
Corcoran	C6		Various	Pavement Maintenance Program	Various	$267,000	1.10
Corcoran	C7		Various	Pavement Maintenance Program	Various	$273,000	1.10
Corcoran	C8		Various	Pavement Maintenance Program	Various	$280,000	1.10
Corcoran	C9		Various	Pavement Maintenance Program	Various	$286,000	1.10
Corcoran	C10		Various	Pavement Maintenance Program	Various	$292,000	1.10
Corcoran	C11		Various	Pavement Maintenance Program	Various	$298,000	1.10
County	SHOPP-RSP	21600000212		At Various Locations, Grouped Projects for Roadside Preservation to enhance, preserve or restore scenic and native landscape areas within or near roadsides - SHOPP Roadside Preservation Program (Non-Capacity Increasing Projects)	Kings County	$2,959,000	1.15
Avenal	CM5424A	21600000213		At the Avenal Police Department Purchase solar-powered EV charging stations	City of Avenal	$155,000	4.01
County	CM5945B	21600000214	SR 41	Construct Roundabout	At Bernard Dr.	$621,000	1.06
KCAPTA	FTA5339A	21600000217		KCAPTA Transit Facility Maintenance		$83,000	2.08
KCAPTA	FTA5339B	21600000218		Purchase CNG Engine		$130,000	2.05
County	HIP	21600000216		Highway Infrastructure projects at various locations in Kings County.	Kings County	$397,000	1.06

APPENDIX C

CONFORMITY ANALYSIS DOCUMENTATION

2015 Ozone Conformity Analysis Results Summary -- KINGS

		ROG (tons/day)	NOx (tons/day)	ROG	NOx
2008 and 2015 Ozone	2020 Budget	1.2	4.5		
	2020	1.2	4.5	YES	YES
	2023 Budget	1.0	2.7		
	2023	1.0	2.6	YES	YES
	2026 Budget	0.9	2.6		
	2026	0.9	2.4	YES	YES
	2029 Budget	0.8	2.6		
	2029	0.8	2.3	YES	YES
	2031 Budget	0.8	2.6		
	2031	0.8	2.2	YES	YES
	2037	0.7	2.2	YES	YES
	2042	0.6	2.2	YES	YES

		PM-10 (tons/day)	NOx (tons/day)	PM-10	NOx
PM-10	2020 Budget	1.8	4.8		
	2020	1.7	4.7	YES	YES
	2020 Budget	1.8	4.8		
	2029	1.8	2.3	YES	YES
	Adjusted 2020 Budget	2.0	4.5		
	2037	2.0	2.2	YES	YES
	Adjusted 2020 Budget	2.1	4.4		
	2042	2.1	2.3	YES	YES

		PM2.5 (tons/day)	NOx (tons/day)	PM2.5	NOx
1997 24-Hour and 1997 & 2012 Annual PM2.5 Standards	2014 Budget	0.3	9.3		
	2021	0.1	4.3	YES	YES
	2014 Budget	0.3	9.3		
	2029	0.1	2.3	YES	YES
	2014 Budget	0.3	9.3		
	2037	0.1	2.2	YES	YES
	2014 Budget	0.3	9.3		
	2042	0.2	2.3	YES	YES

		PM2.5 (tons/day)	NOx (tons/day)	PM2.5	NOx
2006 PM2.5 Winter 24-Hour Standard	2017 Budget	0.2	5.9		
	2019	0.1	5.1	YES	YES
	2017 Budget	0.2	5.9		
	2029	0.1	2.4	YES	YES
	2017 Budget	0.2	5.9		
	2037	0.1	2.2	YES	YES
	2017 Budget	0.2	5.9		
	2042	0.2	2.3	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	0.299	4.660	0.916		0.419		0.077		**1.7**	**4.7**
2029	0.314	2.324	1.038		0.419		0.025		**1.8**	**2.3**
2037	0.346	2.186	1.167		0.419		0.060		**2.0**	**2.2**
2042	0.372	2.264	1.263		0.419		0.020		**2.1**	**2.3**

EMFAC Emissions (tons/day)

KINGS

Pollutant	Source	Description	2020	2023	2026	2029	2031	2037	2042
2008 and 2015 Ozone	EMFAC 2014 (Summer Run)	ROG Total Exhaust (All Vehicles Total)	1.10	0.91	0.83	0.76	0.72	0.62	0.59
		Conformity Total	1.20	1.00	0.90	0.80	0.80	0.70	0.60
2008 and 2015 Ozone	EMFAC 2014 (Summer Run)	NOx Total Exhaust (All Vehicles Total)	4.46	2.59	2.40	2.24	2.19	2.11	2.19
		Conformity Total	4.50	2.60	2.40	2.30	2.20	2.20	2.20

Pollutant	Source	Description	2020	2029	2037	2042
PM-10	EMFAC 2014 (Annual Run)	PM-10 Total (All Vehicles Total) * includes tire & brake wear	0.30	0.31	0.35	0.37
		Conformity Total	0.30	0.31	0.35	0.37
PM-10	EMFAC 2014 (Annual Run)	NOx Total Exhaust (All Vehicles Total)	4.66	2.32	2.19	2.26
		Conformity Total	4.66	2.32	2.19	2.26

Pollutant	Source	Description	2021	2029	2037	2042
PM2.5 Annual (1997 and 2012 standards)	EMFAC 2014 (Annual Run)	PM2.5 Total Exhaust (All Vehicles Total) * includes tire & brake wear	0.13	0.13	0.14	0.15
		Conformity Total	0.10	0.10	0.10	0.20
PM2.5 Annual (1997 and 2012 standards)	EMFAC 2014 (Annual Run)	NOx Total Exhaust (All Vehicles Total)	4.25	2.32	2.19	2.26
		Conformity Total	4.30	2.30	2.20	2.30

Pollutant	Source	Description	2019	2029	2037	2042
PM2.5 24-hour (2006 standard)	EMFAC 2014 (Winter Run)	PM2.5 Total Exhaust (All Vehicles Total) * includes tire & brake wear	0.14	0.13	0.14	0.15
		Conformity Total	0.10	0.10	0.10	0.20
PM2.5 24-hour (2006 standard)	EMFAC 2014 (Winter Run)	NOx Total Exhaust (All Vehicles Total)	5.08	2.37	2.22	2.30
		Conformity Total	5.10	2.40	2.20	2.30

PM10 Emission Trading Worksheet

KINGS CONFORMITY ESTIMATES (tons/day)

	2020		2029		2037		2042	
	PM10	NOx	PM10	NOx	PM10	NOx	PM10	NOx
Total On-Road Exhaust	0.299	4.660	0.314	2.324	0.346	2.186	0.372	2.264
Paved Road Dust	0.916		1.038		1.167		1.263	
Unpaved Road Dust	0.419		0.419		0.419		0.419	
Road Construction Dust	0.077		0.025		0.060		0.020	
Total	**1.710**	**4.660**	**1.796**	**2.324**	**1.991**	**2.186**	**2.073**	**2.264**

Difference (2020 Budget - 2020)

	PM10	NOx
2020 Budgets	1.8	4.8
2020	1.7	4.7
Difference	**0.1**	**0.1**
* 1.5 (Adjustment to NOx Budget)	-0.2	

NOTE: ONLY IMPLEMENT TRADING IF NECESSARY (I.E., CONFORMITY FAILURE IN TOTALS WORKSHEET)

Difference (2020 Budget - 2029)

	PM10	NOx
2020 Budgets	1.8	4.8
2029	1.8	2.3
Difference	**0.0**	**2.5**
* 1.5 (Adjustment to NOx Budget)	0.0	

NOTE: ONLY IMPLEMENT TRADING IF NECESSARY (I.E., CONFORMITY FAILURE IN TOTALS WORKSHEET)

Difference (2020 Budget - 2037)

	PM10	NOx
2020 Budgets	1.8	4.8
2037	2.0	2.2
Difference	**-0.2**	**2.6**
* 1.5 (Adjustment to NOx Budget)	0.3	

NOTE: ONLY IMPLEMENT TRADING IF NECESSARY (I.E., CONFORMITY FAILURE IN TOTALS WORKSHEET)

Difference (2020 Budget - 2042)

	PM10	NOx
2020 Budgets	1.8	4.8
2042	2.1	2.3
Difference	**-0.3**	**2.5**
* 1.5 (Adjustment to NOx Budget)	0.5	

NOTE: ONLY IMPLEMENT TRADING IF NECESSARY (I.E., CONFORMITY FAILURE IN TOTALS WORKSHEET)

1:1.5 PM10 to NOx Trading

Adjusted 2020 Budget	**1.7**	**5.0**
2020 Conformity Total	**1.7**	**4.7**
Difference	**0.0**	**0.3**

TRADING WAS NOT IMPLEMENTED

NOTE: FINAL DIFFERENCE MUST BE POSITIVE

Adjusted 2020 Budget	**1.8**	**4.8**
2029 Conformity Total	**1.8**	**2.3**
Difference	**0.0**	**2.5**

TRADING WAS NOT IMPLEMENTED

NOTE: FINAL DIFFERENCE MUST BE POSITIVE

Adjusted 2020 Budget	**2.0**	**4.5**
2037 Conformity Total	**2.0**	**2.2**
Difference	**0.0**	**2.3**

NOTE: FINAL DIFFERENCE MUST BE POSITIVE

Adjusted 2020 Budget	**2.1**	**4.4**
2042 Conformity Total	**2.1**	**2.3**
Difference	**0.0**	**2.1**

NOTE: FINAL DIFFERENCE MUST BE POSITIVE

Road Construction Dust

KINGS

Description	2020		2029		2037		2042	
	Year	Lane Miles	Year	Lane Miles	Year	Lane Miles	Year	Lane Miles
Baseline	2005	2363	2020	2440	2029	2455	2037	2487
Horizon	2020	2440	2029	2455	2037	2487	2040	2491
Difference	15	77	9	15	8	32	3	4
Lane Miles per Year		5		2		4		1
Acres Disturbed		20		6		16		5
Acre-Months		359		116		279		93
Emissions (tons/year)		39.542		12.800		30.720		10.240
Annual Average Day Emissions (tons)		0.108		0.035		0.084		0.028
District Rule 8021 Control Rates		0.290		0.290		0.290		0.290
Total Emissions (tons per day)		**0.077**		**0.025**		**0.060**		**0.020**

Paved Road Dust Emissions (tons/day)

KINGS 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	1,474,490	538	41.123	40.045	0.110	0.075	0.101
Enter Arterial VMT ==>		Arterial	2,243,642	819	104.125	101.396	0.278	0.282	0.199
Enter Collector VMT ==>		Collector	329,893	120	15.310	14.909	0.041	0.407	0.024
		Urban	61,999	23	21.556	20.991	0.058	0.324	0.039
Enter Total of Urban and Rural		Rural	151,055	55	227.188	221.234	0.606	0.090	0.552
Local VMT Here =>	213,054								
		Totals	4,261,078	1,555	409.302	398.576	1.092		0.916

KINGS 2029

			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	1,626,274	593.59	45.356	44.167	0.121	0.075	0.112
Enter Arterial VMT ==>		Arterial	2,594,727	947.08	120.419	117.263	0.321	0.282	0.231
Enter Collector VMT ==>		Collector	363,271	132.59	16.859	16.417	0.045	0.407	0.027
		Urban	70,212	25.63	24.412	23.772	0.065	0.324	0.044
Enter Total of Urban and Rural		Rural	171,066	62.44	257.284	250.542	0.686	0.090	0.625
Local VMT Here =>	241,277								
		Totals	4,825,549	1,761	464.330	452.161	1.239		1.038

KINGS 2037

			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	1,788,830	652.92	49.889	48.582	0.133	0.075	0.123
Enter Arterial VMT ==>		Arterial	2,958,689	1079.92	137.310	133.712	0.366	0.282	0.263
Enter Collector VMT ==>		Collector	401,968	146.72	18.655	18.166	0.050	0.407	0.030
		Urban	78,868	28.79	27.421	26.703	0.073	0.324	0.049
Enter Total of Urban and Rural		Rural	192,157	70.14	289.006	281.432	0.771	0.090	0.702
Local VMT Here =>	271,026								
		Totals	5,420,512	1,978	522.282	508.594	1.393		1.167

KINGS 2042

			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	1,872,851	683.59	52.233	50.864	0.139	0.075	0.129
Enter Arterial VMT ==>		Arterial	3,249,705	1186.14	150.816	146.863	0.402	0.282	0.289
Enter Collector VMT ==>		Collector	445,278	162.53	20.665	20.123	0.055	0.407	0.033
		Urban	85,276	31.13	29.649	28.872	0.079	0.324	0.053
Enter Total of Urban and Rural		Rural	207,768	75.84	312.485	304.296	0.834	0.090	0.759
Local VMT Here =>	293,044								
		Totals	5,860,877	2,139	565.847	551.018	1.510		1.263

DO NOT CHANGE ANY ITEMS BELOW THIS LINE

KINGS

HPMS Local Urban/Rural Percent
From 1998 Assembly of Statistical Reports - Caltrans
29.1% Urban
70.9% 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

KINGS

	January	February	March	April	May	June	July	August	September	October	November	December	Total/Average
Rain Days	7.0	6.5	6.0	4.0	2.0	0.0	0	0	1.0	2.0	4.0	5.5	**38.0**
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	0.98	1.00	1.00	1.00	0.99	0.98	0.97	0.96	**0.97**

Unpaved Road Dust Emissions (tons/day)

KINGS 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	70.1	10	255.9	255.865	229.043	0.628	0.333	0.419

KINGS 2029

	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	70.1	10	255.9	255.865	229.043	0.628	0.333	0.419

KINGS 2037

	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	70.1	10	255.9	255.865	229.043	0.628	0.333	0.419

KINGS 2042

	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	70.1	10	255.9	255.865	229.043	0.628	0.333	0.419

DO NOT CHANGE ANY ITEMS BELOW THIS LINE

KINGS

	January	February	March	April	May	June	July	August	September	October	November	December	Total/Average
Rain Days	7.0	6.5	6.0	4.0	2.0	0.0	0	0	1.0	2.0	4.0	5.5	**38.0**
Total Days	31	28	31	30	31	30	31	31	30	31	30	31	**365**
Rain Reduction Factor	0.77	0.77	0.81	0.87	0.94	1.00	1.00	1.00	0.97	0.94	0.87	0.82	**0.90**

APPENDIX D

TIMELY IMPLEMENTATION DOCUMENTATION FOR TRANSPORTATION CONTROL MEASURES

Kings County Association of Governments
RACM Timely Implementation Documentation

RACM Commitment	Agency	Measure Title	Measure Description (not verbatim)	Implementation Status (as of 6/18)	2015 Ozone Conformity Analysis (as of 1/19)
KI3.8	Avenal	Purchase vans for vanpools	Purchase a set number of Vans to encourage local employee commute travel	Commitment complete.	Commitment complete.
KI9.2	Avenal	Encouragement of Pedestrian Travel	Encourage the use of pedestrian travel as an alternative to automobile travel	Implementation ongoing.	Implementation ongoing.
KI9.5	Avenal	Encouragement of Bicycle Travel	Promotion of bicycle travel	Implementation ongoing.	Implementation ongoing.
KI15.1	Avenal	Encouragement of Pedestrian Travel	Promote public awareness	Implementation ongoing.	Implementation ongoing.
TCM1	Avenal	Traffic Flow Improvements	Flow improvements include cross-valley rail, signalization improvement, and corridor improvements	No additional implementation needs have been identified at this time. City will continue to monitor.	No additional implementation needs have been identified at this time. City will continue to monitor.
TCM4	Avenal	Bicycle Programs	Fund bicycle projects	No additional implementation needs have been identified at this time. City will continue to monitor.	No additional implementation needs have been identified at this time. City will continue to monitor
5.4	Avenal	Site-Specific Transportation Control Measures	Considerations will be included in the design and engineering functions	No additional implementation needs have been identified at this time. City will continue to monitor.	No additional implementation needs have been identified at this time. City will continue to monitor
KI1.5	Corcoran	Expansion of Public Transportation Systems	Expand and enhance existing public transit services	No additional implementation needs have been identified at this time. City will continue to monitor.	No additional implementation needs have been identified at this time. City will continue to monitor
KI1.6	Corcoran	Transit Service Improvements in Combination with Park-and-Ride Lots and Parking Management	Improve the public transit system and add new Park-and-Ride facilities and spaces as needed	Commitment complete.	Commitment complete.
KI9.2	Corcoran	Encouragement of Pedestrian Travel	Encourage the use of pedestrian travel	Implementation ongoing.	Implementation ongoing.

Kings County Association of Governments
RACM Timely Implementation Documentation

RACM Commitment	Agency	Measure Title	Measure Description (not verbatim)	Implementation Status (as of 6/18)	2015 Ozone Conformity Analysis (as of 1/19)
KI9.5	Corcoran	Encouragement of Bicycle Travel	Promotion of bicycle travel	Implementation ongoing.	Implementation ongoing.
TCM4	Corcoran	Bicycle Programs	Fund bicycle projects	Implementation ongoing.	Implementation ongoing.
5.3	Corcoran	Reduce Traffic Congestion at Major Intersections	Implement traffic control techniques as part of routine road maintenance	No additional implementation needs have been identified at this time. City will continue to monitor.	No additional implementation needs have been identified at this time. City will continue to monitor.
5.4	Corcoran	Site-Specific Transportation Control Measures	Considerations will be included in the design and engineering functions	No additional implementation needs have been identified at this time. City will continue to monitor.	No additional implementation needs have been identified at this time. City will continue to monitor.
KI1.6	Hanford	Transit Service Improvements in Combination with Park-and-Ride Lots and Parking Management	Local jurisdictions and transit agency improve the public transit system and add new park and ride facilities and spaces on an as needed basis.	No additional implementation needs have been identified at this time. City will continue to monitor.	No additional implementation needs have been identified at this time. City will continue to monitor.
KI6.1	Hanford	Park and Ride Lots	Develop, design, and implement new park and ride facilities in locations where they are needed.	Park and ride lot project programmed for FY 14/15 on 6th St. was cancelled due to UPRR not willing to sell property for project.	No additional implementation needs have been identified at this time. City will continue to monitor.
KI9.2	Hanford	Encouragement of Pedestrian Travel	Encourage the use of pedestrian travel as an alternative to automobile travel.	Implementation ongoing.	Implementation ongoing.
KI9.3	Hanford	Bicycle/Pedestrian Program	Fund high priority bicycle/pedestrian projects in countywide plans consistent with available funding.	See Project TID Table, K-9.3 (10th Ave. sidewalks and bike route). Project completed in 2014.	Project completed.
KI9.5	Hanford	Encouragement of Bicycle Travel	Promotion of bicycle travel to reduce automobile use and improve air quality. Bikeway system planning, routes for inter-city bike trips to help bicyclists avoid other less safe facilities. Development and distribution of educational materials regarding bicycle use and safety.	See Project TID Table, K-9.3 (10th Ave. sidewalks and bike route). Implementation ongoing.	See Project TID Table, K-9.3 (10th Ave. sidewalks and bike route). Project completed in 2014.

Kings County Association of Governments
RACM Timely Implementation Documentation

RACM Commitment	Agency	Measure Title	Measure Description (not verbatim)	Implementation Status (as of 6/18)	2015 Ozone Conformity Analysis (as of 1/19)
5.3	Hanford	Reduce Traffic Congestion at Major Intersections	Implement a wide range of traffic control techniques, including signalization, turn lanes, or median dividers.	Commitment complete.	Commitment complete.
5.4	Hanford	Site-Specific Transportation Control Measures	Geometric or traffic control improvements at specific congested intersections.	Commitment complete.	Commitment complete.
5.9	Hanford	Bus Pullouts In Curbs for Passenger Loading	Provide bus pullouts in curbs, or queue bumper lanes for passenger loading and unloading.	Implementation ongoing.	Implementation ongoing.
KI15.1	Lemoore	Encouragement of Pedestrian Travel	Promote public awareness and use of walking as an alternative to the motor vehicle.	Implementation ongoing.	Implementation ongoing.
5.3	Lemoore	Reduce Traffic Congestion at Major Intersections	Implement a wide range of traffic control techniques, including signalization, turn lanes, or median dividers.	No additional implementation needs have been identified at this time. City will continue to monitor.	No additional implementation needs have been identified at this time. City will continue to monitor
5.4	Lemoore	Site-Specific Transportation Control Measures	Geometric or traffic control improvements at specific congested intersections.	No additional implementation needs have been identified at this time. City will continue to monitor.	No additional implementation needs have been identified at this time. City will continue to monitor.
KI9.2	County of Kings	Encouragement of Pedestrian Travel	Encourage the use of pedestrian travel as an alternative to automobile travel.	Implementation ongoing.	Implementation ongoing.
KI15.1	County of Kings	Encouragement of Pedestrian Travel	Promote public awareness and use of walking as an alternative to the motor vehicle.	Implementation ongoing.	Implementation ongoing.
TCM1	County of Kings	Traffic Flow Improvements	Flow improvements include cross-valley rail, signalization improvement, and corridor improvements	See Project TID Table. (Install traffic signal 13th Ave. and Lacey Blvd.). County continues to develop capital projects to improve traffic flow. Implementation ongoing.	Project completed in 2018. County continues to develop capital projects to improve traffic flow. Implementation ongoing.

Kings County Association of Governments
RACM Timely Implementation Documentation

RACM Commitment	Agency	Measure Title	Measure Description (not verbatim)	Implementation Status (as of 6/18)	2015 Ozone Conformity Analysis (as of 1/19)
5.3	County of Kings	Reduce Traffic Congestion at Major Intersections	Implement a wide range of traffic control techniques, including signalization, turn lanes, or median dividers.	No additional implementation needs have been identified at this time. County will continue to monitor.	No additional implementation needs have been identified at this time. County will continue to monitor.
5.4	County of Kings	Site-Specific Transportation Control Measures	Geometric or traffic control improvements at specific congested intersections.	See Project TID Table. (Install traffic signal 13th Ave. and Lacey Blvd.) County continues to develop capital projects to improve traffic flow. Implementation ongoing.	Project completed in 2018. County continues to develop capital projects to improve traffic flow. Implementation ongoing.
5.9	County of Kings	Bus Pullouts In Curbs for Passenger Loading	Provide bus pullouts in curbs, or queue bumper lanes for passenger loading and unloading.	Implementation ongoing.	Implementation ongoing.
KI10.2	Kings County Area Public Transit Agency	Bike Racks on Buses	Provide bike racks on buses to promote the use of transit by bike riders.	Commitment complete.	Commitment complete.
TCM2	Kings County Area Public Transit Agency	Public Transit	Purchase of CNG buses and improved service routes.	Commitment complete.	Commitment complete.

Kings County Association of Governments
Project Timely Implementation Documentation

RACM Commitment	Agency	Commitment Description	Commitment Schedule	Commitment Funding	TIP	TIP Project ID	Project Description	Implementation Status (as of 6/18)	2015 Ozone Conformity Analysis (as of 1/19)
KI - 1.6	Avenal	Transit Service Improvements in combination with Park-and-Ride Lots and Parking Management	In process	CMAQ	2000	CML619811	Purchase Vans for expanded Senior Service	Avenal will continue to monitor the need for a Park-and-Ride Lot. No need identified / warranted at this time.	Avenal will continue to monitor the need for a Park-and-Ride Lot. No need identified / warranted at this time.
KI-5.3	Avenal	Reduce traffic congestion at major intersections.	2002	Safe Routes to School	2002	KIN-HES2	A traffic signal has been installed at Interstate 269 and Seventh Avenue.	Completed	Completed
KI - 10.2	Corcoran	bike racks on two new buses	In process	CMAQ	1999	CML522302	Purchase Buses and Associated Equipment	Completed	Completed
					2000	CML522305	Purchase Buses and Associated Equipment	Completed	Completed
					2002	CML522306	Purchase Buses and Associated Equipment	Completed	Completed
TCM1	Corcoran	Traffic Flow Improvements	In process	CMAQ	1999	CML522307	Upgrade traffic signals at various locations	Completed.	Completed
TCM 2	Corcoran	3 additional buses	Pending	CMAQ	1999	CML522302	Purchase Buses and Associated Equipment for Expanded Service	Completed	Completed
					2000-Amend. #1	CML522305	Purchase Small Bus for Service Expansion	Completed	Completed
					2002	CML522306	Purchase Large Bus for Service Expansion	Completed	Completed
KI TCM1	Hanford	Traffic Flow Improvements	In process	CMAQ	2002	CML509101	On UP-SJVRR Coalinga Branch line between Huron and Visalia, upgrade railroad within Kings County.	Completed.	Completed

Kings County Association of Governments
Project Timely Implementation Documentation

ADDITIONAL PROJECTS IDENTIFIED									
5.4	Hanford	Site-Specific TCMs	FY 07-08	CMAQ	2004	CML509126	Install traffic signal 11th Ave. at Hume Ave.	Completed	Completed
						CML509127	Install traffic signal 12th Ave. at Hanford Armona Rd.	Completed	Completed
			FY 08-09	CMAQ	2006	CML-5091H	Install traffic signal Grangeville at Centennial	Completed	Completed
			FY 09-10	CMAQ	2006	CML-5091J	Install traffic signal 12th Ave. at Muscat	Completed	Completed
			FY 07-08	CMAQ	2006	CML509133	Install traffic signal 12th Ave. at Greenfield	Completed	Completed
5.3	Hanford	Reduce Traffic Congestion at Major Intersections	FY 06-07	CMAQ	2006	CML509129	Traffic Signal Coordination Study	Completed	Completed
9.3	Hanford	Bicycle/Pedestrian Program	FY09-10	CMAQ	2006	CML-5091K	Install Sidewalks and Bike Route, 10th Ave. from SR 198 to Hanford Armona Rd.	Completed in 2014	Completed

Kings County Association of Governments
Project Timely Implementation Documentation

5.4	Lemoore	Site-Specific TCMs	FY 07-08	CMAQ	2004	CML511510	Install traffic signal Bush St. at Belle Haven Dr.	Developer project cancelled. No need for project. Project deleted.	Developer project cancelled. No need for project. Project deleted.
						CML511511	Install traffic signal Bush St. at 19th Ave.	Completed	Completed
						CML-5115F	Install traffic signal Bush St. at 19 1/2 Ave.	Agency is not going to proceed with traffic signal project. Project is deleted.	Agency is not going to proceed with project. Project is deleted.
			FY 08-09			CML511520	Install traffic signal Hanford Armona Rd. at Fox St.	Completed	Completed
TCM1	County of Kings	Traffic Flow Improvements	FY 07-08	CMAQ	2004	CML595465	Install traffic signal 13th Ave. and Lacey Bl.	Completed in 2018	Completed
TCM2	Kings County Area Public Transit Agency	Public Transit	FY 05-06	CMAQ	2004	CML619813	Purchase CNG Buses	Completed	Completed
			FY 05-06	CMAQ	2004	CML619814	Operating assistance for expanded Hanford-Lemoore Fixed Route	Completed	Completed
			FY 08-09	CMAQ	2006	CML619818	Purchase CNG Buses	Completed	Completed

APPENDIX E

PUBLIC MEETING PROCESS DOCUMENTATION

NOTICE OF PUBLIC HEARING ON THE
DRAFT 2015 OZONE CONFORMITY ANALYSIS

NOTICE IS HEREBY GIVEN that the Kings County Association of Governments (KCAG) will hold a public hearing on January 23, 2019 at 4:30 p.m. at the Board of Supervisors' Chambers, Kings County Government Center, 1400 W. Lacey Blvd., Hanford, CA regarding the Draft 2015 Ozone Conformity Analysis. The purpose of this public meeting is to receive public comments on these documents.

- The 2015 Ozone Conformity Analysis contains the documentation to support a finding that the 2019 FTIP and 2018 RTP meet the air quality conformity requirements for ozone and particulate matter.

Individuals with disabilities may call KCAG staff at 559-852-2654 (with 3-working-day advance notice) to request auxiliary aids necessary to participate in the public hearing. Translation services are available (with 3-working-day advance notice) to participants speaking any language with available professional translation services.

A concurrent 30-day public review and comment period will commence on January 11, 2019 and conclude on February 11, 2019. The draft documents are available for review at the KCAG office, located at 339 W. D Street, Lemoore, CA and on the KCAG website at www.kingscog.org.

Public comments are welcomed at the meeting, or may be submitted in writing by 5 p.m. on February 11, 2019 to Yunsheng Luo at the address below.

After considering the comments, the documents will be considered for adoption, by resolution, by the KCAG Transportation Policy Committee at a regularly scheduled meeting to be held on February 27, 2019. The documents will then be submitted to state and federal agencies for approval.

Contact Person: Yunsheng Luo, Regional Planner
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JAN 14 2019
KCAG

Kings County Assoc. of Governments-Legals

339 W D ST STE B
LEMOORE CA 93245

ORDER NUMBER 87368

Publication- The Hanford Sentinel

State of California

County of Kings

I am a citizen of the United States and a resident of the county forsaid; I am over the age of eighteen years, and not a part to or interested in the above-entitled matter. I am the principal clerk of The Hanford Sentinel, a newspaper of general circulation, printed and published daily in the city of Hanford, County of Kings, and which newspaper has been adjudged a newspaper of general circulation by the superior court of the County of Kings, State of California, under the date of October 23, 1951, case number 11623.

That I know from my own personal knowledge the notice, of which the annexed is a printed copy (set in type not smaller than nonpareil), has been published in each regular and entire issue of said nespaper and not in any supplement thereof on the following dates, to wit:

Section: Legals

Category: 201 Public Notices

PUBLISHED ON: 01/11/2019

TOTAL AD COST:	165.81
FILED ON:	1/11/2019

I certify (or declare) under penalty of perjury that the foregoing is true and correct.

Dated at Kings County, California

This Day 11 of January, 2019.

Signature _____

Ad# 87368

NOTICE OF PUBLIC HEARING ON THE DRAFT 2015 OZONE CONFORMITY ANALYSIS

NOTICE IS HEREBY GIVEN that the Kings County Association of Governments (KCAG) will hold a public hearing on January 23, 2019 at 4:30 p.m. at the Board of Supervisors' Chambers, Kings County Government Center, 1400 W. Lacey Blvd., Hanford, CA regarding the Draft 2015 Ozone Conformity Analysis. The purpose of this public meeting is to receive public comments on these documents.

• The 2015 Ozone Conformity Analysis contains the documentation to support a finding that the 2019 FTIP and 2018 RTP meet the air quality conformity requirements for ozone and particulate matter.

Individuals with disabilities may call KCAG staff at 559-852-2654 (with 3-working-day advance notice) to request auxiliary aids necessary to participate in the public hearing. Translation services are available (with 3-working-day advance notice) to participants speaking any language with available professional translation services.

A concurrent 30-day public review and comment period will commence on January 11, 2019 and conclude on February 11, 2019. The draft documents are available for review at the KCAG office, located at 339 W. D Street, Lemoore, CA and on the KCAG website at www.kingscog.org.

Public comments are welcomed at the meeting, or may be submitted in writing by 5 p.m. on February 11, 2019 to Yunsheng Luo at the address below.

After considering the comments, the documents will be considered for adoption, by resolution, by the KCAG Transportation Policy Committee at a regularly scheduled meeting to be held on February 27, 2019. The documents will then be submitted to state and federal agencies for approval.

Contact person: Yunsheng Luo, Regional Planner
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(559) 852-2584; Yunsheng.Luo@co.kings.ca.us
Publish January 11, 2019

BEFORE THE KINGS COUNTY ASSOCIATION OF GOVERNMENTS
TRANSPORTATION POLICY COMMITTEE

*** * * * * * * * * ***

IN THE MATTER OF ADOPTING THE 2015 OZONE CONFORMITY ANALYSIS FOR THE 2018 REGIONAL TRANSPORTATION PLAN AND 2019 FEDERAL TRANSPORTATION IMPROVEMENT PROGRAM	**)**	**RESOLUTION NO. 19-02** **RE: 2015 OZONE CONFORMITY**

WHEREAS, the Kings County Association of Governments (KCAG) 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 2018 Regional Transportation Plan (2018 RTP) has been prepared in full compliance with federal guidance; and

WHEREAS, 2018 RTP 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 2019 Federal Transportation Improvement Program (2019 FTIP) has been prepared to comply with Federal and State requirements for local projects and through a cooperative process between the Federal Highway Administration (FHWA), the Federal Transit Administration (FTA), the State Department of Transportation (Caltrans), principal elected officials of general purpose local governments and their staffs, and public owner operators of mass transportation services acting through the KCAG forum and general public involvement; and

WHEREAS, the 2019 FTIP program listing is consistent with: 1) the 2018 Regional Transportation Plan; 2) the 2018 State Transportation Improvement Program; and 3) the 2015 Ozone Conformity Analysis; and

WHEREAS, the 2019 FTIP contains the MPO's certification of the transportation planning process assuring that all federal requirements have been fulfilled; and

WHEREAS, the 2019 FTIP meets all applicable transportation planning requirements per 23 CFR Part 450; and

WHEREAS, KCAG has integrated into its metropolitan transportation planning process, directly or by reference, the goals, objectives, performance measures, and targets described in other State transportation plans and transportation processes, as well as any plans developed under 49 U.S.C. Chapter 53 by providers of public transportation, required as part of a performance-based program; and

WHEREAS, projects submitted in the 2019 FTIP 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 2015 Ozone Conformity Analysis is a new conformity analysis for the 2019 FTIP and 2018 RTP prepared in compliance with requirements of the federal implementation rule for the 2015 ozone standard; and

WHEREAS, the 2015 Ozone Conformity Analysis supports a finding that the 2019 FTIP and 2018 RTP meet the air quality conformity requirements for ozone and particulate matter; and

WHEREAS, the 2018 RTP and 2019 FTIP do not interfere with the timely implementation of the Transportation Control Measures; and

WHEREAS, the 2018 RTP and 2019 FTIP conforms to the applicable SIPs; and

WHEREAS, the documents have been widely circulated and reviewed by KCAG 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 Kings County consistent with public participation process adopted by KCAG; and

WHEREAS, a public hearing was conducted on January 23, 2019 to hear and consider comments on the 2015 Ozone Conformity Analysis.

NOW, THEREFORE, BE IT RESOLVED, that the KCAG Transportation Policy Committee adopts the 2015 Ozone Conformity Analysis.

BE IT FURTHER RESOLVED, that the KCAG Transportation Policy Committee finds that the 2018 RTP and 2019 FTIP are in conformity with the requirements of the Federal Clean Air Act Amendments and applicable State Implementation Plans for air quality.

The foregoing Resolution was adopted on a motion by Commissioner Brown, seconded by Commissioner Ramirez, at a regular meeting held on March 27, 2019, by the following vote:

AYES: Brown, Ramirez, Neves, Fagundes, Miller, Palmerin, Woolley
NOES:
ABSTAIN:
ABSENT:

KINGS COUNTY ASSOCIATION OF GOVERNMENTS
TRANSPORTATION POLICY COMMITTEE

Joe Neves
Chairman

WITNESS, my hand this 27th day of March, 2019.

Terri King
Terri King, Executive Director

APPENDIX F

RESPONSE TO PUBLIC COMMENTS

There were no public comments received.