U.S. Department of Transportation

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December 16, 2022

In Reply Refer To:
HDA-CA

ELECTRONIC CORRESPONDENCE ONLY

Mr. James R. Anderson, Chief
Division of Financial Programming, M.S. 82
California Department of Transportation
1120 N Street
Sacramento, CA 95814

SUBJECT: California 2023 FSTIP Approval

Dear Mr. Anderson:

The Federal Highway Administration (FHWA) and the Federal Transit Administration (FTA) have completed our reviews of the 2023 Federal Statewide Transportation Improvement Program (FSTIP), which was submitted by your letter dated November 16, 2022. As detailed in your letter, the 2023 FSTIP incorporates by reference the following metropolitan planning organizations' (MPO) Federal Transportation Improvement Programs (FTIP):

- Association of Monterey Bay Area Governments (AMBAG)
- Butte County Association of Governments (BCAG)
- Fresno Council of Governments (FresnoCOG)
- Kern Council of Governments (KCOG)
- Kings County Association of Governments (KCAG)
- Madera County Transportation Commission (Madera CTC)
- Merced County Association of Governments (MCAG)
- Metropolitan Transportation Commission (MTC)
- Sacramento Area Council of Governments (SACOG)
- San Diego Association of Governments (SANDAG)
- San Joaquin Council of Governments (SJCOG)
- San Luis Obispo Council of Governments (SLOCOG)
- Santa Barbara County Association of Governments (SBCAG)
- Shasta County Regional Transportation Planning Agency (SRTA)
- Southern California Association of Governments (SCAG)
- Stanislaus Council of Governments (StanCOG)
- Tahoe Metropolitan Planning Organization (TMPO)
- Tulare County Association of Governments (TCAG)

We find that the FSTIP and FTIPs were developed through a continuing, cooperative, and comprehensive transportation planning process in accordance with the metropolitan planning provisions of 23 U.S.C. 134 and 49 U.S.C. Chapter 53, as amended by Public Law 117-58 of the Bipartisan Infrastructure Law (BIL), enacted as the Infrastructure Investment and Jobs Act.

The United States Environmental Protection Agency (EPA) has designated the following planning areas as Nonattainment or Maintenance Areas for Criteria Pollutants:

- Butte County Association of Governments (BCAG)
- Fresno Council of Governments (FresnoCOG)
- Kern Council of Governments (KCOG)
- Kings County Association of Governments (KCAG)
- Madera County Transportation Commission (Madera CTC)
- Merced County Association of Governments (MCAG)
- Metropolitan Transportation Commission (MTC)
- Sacramento Area Council of Governments (SACOG)
- San Diego Association of Governments (SANDAG)
- San Joaquin Council of Governments (SJCOG)
- San Luis Obispo Council of Governments (SLOCOG)
- Southern California Association of Governments (SCAG)
- Stanislaus Council of Governments (StanCOG)
- Tulare County Association of Governments (TCAG)

As such, the above MPO Policy Boards made an initial conformity determination on the above FTIPs and associated Regional Transportation Plans (RTPs) and applicable RTP amendments. The FHWA and the FTA reviewed the conformity determinations and find that the FTIPs and the associated RTPs and RTP amendments conform to the applicable state implementation plan (SIP) in accordance with the provisions of 40 CFR Parts 51 and 93. This finding has been coordinated with Region IX of the EPA pursuant to the Transportation Conformity Rule.

Based on our review of the information provided and our ongoing oversight of the statewide and metropolitan transportation planning processes, FHWA and FTA are approving the 2023 FSTIP. This approval is effective December 16, 2022. This approval is given with the understanding that an eligibility determination of individual projects for funding must be met, and the applicant must ensure the satisfaction of all administrative and statutory requirements.

Included with this approval is the FHWA and FTA Federal Planning Finding (FPF). The FHWA and the FTA are required under 23 CFR 450.220(b) to document and issue an FPF in conjunction with the approval of the FSTIP. At a minimum, the FPF verifies that the development of the STIP is consistent with the provisions of both the Statewide and Metropolitan transportation planning requirements. Furthermore, the FPF documents FHWA and FTA's recommendations for statewide and metropolitan transportation planning improvements.

If you have questions or need additional information concerning our approval and the FPF, please contact Ms. Jean Mazur of the FTA Region IX at (415) 734-9456 or by email at jean.mazur@dot.gov, or Mr. Patrick Pittenger at (916) 498-5854 or by email at patrick.pittenger@dot.gov.

Sincerely,

Vincent P. Mammano
Division Administrator

Ray Tellis
Regional Administrator

Enclosure

TO:
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U.S. Department of Transportation

Federal Highway Administration

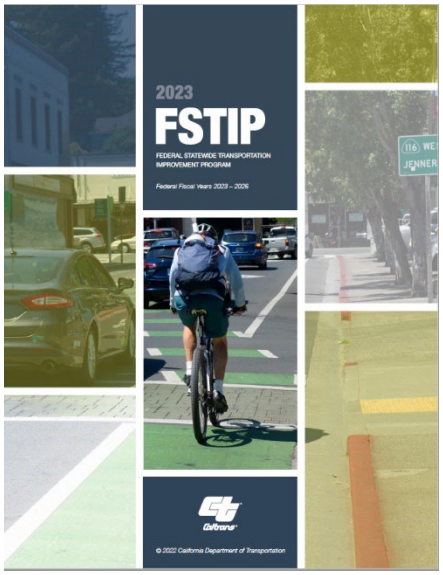
Federal Planning Finding

FHWA, California Division

FTA, Region IX

2023 Federal Statewide Transportation Improvement Program

December 16, 2022



FINAL REPORT

U.S. Department of Transportation
Federal Highway Administration

The Federal Highway Administration (FHWA) and Federal Transit Administration (FTA) are required under 23 CFR 450.220(b) to document and issue a Federal Planning Finding (FPF) in conjunction with the approval of the Federal Statewide Transportation Improvement Program (FSTIP).[1] The Federal Planning Finding verifies, at a minimum, that the development of the FSTIP is consistent with the provisions of both the Statewide and Metropolitan transportation planning requirements of 23 U.S.C. 134, 135; 49 U.S.C. 5303-5305; 23 CFR parts 450 and 500, and 49 CFR part 613. This report substantiates the issuance of the FHWA/FTA FPF to support FHWA/FTA approval of the FSTIP based on the review of FSTIP and FTIP documents, statewide and metropolitan planning self-certification statements (23 CFR 450.220; 23 CFR 450.336), and related supporting documentation.

The FPF is one part of the risk-based stewardship and oversight the FHWA and FTA conduct for Caltrans, the Metropolitan Planning Organizations (MPOs), and planning partners. The FPF serves as a "tool" for FHWA and FTA to support improvements to the planning process and ensure that Caltrans, the MPOs, and planning partners comply with Federal laws and regulations. The FPF ties the statewide, metropolitan, and non-metropolitan planning processes together into one formal risk-based action.

This FPF first addresses the status of finding from the previous FPF issued in April 2021. Following that, this FPF addresses the consistency of the 2023 FSTIP with Federal requirements to support approval the FSTIP

STATUS OF FINDINGS FROM PREVIOUS REVIEW

On April 16, 2021, FHWA and FTA issued a FPF in support of an approval of the 2021 FSTIP. That FPF contained one corrective action and three recommendations:

- Corrective Action - Congestion Mitigation Air Quality (CMAQ) and Surface Transportation Block Grant (STBG) programs administration and oversight
- Recommendation - Periodic evaluation of facilities repeatedly requiring repair and reconstruction due to emergency events
- Recommendation - Performance-Based Planning and Programming (PBPP) and Transportation Performance Management (TPM) Implementation
- Recommendation – Regional Transportation Conformity

To determine the status of the corrective action and recommendations, FHWA and FTA reviewed the following:

- 2021 California FSTIP Federal Planning Finding
- Caltrans January 19, 2022, letter with FSTIP response
- Caltrans April 15, 2022, letter with Corrective Action Plan
- Caltrans November 10, 2022, response letter to 2021 Federal Planning Finding

[1] In California, the state's document referred to as the Statewide Transportation Improvement Program (STIP) in federal regulations is referred to as the Federal Statewide Transportation Improvement Program (FSTIP).

- Transportation Management Area Certification Reviews Reports of 2021 and 2022
- California Division Planning and Air Quality Program Analysis and Risk Assessments for Years 2019, 2020, 2021, and 2022
- 2023 Metropolitan Planning Organization FTIPs[2]

Corrective Action – Congestion Mitigation Air Quality (CMAQ) and Surface Transportation Block Grant (STBG) programs administration and oversight

Caltrans is the primary recipient of the STBG and CMAQ programs apportionments. As such, Caltrans is required to ensure that Caltrans' sub-recipients are administering CMAQ and STBG funds per the applicable federal-aid program requirements. Caltrans shall review the DOT's CMAQ and STBG administrative policies, update the policies and procedures if warranted, and ensure and/or develop a process for ensuring the sub-recipients are administering the programs in compliance with Federal program regulations. At the time of issuance, compliance was expected by October 2022.

Disposition:

Caltrans initiated actions to address the corrective action in 2021. On January 19. 2022, Caltrans requested (and FHWA/FTA subsequently approved) a time extension to comply with the corrective action. The extension provided was to June 30, 2023, contingent on Caltrans' submittal of an action plan for tracking and reporting progress. On April 15, 2022, Caltrans submitted their corrective action plan to FHWA and FTA. The action plan included Caltrans' strategy to bring the CMAQ and STBG program into compliance by June 2023 and milestones for tracking and reporting progress. Since that time, Caltrans' efforts to address the corrective action have continued. On November 10, 2022, Caltrans provided a letter to FHWA/FTA to document progress with respect to the corrective action.

Caltrans has taken multiple steps to address this corrective action. Noteworthy actions by Caltrans have included the following:

- Evaluated the STBG and CMAQ project selection procedures and identified six MPOs whose project selection processes were inconsistent with the federal regulations for suballocated funds.
- Provided a corrective action plan in April 2022 which documented planned tasks to ensure improvement of related processes and a timeline for implementation.
- Worked with multiple affected MPOs including providing review and comment on existing and proposed processes.
- Coordinated with FHWA/FTA including through the conduct of certification reviews for some affected MPOs and through the review of proposed processes from MPOs.

[2] In California, the document of a Metropolitan Planning Organization (MPO) referred to as the Transportation Improvement Program (TIP) in federal regulations is referred to as the Federal Transportation Improvement Program (FTIP).

- Enhanced guidance and communications including developing with FHWA and FTA a California Resource Document for Performance-Based Planning and Programming, continued communications with the California Federal Programming Group (CFPG), updates to related portions of the Caltrans website, and increased focus on the subject during coordination with MPOs on their Overall Work Programs (OWPs).[3]

While there has been progress related to both Caltrans' process and those of the affected MPOs, addition progress is needed prior to the June 30, 2023, to implemented required improvements with respect to the affected MPOs and the Caltrans' procedures.

Caltrans' November 10, 2022, letter provided brief summaries of the progress made by the six affected MPOs. The MPOs are currently at various stages of improving their processes. Most of the MPOs have taken significant steps to develop and/or implement revised processes which, assuming progress continues, could be expected to meet Caltrans' schedule included in the corrective action plan. Caltrans continues to work with all affected MPOs including one MPO which has not made similar progress. Caltrans is addressing this MPO with FHWA/FTA continued support. Caltrans will need to continue to encourage progress by all MPOs to meet the extended deadline of June 30, 2023.

Regarding Caltrans' efforts related to its processes, Caltrans identified a specific milestone, deliverable, and associated due date in its corrective action plan. Caltrans indicated that it would provide a document "with revisions to Caltrans' oversight strategy, risk management, and procedures referencing STBG and CMAQ funds" by March 31, 2023. FHWA and FTA look forward to receiving that document and working with Caltrans during the development of that document as needed. A change enacted by the Bipartisan Infrastructure Law (BIL) will modify how STBG funds will be suballocated in California to smaller MPOs – further reinforcing the need for a statewide document referenced above.

Recommendation - Periodic evaluation of facilities repeatedly requiring repair and reconstruction due to emergency events

Per 23 CFR 667, Caltrans is required to conduct statewide evaluations to determine if there are reasonable alternatives to all roads, highways, and bridges that have required repair and reconstruction activities on two or more occasions due to emergency events. The evaluations shall be completed prior to any affected portion of a road, highway, or bridge project being included in the FSTIP.

Several Divisions within Caltrans are responsible for documenting damages to the National Highway System (NHS) caused by emergency events and the associated repairs and sustainability activities including conducting an evaluation. However, the evaluation and supporting documentation was not included in the 2018 California FSTIP and associated FTIPs

[3] In California, the document of a Metropolitan Planning Organization (MPO) referred to as the Unified Planning Work Program (UPWP) in federal regulations is referred to as the Overall Work Program (OWP).

and was not included in the 2021 California FSTIP and associated FTIPs. Failure to include the evaluation in the 2023 California FSTIP is likely to result in the issuing of a Corrective Action and/or non-approval of the FSTIP. Caltrans and the MPOs were encouraged to include consideration of the evaluations during the development of transportation plans and programs, including the 2023 California FSTIP and FTIPs.

Disposition:

The 2023 FSTIP includes a section dedicated to the above recommendation. The document references Section 5 and Appendix B of the California Transportation Asset Management Plan (TAMP) and includes a map showing the NHS locations of repeatedly damaged assets from 2006-2020. Concurrently, the Caltrans local assistance division has included a 23 CFR 667 web page on their site to detail the federal requirements.

In the Caltrans November 10, 2022, letter, Caltrans indicated that "The OFP is developing policies and procedures for MPOs, RTPAs, and local agencies to comply with the 23 CFR 667 resiliency requirements on their federally funded road and bridge projects. These new policies and procedures require agencies with fed-aid projects, to evaluate projects at locations of repeated disaster damage and consider possible alternatives that address the root cause of the repeated damage.

Caltrans begins the process by conducting a statewide assessment of repeated disaster damage locations on local agency federal-aid roads and bridges. From the assessment, the OFP develops and maintains a table of Sites of Repeated Disaster Damage (SORDD) which is posted on the DLA website.

The Local Agencies, MPOs, RTPAs, and other planning organizations are expected to consult the list during their planning, programming, and project development work to determine if the site of their proposed project has any locations of repeated disaster damage. These repeated disaster damage locations should be considered for possible project adjustments or new projects implementing one, or more, resiliency improvements addressing the underlying cause of the repeated disaster damage.

The MPOs and RTPAs consider the SORDD listed locations, as well as information from completed project 23 CFR 667 Resiliency Certification when developing projects on the federal-aid system. MPOs program the federal-aid projects into the FTIP once the project's 23 CFR 667 Resiliency Certification is complete."

Caltrans staff has indicated that while significant progress toward implementation has been made, the enforcement of the requirement for MPOs and local agencies to have a completed 23 CFR 667 Resiliency Certification will not begin until December 14, 2022 – after the completion of the final 2023 FSTIP. While Caltrans is still completing the implementation of improvements to respond to the recommendation, substantial progress has been made and the enforcement of

the requirement for other agencies was implemented by the date of this FPF. FHWA/FTA will continue to monitor the performance of Caltrans related to this previous recommendation.

Recommendation - Performance-Based Planning and Programming (PBPP) and Transportation Performance Management (TPM) Implementation

FHWA and FTA recommended that Caltrans and the MPOs jointly agree upon and develop specific written provisions for cooperatively developing and sharing information related to transportation performance data, the selection of performance targets, the reporting of performance targets, the reporting of performance to be used in tracking progress toward attainment of critical outcomes for the region of the MPO (see §450.306(d)), and the collection of data for the State asset management plan for the NHS. This agreement shall be documented either as part of the metropolitan planning agreements or documented in some other means outside of the metropolitan planning agreements as determined cooperatively by Caltrans and the MPOs.

Disposition:

Caltrans is coordinating internally to update the Planning and Programming Memorandum of Understanding (MOU) to include roles, responsibilities, and written provisions for developing and sharing information with MPOs related to transportation performance data, the selection of performance targets, and the reporting of performance targets. The MOU is expected to be finalized by December 2023.

Caltrans has not yet completed the work needed to address this recommendation. FHWA/FTA will continue to monitor Caltrans' progress with respect to this recommendation and are available to support Caltrans in this undertaking as needed.

Recommendation – Regional Transportation Conformity

FHWA and FTA recommended that Caltrans develop a process to integrate the Air Quality, Environment, and Health Branch into the FSTIP/FTIP review process before Caltrans requests FHWA/FTA FSTIP or associated amendments approvals. FHWA and FTA also recommended that the updated process includes Caltrans providing the conformity analysis and their concurrence as part of the request for approval. Failure to integrate the Air Quality, Environment, and Health Branch into the process may result in FHWA and FTA determination that Caltrans has not satisfied the Self-Certification requirements.

Disposition:

The Caltrans Office of Federal Programming and Data Management has developed a process to integrate the Caltrans Office of Air Quality and Climate Change into the FSTIP/FTIP review process. In their letter of November 14, 2022, Caltrans describes how the Office of Air Quality and Climate Change has been integrated into the FTIP amendment processes and the MPO FTIP

review and approval process for areas classified nonattainment or attainment/ maintenance. The letter also described how the Office of Air Quality and Climate Change have been integrated into the California Financial Planning Group (CFPG) meetings.

The progress that Caltrans continues to make in working cooperatively internally has improved the efficiency of the planning process. The integration of the Office of Air Quality and Climate Change in the FTIP review and amendment process has improved the quality and consistency of their processes. Caltrans is commended for their work in this area and can be expected to have continued success with the improvements to processes implemented in response to this recommendation.

FINDINGS RELATED TO THE 2023 FSTIP

To determine if Caltrans transportation planning and programming processes substantially meet the Federal requirements, FHWA and FTA reviewed the following as they relate to the 2023 FSTIP:

- 2021 California FSTIP Federal Planning Finding
- Transportation Management Area Certification Reviews Reports of 2021 and 2022
- California Division Planning and Air Quality Program Analysis and Risk Assessments for Years 2019, 2020, 2021, and 2022
- 2023 Metropolitan Planning Organization FTIPs
- 2018 California Freight Mobility Plan (CFMP) Addendum
- 2022 California Freight Investment Plan
- Additional guidance received from the FHWA Office of Planning.

Based on the above, FHWA and FTA find that California's statewide and metropolitan planning process substantially meets the Federal requirements. FHWA and FTA also finds that some improvements are warranted to ensure continued compliance with the Federal requirements and therefore are issuing the following recommendations:

Recommendation – Fiscal Constraint

Caltrans reviews the Regional Transportation Plans (RTPs) of MPOs.[4] Caltrans conducts such reviews consistent with the state's RTP guidelines. The state's RTP guidelines include specific requirements including referencing federal requirements.

According to 23 CFR 450.104, fiscal constraint means that the metropolitan transportation plan (MTP), Transportation Improvement Plan (TIP), and Statewide Transportation Improvement Plan (STIP) includes sufficient financial information for demonstrating that projects in each of

[4] In California, the long-range transportation plan of a Metropolitan Planning Organization (MPO) referred to as the Metropolitan Transportation Plan (MTP) in federal regulations is referred to as the Regional Transportation Plan (RTP).

these plans can be implemented using committed, available, or reasonably available revenue sources. FHWA issued a memo on May 15, 2017, titled "Clarifying Fiscal Constraint Guidance" which can be found at the following location: https://www.fhwa.dot.gov/planning/clarify_fiscal_constraint.cfm. That memo and the associated attachment provide examples of "reasonably available" assumptions specifically related to new funding sources.

Fiscal constraint is also an element of an air quality conformity determination of an MTP and/or an FTIP. 40 CFR 93.108 states that metropolitan transportation plans and FTIPs must be fiscally constrained to be found in conformity. MPOs in nonattainment or maintenance areas which assume funding sources which may not reasonably be expected to be available during the programming period of an FTIP or the planning period of an MTP risk not receiving a needed conformity determination due to fiscal constraint concerns.

FHWA and FTA recommend that Caltrans ensures that, consistent with Federal requirements and guidance, MPOs are preparing fiscally constrained MTPs and FTIPs. New and future funding sources should be reasonable to assume and MPOs should be able to document this. Existing Caltrans processes currently address this need for FTIPs. Caltrans should address MTP fiscal constraint during MTP reviews and could consider additional emphasis as it works with the California Transportation Commission to update the state's RTP guidelines document.

Recommendation – Performance-Based Planning and Programming

The implementation of Transportation Performance Measures (TPM) through Performance-Based Planning and Programming (PBPP) has increasingly become a priority of FHWA and FTA for over a decade while implementing federal transportation legislation. In recent years, significant progress has been made by Caltrans and the MPOs of California in this area. Improvements have been notable in coordination efforts, target setting, and documentation in FTIPs. Progress continues through the response to the related corrective action and a recommendation included in the previous Federal Planning Finding and through MPO certification reviews.

MPOs are required to conduct their planning and programming processes using performance driven processes. PBPP is referenced in the CFR for metropolitan, statewide, and nonmetropolitan transportation planning. In the case of metropolitan transportation planning the CFR states: "[MPOs]…, in cooperation with the State and public transportation operators, shall develop long-range transportation plans and transportation improvement programs through a performance-driven, outcome-based approach to planning." 23 USC Section 134(c)(1); 49 USC Section 5303(c)(1). "The metropolitan transportation planning process shall provide for the establishment and use of a performance-based approach to transportation decision-making to support the national goals…." 23 USC Section 134(h)(2); 49 USC Section 5303(h)(2). In the case of statewide and nonmetropolitan transportation planning the CFR states the following: "The statewide transportation planning process shall provide for the establishment and use of a performance-based approach to transportation decision-making to support the national

goals…and the general purposes [of the public transportation program]. The performance measures and targets established [in relation to national performance measures] shall be considered by a State when developing policies, programs, and investment priorities reflected in the statewide transportation plan and statewide transportation improvement program." 23 USC Section 135(d)(2); 49 USC Section 5304(d)(2).

While there has been progress related to PBPP in many respects in California, the ongoing efforts of Caltrans and the MPOs have revealed an area for improvement within the state. MTPs and FTIPs are federally required documents which all MPOs prepare with inclusion of PBPP elements as required. Another key step in the PBPP process is the decision-making by MPOs to prioritize and select projects regionally for funding. This key step does not have an associated required document and with flexibility for MPOs to conduct this process, there have been instances when MPOs have conducted this key step in a manner that is not consistent with PBPP. There have also been instances when MPOs in California have conducted this step consistent with PBPP, but it was not documented in such a way that Caltrans, FHWA, and FTA can ensure that the process is performance based. As the decision-making process of an MPO regarding project selection is one of the most impactful ways an MPO implements its MTP, the topic warrants further evaluation.

Because of the progress made in response to the corrective action from the previous FPF and to the results of multiple MPOs' certification reviews in recent years, this topic is already being addressed by some MPOs. FHWA and FTA recommend that Caltrans addresses this topic with each of the MPOs in the state to ensure that they are conducting comprehensive, performance-based planning and programming processes. With respect to project selection component of that comprehensive process, MPOs should be able to document that they employ a regionwide, competitive, performance-based project selection process. Consistent with 23 CFR 450.326 (a), MPOs are the entities responsible for FTIP development to reflect the priorities of the RTP. FHWA and FTA will continue to assist and support Caltrans and the MPOs regarding this topic including through, at a minimum, the provision of statewide training to advance TPM through decision-making.

Recommendation - Federal Land Management Agency Coordination

State DOTS, MPOs, and Federal Land Management Agencies (FLMAs) are required to coordinate throughout their transportation planning and programming processes. Requirements are addressed in 23 U.S.C. 134, 135 and 201 and the implementing regulations under 23 CFR 450 describe how the agencies are required to coordinate throughout their transportation planning processes. Each State must consider the concerns of FLMAs that have jurisdiction over land within the boundaries of the State (23 CFR 450.208(a)(3)). MPOs must appropriately involve FLMAs in the development of the metropolitan transportation plan and the TIP (23 CFR 450.316(d))."

In December 2021, the FHWA and FTA issued the 2021 Planning Emphasis Areas for use in the development of Metropolitan and Statewide Planning and Research Work programs. One the

eight emphasis areas focused on Federal Land Management Agency coordination. The inclusion of the issues in the planning emphasis areas serves as a reminder to agencies to meet those requirements. The document states that agencies should explore opportunities to leverage transportation funding to support access and transportation needs of FLMAs before transportation projects are programmed in the Federal Transportation Improvement Program (FTIP) and Federal Statewide Transportation Improvement Program (FSTIP).

FHWA, FTA, and Caltrans have interacted with several MPOs on this topic through certification reviews and other meetings. Shortcomings have been identified with respect to the required coordination with FLMAs. MPOs have expressed interest in improving their coordination efforts and some have requested assistance in doing so. The FHWA and FTA recommend that Caltrans ensures that MPOs are coordinating with FLMAs during their planning and programming processes as required. As Caltrans is required to coordinate with FLMAs as it conducts planning and programming efforts as well, there are opportunities for Caltrans to coordinate its efforts with the MPOs to avoid duplicative efforts. Caltrans is encouraged to work with the MPOs to coordinate regional and statewide efforts. The FHWA and FTA are willing to assist partners in California through coordination with Federal Lands Highway.

Recommendation – Freight Planning

The State of California completed an approved state freight plan in 2014. This plan is known as the California Freight Mobility Plan (CFMP). An addendum to the 2014 CFMP was approved on July 23, 2018. The addendum resulted in a Fixing America's Surface Transportation (FAST) compliant plan. As the plan was amended under FAST ACT requirements, the plan must be updated by July 23, 2023, - five years from the previous action.

Under the Bipartisan Infrastructure Law (BIL), an approved BIL compliant plan is required to be in place to receive federal freight funds. 49 USC 70202 discusses the requirements of the state freight plans for any state receiving funding under the National Highway Freight Program (NHFP). For a project to be eligible for NHFP funding, it must be identified in a freight investment plan component of an active State freight plan [23 USC 167(h)(5)(A)]. As a result of these requirements, if a BIL compliant plan update is not approved by July 23, 2023, the state will become ineligible for federal freight funds until such a plan is approved. Following that update, under BIL a State shall update a State freight plan not less frequently than once every 4 years [49 USC 70202 (e)(1)].

The FHWA and the FTA recommend that Caltrans continues its update to the CFMP to be BIL compliant and approved by July 23, 2023, Caltrans is encouraged to contact federal agencies for assistance as needed. FHWA will provide technical assistance to Caltrans as the plan update is developed. Additionally, FHWA recognizes that California is a complex and diverse state and there are multiple offices within Caltrans – within Caltrans headquarters and in twelve districts – that are involved in the freight planning process. Because of this, FHWA will provide freight planning training in summer 2023 to support and enhance the state's freight planning capacity.

If you have questions or need additional information concerning the FPF, please contact Ms. Jean Mazur of the FTA Region IX at (415) 734-9456, or Jean.Mazur@dot.gov, or Mr. Patrick Pittenger of the FHWA California Division office at (916) 498-5854 or Patrick.Pittenger@dot.gov.

U.S. Department
of Transportation
Federal Highway Administration

Report prepared by:

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CONFORMITY ANALYSIS
FOR THE 2023 FEDERAL TRANSPORTATION IMPROVEMENT AND THE 2022 REGIONAL TRANSPORTATION PLAN

JULY 21, 2022

Kern Council of Governments

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November 16, 2022

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Attention: Mr. Antonio Johnson

Mr. Ray Tellis
Regional Administrator
Federal Transit Administration, 650
90 Seventh Street, Suite 15-300
San Francisco, CA 94103-6701

Attention: Ms. Amy Changchien

Dear Mr. Johnson and Ms. Changchien:

The California Department of Transportation (Caltrans) is submitting the State of California's 2023 Federal Statewide Transportation Improvement Program (FSTIP) for your joint approval. The FSTIP was developed in accordance with Section 450.218 of Title 23 Code of Federal Regulations (CFR) and covers four years, federal fiscal years 2023 through 2026. The 2023 FSTIP incorporates by reference projects listed in the Metropolitan Planning Organizations (MPOs) 2023 Federal Transportation Improvement Programs (FTIPs) and includes projects in the rural non-MPO areas of the state. The 2023 FSTIP includes a total revenue estimate of $78 billion that comes from federal, state, local, and other sources.

I certify that Caltrans developed the 2023 FSTIP in accordance with the applicable requirements of the federal transportation statutes. Additionally, Caltrans has reviewed and agrees with the regional air quality conformity analyses prepared by the MPOs, which correspond with the 2023 FTIPs. Under the authority delegated to me by the Governor of California, I approve the inclusion of the MPOs' 2023 FTIPs and projects from rural non-MPO counties into the 2023 FSTIP. The 2023 FSTIP and its amendments will be transmitted for FHWA's and FTA's review and approval through the California Transportation Improvement Program System (CTIPS) database.

I want to thank you and your staff for your support, guidance, and assistance during the development of the 2023 FSTIP.

If you have any questions, please contact James R. Anderson at (916) 261-3132 or by email at james.r.anderson@dot.ca.gov.

Sincerely,

TONY TAVARES
Director

Enclosure: 2023 FSTIP

c: MPO Executive Directors
Regional Transportation Planning Agency Executive Directors

bc: Steven Keck, Chief Financial Officer, Caltrans
James R. Anderson, Chief, Division of Financial Programming, Caltrans
Abhijit Bagde, Acting Chief, Office of Federal Programming and Data Management, Caltrans

This report was funded in part through grant(s) from the Federal Highway Administration and Federal Transit Administration, U. S. Department of Transportation. The views and opinions of Kern Council of Governments expressed herein do not necessarily state or reflect those of the U.S. Department of Transportation

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EXECUTIVE SUMMARY

This report presents the Conformity Analysis for the 2023 Federal Transportation Improvement Program (2023 FTIP) and the 2022 Regional Transportation Plan (2022 RTP). Kern Council of Governments is the designated Metropolitan Planning Organization (MPO) in Kern County, California, and is responsible for regional transportation planning.

The 2018 PM2.5 Plan addressing 1997, 2006 and 2012 PM2.5 standards was adopted by the San Joaquin Valley Air District on November 15, 2018 and California Air Resources Board on January 24, 2019 and subsequently submitted for EPA review. EPA issued final approval on 2018 PM2.5 SIP elements that pertain to 2006 24-hour PM2.5 standard serious area nonattainment on July 22, 2020. On November 26, 2021, EPA published final approval of the moderate area SIP budgets for the 2012 PM2.5 standard contained in the 2016 Moderate Area PM2.5 Plan and portions of the 2018 PM2.5 plan that pertain to the moderate requirements for the 2012 PM2.5 standard (effective December 27, 2021). Also on November 26, 2021, EPA partially disapproved the original SIP submittal dealing with 1997 annual PM2.5 nonattainment. In response, CARB submitted a 2021 SIP revision to the 2018 PM2.5 Plan demonstrating attainment by 2023. Then on January 28, 2022, EPA approved 2018 PM2.5 Plan portion dealing with the 1997 24-hour PM2.5 standard and determined that the SJV attained the standard by the December 31, 2020 deadline (effective February 28, 2022). On February 10, 2022, EPA found the 1997 annual PM2.5 budgets for attainment year 2023 adequate (effective February 25, 2022). Therefore, this conformity analysis incorporates new 2018 PM2.5 SIP budgets for the 2006 24-hour and 1997 annual and 24-hour PM2.5 standards.

The remaining components of the 2018 PM2.5 Plan addressing the 2012 PM2.5 serious nonattainment area requirements are currently undergoing EPA review. In addition, East Kern Indian Wells Valley Second PM-10 Maintenance Plan was proposed to be approved on October 13, 2021 but is still pending final federal approval. Should EPA act on these additional SIP elements, this conformity analysis includes an "upcoming budget test" to address conformity to the budgets anticipated to be available by end of this year.

The Clean Air Act Section 176(c) (42 U.S.C. 7506(c)) and U.S. Environmental Protection Agency (EPA) transportation conformity regulations (40 CFR 93 Subpart A) require that each new RTP and TIP be demonstrated to conform to the State Implementation Plan (SIP) before the RTP and TIP are approved by the MPO or accepted by the U.S. Department of Transportation (DOT). This analysis demonstrates that the criteria specified in the transportation conformity regulations for a conformity determination are satisfied by the 2023 FTIP and the 2022 RTP; a finding of conformity is therefore supported. The 2023 FTIP, the 2022 RTP, and the corresponding Conformity Analysis were approved by Kern Council of Governments Policy Board on July 21, 2022. Federal approval is anticipated on or before December 31, 2022. FHWA/FTA last issued a finding of conformity for the 2021 FTIP and the 2018 RTP, as amended if applicable, on August 13, 2021.

The 2023 FTIP and the 2022 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.

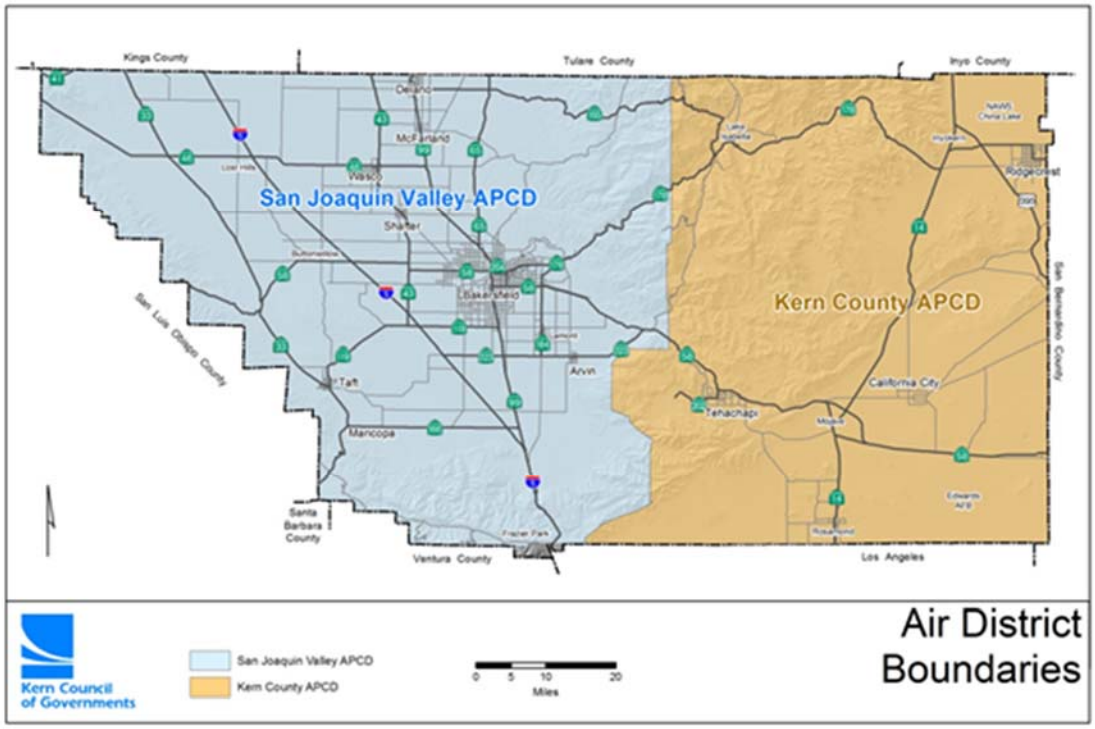
The applicable Federal criteria or requirements for conformity determinations, the conformity tests applied, the results of the conformity assessment, and an overview of the organization of this report are summarized below.

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 Kern 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 TIP and RTP no longer include a CO conformity demonstration.

Figure 1– Air Pollution Control Districts in the Kern Region



Kern COG is also located in the federally designated Mojave Desert, portions of the Indian Wells Valley Planning Area, and the portion of the San Joaquin Valley (SJV) PM-10 nonattainment area that lies within the Kern County Air Pollution Control District (this area is not included in the SJV 2007 PM-10 Maintenance Plan and has been labeled the East Kern PM-10 Area). The Mojave Desert (Eastern Kern) area is currently designated as nonattainment for the National Ambient Air Quality Standards (NAAQS) for 2008 and 2015 8-hour ozone; whereas the Indian Wells Valley Planning area is designated as a maintenance area for PM-10. The Kern COG transportation plans and programs also satisfy the requirements of the transportation conformity regulation for these nonattainment areas.

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

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

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

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

(4) interagency and public consultation.

Figure 2 – Ozone/Carbon Monoxide Planning Areas

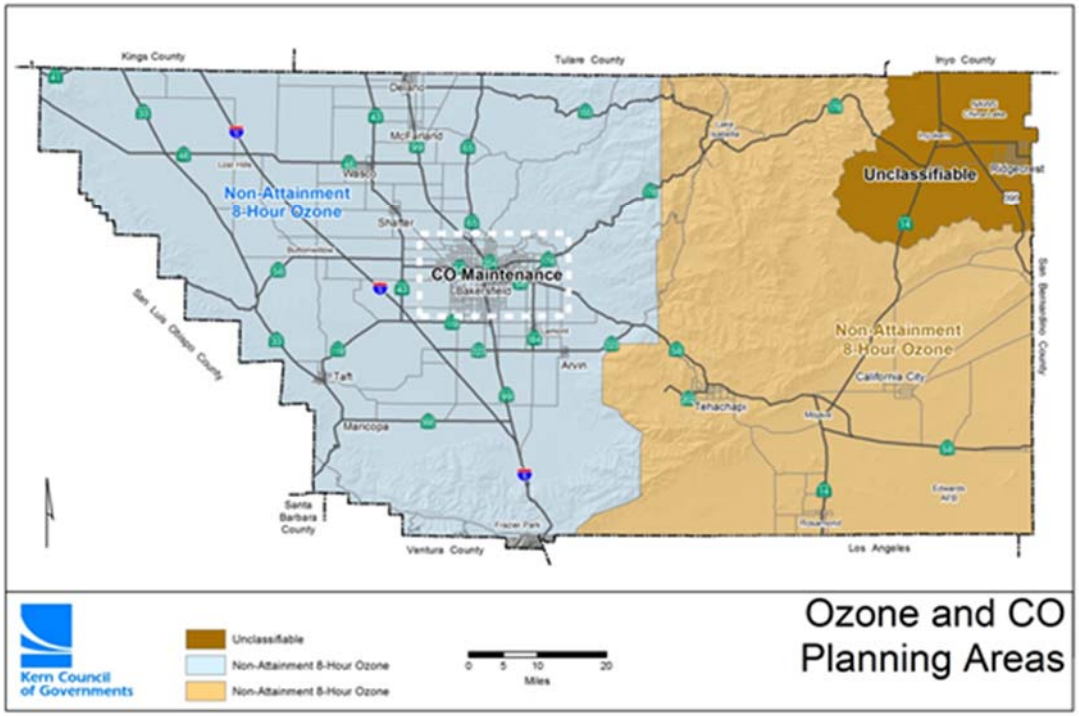
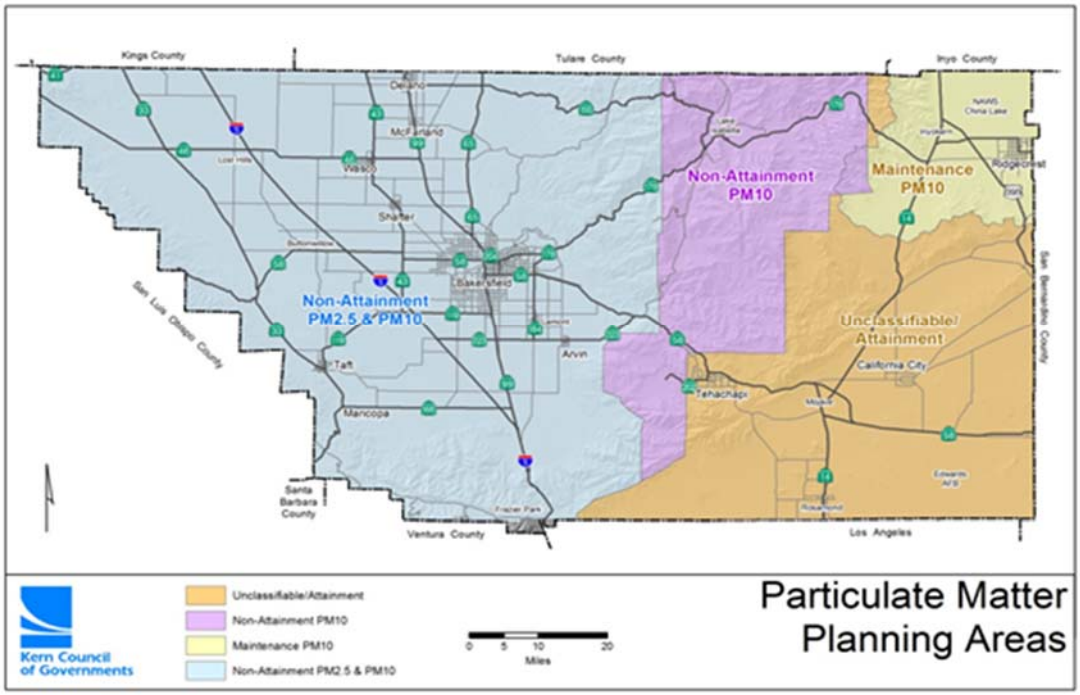


Figure 3 – Particulate Matter Planning Areas



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

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

CONFORMITY TESTS

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

RESULTS OF THE CONFORMITY ANALYSIS

A regional emissions analysis was conducted for the years 2022, 2023, 2024, 2025, 2026, 2029, 2031, 2037 and 2046 for each applicable pollutant. All analyses were conducted using the latest planning assumptions and emissions models. The major conclusions of the Conformity Analysis for the 2023 FTIP and 2022 RTP are:

- For 2008 and 2015 8-hour ozone, the total regional on-road vehicle-related emissions (ROG and NOx) associated with implementation of the 2023 FTIP and the 2022 RTP 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 2023 FTIP and the 2022 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 24-hour PM2.5 standard, the total regional on-road vehicle-related emissions associated with implementation of the 2023 FTIP and the 2022 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 *2018 Plan for the 1997, 2006, and 2012 PM2.5 Standards (2018 PM2.5 Plan)* for the 1997 PM2.5 24-hour serious area requirements (2020 attainment year).. The conformity tests for the 1997 24-hour PM2.5 standard are therefore satisfied.

- For the 1997 annual PM2.5 standard, the total regional on-road vehicle-related emissions associated with implementation of the 2023 FTIP and the 2022 RTP for the analysis years are projected to be less than the adequate emission budgets from the 2021 revision to the *2018 Plan for the 1997, 2006, and 2012 PM2.5 Standards (2018 PM2.5 Plan)* for the 1997 annual PM2.5 serious area requirements (2023 attainment year). The conformity tests for the 1997 annual PM2.5 standard are therefore satisfied.
- For the 2006 24-hour PM2.5 standard, the total regional on-road vehicle-related emissions associated with implementation of the 2023 FTIP and the 2022 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 *2018 Plan for the 1997, 2006, and 2012 PM2.5 Standards (2018 PM2.5 Plan)*. The conformity tests for the 2006 PM2.5 standard are therefore satisfied.
- For the 2012 annual PM2.5 standard, the total regional on-road vehicle-related emissions associated with implementation of the 2023 FTIP and the 2022 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 *2016 Moderate PM2.5 Plan* and *2018 Plan for the 1997, 2006, and 2012 PM2.5 Standards (2018 PM2.5 Plan)* for 2012 PM2.5 moderate area requirements. In addition, this conformity analysis includes an "upcoming budget test" demonstrating conformity to the serious (2025) budgets contained in the 2018 PM2.5 Plan. The conformity tests for the 2012 PM2.5 standard are therefore satisfied. The conformity tests for the 2012 PM2.5 standard are therefore satisfied.

The 2023 FTIP and the 2022 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.

Regional emissions analyses were also conducted for 2022, 2023, 2025, 2026, 2029, 2037, and 2046 for the Eastern Kern ozone area and the Indian Wells Valley PM-10 area. No emissions analysis was completed for the portion of the SJV PM-10 nonattainment area that is under Kern County Air Pollution Control District jurisdiction (East Kern PM-10 Area).

- For Mojave Desert (Eastern Kern) ozone (2008 and 2015 standards), the total regional on-road vehicle-related emissions (ROG and NOx) associated with implementation of the 2023 FTIP and the 2022 RTP for all years tested are projected to be less than the approved emissions budgets specified in the Eastern Kern 2017 Ozone Plan. The conformity tests for ozone are therefore satisfied.
- For Indian Wells Valley PM-10, the total regional vehicle-related emissions associated with implementation of the 2021 FTIP and the 2018 RTP for all years tested are projected to be less than the approved emissions budgets from the PM-10 Attainment Demonstration, Maintenance

Plan, and Re-designation Request. In addition, this conformity analysis includes an "upcoming budget test" demonstrating conformity to the Indian Wells Valley Second 10-Year PM10 Maintenance Plan budgets that are still pending final federal approval. The conformity tests for PM-10 are therefore satisfied.

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

REPORT ORGANIZATION

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

Appendix E includes public hearing documentation conducted on the 2023 FTIP, the 2022 RTP and the corresponding Conformity Analysis on May 16 and May 19, 2022. Comments received on the conformity analysis and responses made as part of the public involvement process are included in Appendix F.

CHAPTER 1:
FEDERAL AND STATE REGULATORY REQUIREMENTS

The criteria for determining conformity of transportation programs and plans under the Federal transportation conformity regulation (40 CFR Parts 51 and 93) and the applicable conformity tests for the San Joaquin Valley nonattainment areas are summarized in this section. The Conformity Analysis for and the 2023 FTIP and 2022 RTP was prepared based on these criteria and tests. Presented first is a review of the development of the applicable conformity regulation and guidance procedures, followed by summaries of conformity regulation requirements, air quality designation status, conformity test requirements, and analysis years for the Conformity Analysis.

Kern Council of Governments is the designated Metropolitan Planning Organization (MPO) for Kern County in the San Joaquin Valley. As a result of this designation Kern Council of Governments prepares the TIP, RTP, and associated conformity analyses. The TIP serves as a detailed four year (FY 2022/23 – 2025/26) programming document for the preservation, expansion, and management of the transportation system. The 2022 RTP has a 2046 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 if 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).

   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. EPA has approved EMFAC2017 for conformity use on August 15, 2019 and the final rule started the two-year grace period to transition to the new emissions model for use in conformity demonstrations. Therefore, EMFAC2014 continued to be used in this 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. On November 20, 2019, California Air Resources Board (CARB) released "EMFAC Off-Model Adjustment Factors to Account for the SAFE Vehicles Rule Part One" for use in regional conformity analyses. On March 12, 2020, EPA concurred on the use of CARB's EMFAC off-model adjustment factors in conformity demonstrations. On April 30, EPA and NHTSA published SAFE Vehicles Rule for Model Years 2021-2026 Passenger Cars and Light Trucks (Final SAFE Rule) rolling back federal fuel economy standards. On June 26, 2020 CARB issued a public notice stating that EMFAC adjustments released in November continue to be suitable for conformity purposes. On March 14, EPA issued a final decision rescinding its 2019 waiver withdrawal, therefore EMFAC adjustments will no longer be needed for regional conformity analyses (CARB guidance still pending at this time). Therefore, the Conformity Analysis for the 2023 FTIP and 2022 RTP does not include SAFE Rule adjustments.

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. Kern COG adopted consultation process and policy for conformity analysis includes a 30-day comment period (55-day for the RTP) followed by a public meeting.

C. AIR QUALITY DESIGNATIONS APPLICABLE TO THE SAN JOAQUIN VALLEY

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

Kern Council of Governments is located in the federally designated San Joaquin Valley Air Basin. The borders of the basin are defined by mountain and foothill ranges to the east and west. The northern border is consistent with the county line between San Joaquin and Sacramento Counties. The southern border is less defined, but is roughly bounded by the Tehachapi Mountains and, to some extent, the Sierra Nevada range. The Conformity Analysis for the 2023 FTIP and 2022 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. Therefore, future conformity analyses no longer include a CO conformity demonstration.

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 approved the 2016 Ozone Plan and the budgets 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 2016 PM2.5 Plan and portions of the 2018 PM2.5 Plan (2012 Standard, moderate) was approved by EPA on November 26, 2021 (effective December 27, 2021).

- The 2018 PM2.5 Plan was partially approved by EPA on July 22, 2020 (effective as of publication) inclusive of the revised conformity budgets and trading mechanism for the 2006 24-hr PM2.5 standard. Then on November 26, 2021, EPA partially disapproved the original SIP submittal dealing with 1997 annual PM2.5 nonattainment. In response, CARB submitted a 2021 revision to the 2018 PM2.5 Plan demonstrating attainment by 2023. On

December 29, 2021, EPA proposed approval of the SIP elements and conformity budgets that pertain to the 2012 annual PM2.5 standards serious area requirements (final action expected by end of the year). Then on January 28, 2022, EPA approved 2018 PM2.5 Plan portion dealing with the 1997 24-hour PM2.5 standard and determined that the SJV attained the standard by the December 31, 2020 deadline (effective February 28, 2022). On February 10, 2022, EPA found the 1997 annual PM2.5 budgets for attainment year 2023 adequate, effective February 25, 2022. It is expected that EPA will act on the remaining SIP elements related to annual 1997 PM2.5 nonattainment by end of the year including the trading mechanism.

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.

In addition, on May 4, 2016 the Eastern portion of Kern County, the Mojave Desert, was designated nonattainment for the 2008 ozone standard and classified "moderate" with an attainment date July 20, 2018. ARB adopted the Eastern Kern 2017 Ozone Plan on September 28, 2017 including a request to reclassify the area to "serious" nonattainment for the 2008 ozone standard. On July 5, 2018, EPA approved the reclassification request to "serious" including the new attainment deadline of 2021. On June 25, 2021, the Eastern Kern 2017 Ozone Plan was approved by EPA (effective July 26, 2021). On May 15, 2021, CARB sent a letter to EPA requesting voluntary reclassification request for Eastern Kern from "serious" "severe" nonattainment for the 2008 ozone standard with a new attainment date of 2026. EPA approved the reclassification request in June, effective July 7, 2021.

On June 4, 2018 EPA issued final designations classifying Eastern Kern as "moderate" non-attainment for the 2015 ozone standard with an attainment date of 2024. On May 15, 2021, CARB sent a letter to EPA requesting voluntary reclassification request for Eastern Kern for the 2015 8-hour ozone standard from "moderate" to "serious" nonattainment with an attainment date of 2026. EPA approved the bump up on October 28, 2021. It is important to note that the 2015 ozone standard nonattainment area boundary for Eastern Kern 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 approving the 2008 ozone conformity budgets and 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 2023 FTIP and the 2022 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 2016 PM2.5 Plan addressing moderate area requirements for the 2012 PM2.5 standard was adopted by the San Joaquin Valley Air District on September 15, 2016. The 2018 PM2.5 Plan addressing 1997, 2006 and 2012 PM2.5 standards was adopted by the San Joaquin Valley Air District on November 15, 2018 and California Air Resources Board on January 24, 2019, and subsequently submitted for EPA review together with the 2016 Moderate PM2.5 Plan and reclassification to serious request. On July 22, 2020, EPA published final rule approving SIP elements that pertain to 2006 24-hour PM2.5 standard serious area nonattainment (effective as of publication). On December 29, 2021, EPA proposed approval of the SIP elements and conformity budgets that pertain to the 2012 annual PM2.5 standards (final action expected by end of the year). Then on January 28, 2022, EPA approved 2018 PM2.5 Plan portion dealing with the 1997 24-hour PM2.5 standard and determined that the SJV attained the standard by the December 31, 2020 deadline (effective February 28, 2022).

While EPA partially disapproved the original SIP submittal dealing with 1997 annual PM2.5 nonattainment on November 26, 2021, CARB has submitted the 2021 revision to the 2018 PM2.5 Plan in the same month demonstrating attainment by 2023. On February 10, 2022, EPA found the 1997 annual PM2.5 budgets adequate, effective February 25, 2022. It is expected that EPA will act on the remaining SIP elements related to the annual 1997 PM2.5 standards, including the trading mechanism, by end of the year. Therefore, this analysis includes conformity tests to all new budgets contained in the 2018 PM2.5 Plan and it's 2021 revision. Given that EPA may act on the remaining components of the 2018 PM2.5 Plan prior to federal approval of the 2022 RTP and 2023 FTIP conformity analysis, the new transportation conformity budgets addressing the 2012 serious PM2.5 standards are also included in this conformity analysis ("upcoming budget test").

1997 (24-hour and annual) Standards

The 2018 PM2.5 Plan 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 applicable conformity budgets are provided in Table 1-3 for the 1997 annual and 24-hour PM2.5 standards and will be used to compare emissions resulting from the 2023 FTIP and the 2022 RTP.

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

	2020		2023	
County	**PM2.5**	**NOx**	**PM2.5**	**NOx**
Fresno	0.9	25.3	0.8	15.1
Kern (SJV)	0.8	23.3	0.7	13.3
Kings	0.2	4.8	0.2	2.8
Madera	0.2	4.2	0.2	2.5
Merced	0.3	8.9	0.3	5.3
San Joaquin	0.6	11.9	0.6	7.6
Stanislaus	0.4	9.6	0.4	6.1
Tulare	0.4	8.5	0.4	5.2

The 2018 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 a 6.5 to 1 ratio on an annual basis and a 2 to 1 ratio on a 24-hr basis. 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 2018 PM2.5 SIP. To ensure that the trading mechanism does not impact the ability to meet the NOx budget, the NOx emission reductions available to supplement the PM2.5 budget shall only be those remaining after the NOx budget has been met. The trading mechanism for the 24-hour annual PM2.5 was approved by EPA on January 28, 2022. Final action on the trading mechanism for the 1997 annual PM2.5 standard is expected by end of the year.

2012 Annual PM2.5 Standard (Moderate)

On November 26, 2021, EPA published final approval of the moderate area SIP budgets for the 2012 PM2.5 standard contained in the 2016 Moderate Area PM2.5 Plan and portions of the 2018 PM2.5 plan that pertain to the moderate requirements for the 2012 PM2.5 standard. The approval also included reclassification to serious. On December 29, 2021, EPA proposed approval of the SIP

elements and conformity budgets that pertain to the 2012 annual PM2.5 serious area requirements (final action expected by end of the year). Until the new 2012 serious area PM2.5 standard budgets are found adequate or approved, the SJV will conduct conformity determination for the 2012 annual PM2.5 standard using budgets established in the 2018 PM2.5 Plan for moderate nonattainment. The conformity budgets from the November 26, 2021 Federal Register are provided in Table 1-4 will be used to compare emissions resulting from 2023 FTIP and 2022 RTP.

Table 1-4:
On-Road Motor Vehicle 2012 (annual) PM2.5 Standard Emissions Budgets (Moderate)
(tons per average annual day)

	2022	
County	**PM2.5**	**NOx**
Fresno	0.9	21.2
Kern (SJV)	0.8	19.4
Kings	0.2	4.1
Madera	0.2	3.5
Merced	0.3	7.6
San Joaquin	0.6	10.0
Stanislaus	0.4	8.1
Tulare	0.4	6.9

The 2018 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 a 6.5 to 1 ratio on an annual basis. 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 2018 PM2.5 SIP.

2006 24-Hour PM2.5 Standard

The 2018 PM2.5 Plan addressing 1997, 2006 and 2012 PM2.5 standards was adopted by the San Joaquin Valley Air District on November 15, 2018 and California Air Resources Board on January 24, 2019. On March 27, EPA published a proposed rule approving portions of the 2018 PM2.5 Plan, including the 2006 PM2.5 conformity budgets and trading mechanism. Final rule on sections that pertain to 2006 24-hour PM2.5 standard serious area nonattainment was published on July 22, 2020. Therefore, the conformity analysis for the 2021 FTIP and 2018 RTP incorporates new transportation conformity budgets and the new attainment year of 2024 for 2006 24-hour PM2.5 standards.

The 2018 PM2.5 Plan for the 2006 PM2.5 standard 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 March 27, 2020 Federal Register, Table 14 are provided in Table 1-5 below and will be used to compare emissions resulting from the 2023 FTIP and the 2022 RTP.

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

	2020		2023		2024	
County	**PM2.5**	**NOx**	**PM2.5**	**NOx**	**PM2.5**	**NOx**
Fresno	0.9	25.9	0.8	15.5	0.8	15.0
Kern (SJV)	0.8	23.8	0.7	13.6	0.7	13.4
Kings	0.2	4.9	0.2	2.9	0.2	2.8
Madera	0.2	4.4	0.2	2.6	0.2	2.5
Merced	0.3	9.1	0.3	5.5	0.3	5.3
San Joaquin	0.6	12.3	0.6	7.9	0.6	7.6
Stanislaus	0.4	9.8	0.4	6.2	0.4	6.0
Tulare	0.4	8.7	0.4	5.3	0.4	5.1

The 2018 PM2.5 SIP includes a trading mechanism that allows trading from the motor vehicle emissions budget for the PM2.5 precursor NOx to the motor vehicle emissions budget for primary PM-2.5 using a 2 to 1 ratio on a 24-hour, wintertime basis. 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.

"Upcoming Budget Test" for the 2012 Annual PM2.5 Standards (Serious)

The 2018 PM2.5 Plan 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 budgets for serious 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. On December 29, 2021, EPA proposed approval of the SIP elements and conformity budgets that pertain to the 2012 annual PM2.5 standards, serious area requirements (final action expected by end of the year). The 2018 PM2.5 SIP conformity budgets from the December 29, 2021 Federal Register are provided in Table 1-6 below to address serious nonattainment requirements. These budgets will be used to compare emissions resulting from the

2023 FTIP and the 2022 RTP. Should EPA act on these budgets prior to federal approval of this conformity analysis, the budgets below will apply.

Table 1-6:
On-Road Motor Vehicle 2012 (annual) PM2.5 Standard Emissions Budgets (Serious)
(tons per average annual day)

	2022		2025	
County	**PM2.5**	**NOx**	**PM2.5**	**NOx**
Fresno	0.9	21.2	0.8	14.3
Kern (SJV)	0.8	19.4	0.8	12.8
Kings	0.2	4.1	0.2	2.7
Madera	0.2	3.5	0.2	2.3
Merced	0.3	7.6	0.3	5.0
San Joaquin	0.6	10.0	0.6	6.9
Stanislaus	0.4	8.1	0.4	5.6
Tulare	0.4	6.9	0.4	4.7

The 2018 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 a 6.5 to 1 ratio on an annual basis. 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 2018 PM2.5 SIP. To ensure that the trading mechanism does not impact the ability to meet the NOx budget, the NOx emission reductions available to supplement the PM2.5 budget shall only be those remaining after the NOx budget has been met.

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 1-7 below provides a summary of conformity analysis years that apply to this conformity analysis.

Table 1-7:
San Joaquin Valley Conformity Analysis Years

Pollutant	Budget Years[1]	Attainment/ Maintenance Year	Intermediate Years	RTP Horizon Year
2008 and 2015 Ozone	2020/2023/2026/2029	2031/2037[2]	NA	2046
PM-10	NA	2020	2022/2029/2037	2046
1997 24-hour PM2.5	NA	2020	2023/2029/2037	2046
1997 Annual PM2.5	NA	2023	2029/2037	2046
2012 Annual PM2.5 (moderate)	NA	2022	2025/2029/2037	2046
2006 24-hour PM2.5	2020/2023	2024	2031/2037	2046
"Upcoming Budget Test" 2012 Annual PM2.5 (serious)	2022	2025	2029/2037	2046

[1]Budget years that are not in the time frame of the transportation plan/conformity analysis are not included as analysis years (e.g., 2020), although they may be used to demonstrate conformity. Some of the early RFP year budgets were not acted on by EPA since they were not applicable.
[2]2031 is the attainment year for the 2008 ozone standard. 2037 is the attainment year for the 2015 ozone standard.

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. The 2018 PM2.5 SIP addresses attainment of the 1997 24-hour PM2.5 standard (serious) by 2020 and was approved by EPA on January 28, 2022 (effective February 28, 2022). The attainment year is not in the timeframe of this conformity analysis. On February 10, 2022, EPA found the serious area 1997 annual PM2.5 budgets for attainment year 2023 adequate (effective February 25, 2022). Therefore, attainment year 2023 must be modeled.
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, effective September 30, 2016, inclusive of new conformity budgets and trading mechanism for the 2006 24-hour PM2.5 standard with a requirement to attain the standard as expediously as practicable and no later than December 31, 2019. In 2019, CARB submitted an attainment deadline extension request as part of the 2018 PM2.5 Plan. Final rule on 2018 PM2.5 SIP sections that pertain to 2006 24-hour PM2.5 standard serious area nonattainment was released on July 22, 2020. The attainment year of 2024 must be modeled.

On January 15, 2015, EPA classified the San Joaquin Valley as Moderate nonattainment for the 2012 PM2.5 Standards. On November 26, 2021, EPA issued final rule approving of the Moderate Area 2016 PM2.5 Plan, portions of the 2018 PM2.5 SIP pertaining to moderate nonattainment of the 2012 PM2.5 standards, and the reclassification request to serious nonattainment. The San Joaquin Valley 2018 PM2.5 Plan includes serious area budgets for the 2012 PM2.5 standards with an attainment deadline of 2025; therefore, the attainment year 2025 must be modeled.

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

In addition to the San Joaquin Valley planning area, Kern County also includes the federally designated Mojave Desert (Eastern Kern), portions of the Indian Wells Valley Planning Area, and the portion of the San Joaquin Valley PM-10 nonattainment area that lies within the Kern County Air Pollution Control District (this area is not included in the SJV 2007 PM-10 Maintenance Plan) and has been labeled the East Kern PM-10 Area. 2021 Conformity for the 2021 FTIP and 2018 RTP also includes analysis of existing and future air quality impacts for each applicable pollutant.

The Eastern Kern area is currently designated as nonattainment for the National Ambient Air Quality Standards (NAAQS) for 2008 and 2015 8-hour ozone; whereas the Indian Wells Valley Planning area is designated as a maintenance area for PM-10; and there is an additional East Kern PM-10 Area. The Kern County Air Pollution Control District is responsible for air quality plan development for these areas. State Implementation Plans have been prepared to address 8-hour ozone in Eastern Kern county, and PM-10 in the Indian Wells:

- EPA published final approval of the Eastern Kern 2017 Ozone Plan on June 25, 2021 inclusive of the transportation conformity budgets (effective July 26, 2021).
- The PM-10 Attainment demonstration, Maintenance Plan, and Redesignation Request was approved by EPA on May 7, 2003 (effective June 6, 2003).
- Indian Wells Valley Second 10-Year PM10 Maintenance Plan was proposed to be approved by EPA on October 13, 2021. Final action is expected by end of the year.

On May 4, 2016, EPA reclassified Eastern Kern to "moderate" nonattainment for the 2008 ozone standard with a new attainment date of July 20, 2018 (effective June 3, 2016). The Eastern Kern 2017 Ozone Attainment Plan was adopted by the Eastern Kern Air Pollution District on July 27, 2017. ARB adopted the 2017 Ozone Plan on September 28, 2017, including a request to reclassify the area to "serious" nonattainment, and subsequently submitted the Plan for EPA review. On July 5, 2018 EPA approved the reclassification request to serious including the new attainment date of 2021. EPA published final approval for the Eastern Kern 2017 Ozone Plan on June 25, 2021 (effective July 26, 2021). Subsequently, on May 15, 2021, CARB sent a letter to EPA requesting voluntary reclassification request for Eastern Kern from Serious to Severe. EPA approved reclassification request to severe in June 2021, effective July 7. Accordingly, the new attainment year of 2026 must be modeled.

On June 4, 2018, EPA published final designations for the 2015 ozone standard classifying Eastern Kern as "moderate" nonattainment with a new attainment date of 2024. 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 2023 must be modeled. Subsequently, on May 15, 2021, CARB sent a letter to EPA requesting voluntary reclassification request for Eastern Kern for the 2015 8-hour ozone standard from Moderate to Serious. EPA approved the reclassification request on October 28, 2021. When using the budget test, the attainment year for the 2015 ozone standard must be analyzed (i.e. 2026 for serious). According to the 2015 ozone implementation rules, areas designated nonattainment for 2015 ozone standards are required to use any existing adequate or approved SIP motor vehicle emissions budgets for a prior ozone standard until budgets for the 2015 ozone standard are either found adequate or approved; thus, the Eastern Kern 2017 Ozone Plan conformity budgets will be used to demonstrate conformity with the 2015 8-hour ozone standards.

While there is a 2007 PM-10 Maintenance Plan for the San Joaquin Valley, it does not address the portion of the nonattainment area under the jurisdiction of Kern County APCD (East Kern PM-10 Area). It is important to note that EPA has not designated any area beyond the San Joaquin Valley portion of Kern County as nonattainment for the 1997 PM2.5 standards or the 2006 24-hour PM2.5 standard.

G. CONFORMITY TEST REQUIREMENTS

OZONE

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

emission budgets for ozone are specified in the Eastern Kern 2017 Ozone SIP in tons per average summer day. The 2020 motor vehicle emission budgets for ROG and NOx from Table 4 of the October 28, 2020 Federal Register proposed rule are provided in the table below.

Table 1-8:
Upcoming Budget Test
Mojave Desert (Eastern Kern County)
Ozone Emissions Budgets
(summer tons / day)

	2020	
County	**ROG**	**NOx**
Kern – Eastern	1.3	3.6

PM-10

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

Table 1-9:
Kern County Indian Wells Valley Area
PM-10 Emissions Budgets

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

"Upcoming Budget Test" for PM-10

The new motor vehicle emissions budgets for PM-10 are specified in the Indian Wells Valley Second 10-Year PM-10 Maintenance Plan. EPA proposed plan approval on October 13, 2021; final approval is still pending at this time. The budgets for 2020 and 2025 from the October 13, 2021 Federal Register are shown below will be used to compare with each analysis year emissions. Emission budgets include vehicle exhaust, dust from paved and unpaved roads, as well as dust from construction activities. Should EPA act on these budgets prior to federal approval of this conformity analysis, the budgets below will apply.

Table 1-9:
Kern County Indian Wells Valley Area
PM-10 Emissions Budgets (tons/day)

County	2020	2025
Kern – Indian Wells Valley	0.4	0.5

In addition, the San Joaquin Valley PM-10 nonattainment area includes a portion of Kern County that is not addressed in the 2007 PM-10 Maintenance Plan. This area is now under the jurisdiction of the Kern County APCD and has been labeled the East Kern PM-10 Area. This area currently has no PM-10 air quality plan. Under this scenario, the conformity regulation requires that the PM-10 nonattainment area use the interim emissions tests, which include either the "Action" scenario less than the "Baseline" scenario (Build vs. No-Build) or the "Action" scenario less than baseline emissions (Build vs. 1990). The regional emissions analysis must only address PM-10, since neither VOC nor NOx precursors have been found to be a significant contributor to the PM-10 nonattainment problem in this area. Analysis year requirements are addressed under Section 93.119(g)(1) of the conformity regulation, nonattainment areas using interim emission tests are required to perform a regional emissions analysis for the following years:

- A year no more than 5 years beyond the year in which the conformity determination is made (e.g., 2022);
- The last year of the transportation plan's forecast period (e.g., 2046); and
- Any additional years within the time frame of the transportation plan so that analysis years are no more than 10 years apart (e.g., 2029, 2037).

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

H. ANALYSIS YEARS

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

Table 1-10:

Other Portions of Kern County Conformity Analysis Years

Pollutant	Budget Years	Attainment/ Maintenance Year[1]	Intermediate Years	RTP Horizon Year
E. Kern 2008 and 2015 Ozone	2020	2026	2023/2029/2037	2046
Indian Wells Valley PM-10	NA	2010	2022/2029/2037	2046
"Upcoming Budget Test" Indian Wells Valley PM-10	2020	2025	2022/2029/2037	2046
East Kern PM-10	NA	NA	2023/2029/2037	2046

[1]Budget years that are not in the time frame of the transportation plan/conformity analysis are not included as analysis years (e.g., 2020), although they may be used to demonstrate conformity.

CHAPTER 2:
LATEST PLANNING ASSUMPTIONS AND TRANSPORTATION MODELING

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

According to the conformity regulation, the time the conformity analysis begins is "the point at which the MPO or other designated agency begins to model the impact of the proposed transportation plan or TIP on travel and/or emissions." The conformity analysis and initial emissions modeling began in July 2021.

Key elements of the latest planning assumption guidance include:

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

The Kern Council of Governments uses the CUBE transportation model. The model was validated in 2022 for the 2020 base year. The latest planning assumptions used in the transportation model validation and Conformity Analysis is summarized in Table 2-1.

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

Assumption	Year and Source of Data (MPO action)	Modeling	Next Scheduled Update
Population	Base Year: 2020 (Jan 1st) Projections: The Kern COG policy board accepted population projections from the 2020-2050 Kern Regional Growth Forecast on March 19th, 2020. The forecast was later adjusted to incorporate 2020 U.S. Census base year data in August 2021.	This data is disaggregated to the TAZ level using and 2020 U.S. Census population and household data for input into the CUBE for the base year validation. Projections use the Uplan Land Use Model for distribution of socio-economic data to the TAZ level based on local adopted general plans.	Regional Growth Forecast update is anticipated between 2023-25 for the 2026 RTP to be prepared by a consulting economist.
Employment	Base Year: 2020 Projections: The Kern COG policy board accepted employment projections from the 2020-2050 Kern Regional Growth Forecast on March 19th, 2020. Base year growth distribution is based on InfoUSA and state EDD data.	This data is disaggregated to the TAZ level for input into the CUBE for the base year validation. Projections use the Uplan Land Use Model for distribution of socio-economic data to the TAZ level based on local adopted general plans.	Regional Growth Forecast update is anticipated between 2023-25 for the 2026 RTP to be prepared by a consulting economist.
Traffic Counts	909 two-way traffic count locations from the Kern Regional Traffic Count Program were used in model validation. The counts are available online at: http://www.kerncog.org/traffic-counts/	CUBE was validated using traffic counts from the Kern Regional Traffic Count Program and Caltrans Census Program.	Traffic counts are collected annually and used to update model validation every four years.

Assumption	Year and Source of Data (MPO action)	Modeling	Next Scheduled Update
Vehicle Miles of Travel	The transportation model was validated in 2021 to the base year. The validation came within .6% percent of Caltrans latest available HPMS VMT estimate at that time. The Kern COG policy Board is anticipated to accept the 2022 transportation model validation for the 2020 base year in July of 2022 with the adoption of the 2022 RTP.	CUBE is the transportation model software used to model future transportation projects and estimate and assign VMT in Kern County.	VMT is scheduled to be recalibrated to HPMS and observed counts in the 2026 travel model update.
Speeds	The 2022 transportation model validation was based on highway speed data provided by Fehr & Peers from the FHWA's National Performance Research Data Set during the 2017 model development. Speed distributions were updated in EMFAC2014, using methodology approved by ARB and with information from the transportation model.	CUBE transportation model includes a feedback loop that assures congested speeds are consistent with travel speeds. EMFAC2014	Speed studies are conducted by the cities and the County on Caltrans functionally classified routes on an on-going basis for setting/ enforcing speed limits. This information is gathered and incorporated into each new model validation. Updated speed data will be incorporated in the next model validation scheduled for completion by 2026.

A. SOCIOECONOMIC DATA

POPULATION, EMPLOYMENT AND LAND USE

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

Supporting Documentation:

The Kern Regional Transportation Modeling Committee (TMC) provides oversight for the land use and socioeconomic data inputs into the model. The TMC is made up of local government planning and public works staff. The TMC is a subcommittee of the Regional Planning Advisory Committee to the Kern COG policy board and the two groups often meet jointly. The TMC was established by a Memorandum of Understanding (MOU) between Kern COG (representing the outlying communities), the City of Bakersfield, the County of Kern and Caltrans Districts 6 to coordinate modeling in the region. The MOU affirms the Kern COG policy for its Board to revise and adopt the countywide population forecast every 3-5 years.

Land use and socioeconomic data at the zonal level are used for determining trip generation. The TMC updates the distribution of zonal data as new information and planning assumptions are available. The population and household base year estimate is based on the latest US Census and State of California Department of Finance (DOF) estimates available at the time of preparation of the population forecast. The model includes 11 housing types distributed using latest Census data and assessor's tax roll information. **The Kern COG policy board accepted population, household and employment projections from the 2020-2050 Kern Regional Growth Forecast developed by chief economist for the California Economic Forecast consulting firm, on March 19, 2020.**

The base year employment estimate used California Employment Development Department (EDD) and InfoUSA geocoded data. The employment forecast was also developed by California Economic Forecast consulting and is based on the sum of the forecast for 20 employment sectors and adjusted using a jobs housing balance ratio assumption.

Income stratification for zonal data is based on the latest available U.S. Census ACS data, along with vehicle availability to determine mode choice trip generation rates. School enrollment forecasts and future school location are developed in consultation with Kern County Superintendent of Schools and a survey of colleges and trade schools performed by Kern COG.

The household and employment forecast distribution uses the open source Uplan Land Use Model developed by UC Davis using ArcGIS software, incorporating economic factors such as proximity to urban services (sewer, existing urban), rail and interchanges in distribution of employment and households. The model limits distribution based on local general plans and other factors. The model has allowed testing of hundreds scenarios to better balance land use and transportation expenditures in development of the 2022 RTP.

B. TRANSPORTATION MODELING

The San Joaquin Valley Metropolitan Planning Organizations (MPOs) utilize the Cube traffic modeling software. The Kern regional traffic models uses a traditional four-step mode choice traffic forecasting model. 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 thousands of individual traffic analysis zones (TAZs). In addition, the model roadway networks include thousands of nodes and links. Link types include freeway, freeway ramp, other State route, expressway, arterial, collector, and local collector. Current and future-year road networks were developed considering local agency circulation elements of their general plans, traffic impact studies, capital improvement programs, and the State Transportation Improvement Program. The models use equilibrium, a capacity sensitive assignment methodology, and the data from the model for the emission estimates differentiates between peak and off-peak volumes and speeds. In addition, the model is reasonably sensitive to changes in time and other factors affecting travel choices. The results from model validation/calibration were analyzed for reasonableness and compared to historical trends.

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

As discussed above, the San Joaquin Valley Model Improvement Program, Phase 2 (VMIP 2) travel demand model for Kern, applies an advanced four-step travel demand model system of trip generation, distribution, mode choice, and traffic assignment with nearly all stages recognizing household demographics, auto availability, modes including explicit auto occupancy, transit by walk and drive access, walk and bike, pricing, and congestion by time of day. The travel model includes a congestion feedback loop that accurately accounts for short-term induced travel demand. The travel model contains socio-economic data for approximately 1,900 Transportation Analysis Zones (TAZs). The VMIP 2 travel demand model in 2017 was subjected to a peer review by DKS Associates in cooperation with Fehr and Peers.[1] The updated validation is referred to as VMIP 3 and used the same peer reviewed model but with updated input data including the 2020 U.S. Census. The review and update addressed a variety of other calibration considerations, including gateway volumes from the statewide and neighboring models, the 2012 California Household Travel Survey (including more than 400 over-sampled surveys for transit riders in Kern), transit route volumes observed in 2019/20, over 900 peak/off-peak/daily traffic count locations, and observed speed limit information.

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

[1] DKS Associates, Summary of Peer Review Revisions to the Kern COG VMIP-2 Travel Demand Model, http://www.kerncog.org/wp-content/uploads/2018/01/MIP2_peer_review.pdf , 2017.

and compared to historical trends and explain any significant differences between past trends and forecasts (for per capita vehicle-trips, VMT, trip lengths mode shares, time of day, etc.).

Supporting Documentation:

The Kern COG regional travel demand model was validated in 2022 to 2020 base year observed counts at more than 900 two-way locations from the Kern Regional Traffic Count Program and Caltrans Traffic Census Program. The validation incorporated data for Kern County from the most recent available 2012 household travel surveys. 100% of screen-lines in the 2017? model for daily, peak and off-peak periods were within the maximum desirable deviation. All modeled count locations resulted in a correlation co-efficient of 97% well within the 88% best practice threshold. 66% of all 951 links are within the maximum desirable deviation, and 82% during the PM peak hour. Overall freeways, expressways and principal arterials ranged from 0% to 10% of observed counts. Total VMT is within 0.2% of Highway Performance Monitoring System observed VMT for Kern County, well within the allowable +-5% based on best practice.

SPEEDS

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

Supporting Documentation:

Kern COG's member agencies routinely perform speed surveys on functionally classified routes throughout the region and use the data to update posted speed limits. These observed speeds were used as a validation check on HERE Technologies data free-flow speeds input into the model as the free flow speeds. The valley traffic models include a feedback loop that uses congested travel times as an input to the trip distribution step. The feedback loop ensures that the congested travel speeds used as input to the air pollution emission models are consistent with the travel speeds used throughout the traffic model process including. The feedback loop includes a step for mode choice, ensuring that zone to zone impedances are used in the mode split distribution. In addition, the model validation included a series of speed sensitivity tests. The model responded appropriately for the increased and decreased speed tests.

TRANSIT

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

Supporting Documentation:

Several recent on-board transit surveys have been performed for the transit systems in Kern. The Kern COG regional travel demand model was validated in 2015 to observed transit ridership data including electronic farebox data. Transit boardings were within 1% of observed surveys in the 2015 base year, within the +-20 percent best practice guidelines. In addition, the model was subjected to a land use sensitivity test that measured the capability of the model to accurately report transit ridership in high quality transit areas. To implement these tests, land use developments by Traffic Analysis Zone (TAZ) were classified into place types and selected to be changed either geographically (move all the development to a different place but retain the development and demographics) or by place type (keep the development in the same location but modify the place type to reflect different "D" variables). The results showed that the Kern travel model provided results with a high level of correlation to the well calibrated small scale test model.

VALIDATION/CALIBRATION

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

Supporting Documentation:

The models were validated by comparing its estimates of base year traffic conditions with base year traffic counts. The base year validations meet standard criteria for replicating total traffic volumes on various road types and for percent error on links. The base year validation also meets standard criteria for percent error relative to traffic counts on groups of roads (screen-lines) throughout each county.

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

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

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

FUTURE NETWORKS

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

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

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

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

Supporting Documentation:

The build highway networks include qualifying projects based on the 2022 RTP and 2023 FTIP. 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 Kern Council of Governments transportation modeling area for each scenario in the Conformity Analysis is presented in Table 2-2.

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

Horizon Year	Total Population	Employment	Average Weekday VMT (millions)	Total Lane Miles
2022	794,170	303,810	20.6	5,706
2023	804,140	305,640	20.8	N/A
2024	814,110	307,480	21.1	N/A
2025	824,080	309,310	21.3	N/A
2026	834,050	311,140	21.4	N/A
2029	863,960	316,640	22.0	5,866
2031	883,900	320,300	22.4	N/A
2037	941,100	331,300	23.4	6,804
2046	1,027,610	352,100	24.7	6,899

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

Horizon Year	Total Population (thousands)	Employment (thousands)	Average Weekday VMT (millions)	Total Lane Miles
2023	103,010	26,610	3.49	1,997
2026	107,590	27,270	3.54	1,998
2029	111,020	27,930	3.60	1,998
2037	120,300	29,700	3.76	2,363
2046	132,300	32,070	3.80	2,366

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

Horizon Year	Total Population (thousands)	Employment (thousands)	Average Weekday VMT (millions)	Total Lane Miles
2022	32,110	13,570	0.474	371
2025	32,640	13,830	0.474	372

2029	33,340	14,170	0.475	372
2037	34,750	14,860	0.485	405
2046	36,660	15,830	0.481	420

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

Horizon Year	Total Population (thousands)	Employment (thousands)	Average Weekday VMT (millions)	Total Lane Miles
2023	33,780	5,970	0.8	528
2029	34,730	6,030	0.8	528
2037	36,100	6,110	0.8	540
2046	38,260	6,280	0.9	540

D. VEHICLE REGISTRATIONS

Kern Council of Governments does not estimate vehicle registrations, age distributions or fleet mix. Rather, current forecasted estimates for these data are developed by CARB and included in the EMFAC2014 model (http://www.arb.ca.gov/msei/onroad/latest_version.htm). Vehicle registrations, age distribution and fleet mix are developed and included in the model by CARB and cannot be updated by the user. While EPA issued final approval for EMFAC2017 use in conformity demonstrations on August 15, 2019, the Conformity Analysis for the 2023 FTIP and the 2022 RTP relies on EMFAC2014 since the analysis began in July 2021, in line with the grace period established in the Final Rule. 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 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

No committed control measures are included in the 2016 PM2.5 Plan and the 2018 PM2.5 Plan.

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 Update on October 25, 2018. EPA approved the budgets and the plan 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 2016 PM2.5 Plan and portions of the 2018 PM2.5 Plan (2012 Standard, moderate) was approved by EPA on November 26, 2021 (effective December 27, 2021).

- The 2018 PM2.5 Plan was partially approved by EPA on July 22, 2020 (effective as of publication) inclusive of the revised conformity budgets and trading mechanism for the 2006 24-hr PM2.5 standard. Then on November 26, 2021, EPA partially disapproved the original SIP submittal dealing with 1997 annual PM2.5 nonattainment. In response, CARB submitted a 2021 revision to the 2018 PM2.5 Plan demonstrating attainment by 2023. On December 29, 2021, EPA proposed approval of the SIP elements and conformity budgets that pertain to the 2012 annual PM2.5 serious area requirements (final action expected by end of the year. Then on January 28, 2022, EPA approved 2018 PM2.5 Plan portion dealing with the 1997 24-hour PM2.5 standard and determined that the SJV attained the standard by the December 31, 2020 deadline (effective February 28, 2022). On February 10, 2022, EPA found the 1997 annual PM2.5 budgets for attainment year 2023 adequate, effective February 25, 2022. It is expected that EPA will act on the remaining SIP elements related to annual 1997 PM2.5 nonattainment by end of the year, including the trading mechanism.

The conformity regulation requirements for the selection of the horizon years are summarized in Chapter 1; regional emissions have been estimated for the horizon years summarized in Table 1-6.

A. EMFAC2014

The EMFAC model (short for EMission FACtor) is a computer emissions modeling software that estimates emission rates for motor vehicles for calendar years from 2000 to 2050 operating in California. Pollutant emissions for hydrocarbons, carbon monoxide, nitrogen oxides, particulate matter, lead, sulfur oxides, and carbon dioxide are output from the model. Emissions are calculated for passenger cars, light, heavy, and medium-duty trucks, motorcycles, buses and motor homes.

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

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

On March 1, 2018 ARB released an update to the EMFAC model – EMFAC2017v1.0.2. The model was submitted for EPA review in the fall of 2018 and EPA published final approval of EMFAC for conformity use on August 15, 2019. The announcement set a grace period of 2 years before EMFAC2017 is required for use in new regional emissions analyses. The conformity analysis for the 2023 FTIP and the 2022 RTP began in July 2021, before the EMFAC2017 grace period expired; therefore this analysis relies on EMFAC2014 for all conformity tests.

On January 15, 2021 ARB released the latest update to the EMFAC model – EMFAC2021v1.0.0. EPA has not yet approved EMFAC2021 for regional conformity use.

On September 27, 2019, the United States Environmental Protection Agency (EPA) and the National Highway Traffic Safety Administration (NHTSA) published the "Safer Affordable Fuel-Efficient (SAFE) Vehicles Rule Part One: One National Program" (effective November 26, 2019). The Part One Rule revoked California's authority to set its own greenhouse gas emissions standards, which were incorporated in EMFAC2014 emissions model. On November 20, 2019, California Air Resources Board (CARB) released "EMFAC Off-Model Adjustment Factors to Account for the SAFE Vehicles Rule Part One" for use in regional conformity analyses. On March 12, 2020, EPA concurred on the use of CARB's EMFAC off-model adjustment factors in conformity demonstrations. On April 30, EPA and NHTSA published SAFE Vehicles Rule for Model Years 2021-2026 Passenger Cars and Light Trucks (Final SAFE Rule) rolling back federal fuel economy standards. On June 26, 2020 CARB issued a public notice stating that EMFAC adjustments released in November continue to be suitable for conformity purposes. On March 14, EPA issued a final decision rescinding its 2019 waiver withdrawal, therefore EMFAC adjustments are no longer required for regional conformity analyses. Therefore, the Conformity Analysis for the 2023 FTIP and 2022 RTP does not include SAFE Rule adjustments.

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 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 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 24-Hour and Annual Standards –The portions of the 2018 PM2.5 Plan dealing with the 1997 24-hour standard was approved by EPA on January 28, 2022 (effective February 28, 2022) and contain motor vehicle emission budgets for PM2.5 and NOx established based on average annual daily emissions. The 1997 annual PM2.5 transportation conformity budgets for annual average PM2.5 and NOx emissions were found adequate by EPA on February 19, 2022 (effective February 25, 2022). The annual inventory methodology contained in the 2018 PM2.5 Plan was 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 24-Hour Standard – On March 27, 2020, EPA proposed approval of portions of the 2018 PM2.5 Plan that pertain to the 2006 24-hour PM2.5 standard, including granting attainment deadline extension to 2024. This portion of the 2018 PM2.5 Plan was finalized on July 22, 2020, effective as of publication. The 2018 PM2.5 Plan contains motor vehicle emission budgets for PM2.5 and NOx established based on average winter daily emissions. The winter inventory

methodology contained in the 2018 PM2.5 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

2012 Annual Standard – On November 26, 2021, EPA issued final approval of the 2016 Moderate Area PM2.5 Plan and the portions of the 2018 PM2.5 plan that pertain to the moderate requirements for the 2012 PM2.5 standard. The approval also included reclassification to serious. On December 29, 2021, EPA proposed approval of the SIP elements and conformity budgets that pertain to the 2012 annual PM2.5 serious area requirements (final action expected by end of the year). Until the new 2012 serious area PM2.5 standard budgets are found adequate or approved, the SJV will conduct conformity determination for the 2012 annual PM2.5 standard using budgets established in the 2018 PM2.5 and 2018 PM2.5 Plan for moderate nonattainment. The 2018 PM2.5 Plan contains motor vehicle emission budgets for PM2.5 and NOx established based on average annual daily emissions. The annual inventory methodology contained in the 2018 PM2.5 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.

If EPA does not act on the serious area 2012 PM2.5 budgets, the moderate area annual PM2.5 budgets will continue to be used in this conformity analysis. However, if the new conformity budgets are approved or found adequate, the "upcoming budget test" addresses conformity to new conformity budgets.

1997 AND 2012 ANNUAL PM2.5 TRADING MECHANISM

The 2018 PM2.5 Plan budgets and trading mechanism will also be used in this conformity analysis for moderate and serious 2012 PM2.5 standards, as needed. The 2016 PM2.5 Plan and the 2018 PM2.5 Plan allow trading from the motor vehicle emissions budget for the PM2.5 precursor NOx to the motor vehicle emissions budget for primary annual PM2.5 using a 6.5 to 1 ratio. No trading mechanism for 1997 annual PM2.5 is currently available, but final EPA action is expected by end of the year.

2006 AND 1997 24-HOUR PM2.5 TRADING MECHANISM

On July 22, 2020, EPA partially approved the 2018 PM2.5 SIP including the 2006 PM2.5 standard 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 a 2 to 1 ratio. Then on January 28, 2022, EPA approved 1997 24-hour PM2.5 SIP elements contained in the 2018 PM2.5 Plan, inclusive of the inter-pollutant trading mechanism with the same 2 to 1 ratio. This trading mechanism will be used for the 2006 24-hour and 1997 24-hour PM2.5 standards conformity analysis, as needed.

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

For Mojave Desert (Eastern Kern), the model used to estimate emissions for ozone precursors is EMFAC2014 using the methodology described above.

For Indian Wells Valley (Kern County Portion), PM-10 on-road exhaust is not significant and not included in the emissions budgets or the conformity estimates. However, consistent with the Second 10-Year P10 Maintenance Plan, on-road exhaust is included in the emissions budgets and the conformity estimates for the "upcoming budget test". Paved road dust, unpaved road dust, and fugitive dust associated with road construction have been estimated using the methodology described above. However, there is no PM-10 trading mechanism.

For this Conformity Analysis, model inputs not dependent on the TIP or RTP are consistent with the applicable SIPs, which include:

- EPA published final approval of the Eastern Kern 2017 Ozone Plan on June 25, 2021 inclusive of the transportation conformity budgets (effective July 26, 2021).
- The PM-10 Attainment demonstration, Maintenance Plan, and Redesignation Request was approved by EPA on May 7, 2003 (effective June 6, 2003).
- Indian Wells Valley Second 10-Year PM10 Maintenance Plan was proposed to be approved by EPA on October 13, 2021. Final action expected by end of the year.

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

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

E. SUMMARY OF PROCEDURES FOR REGIONAL EMISSIONS ESTIMATES

New step-by-step air quality modeling instructions were developed for SJV MPO use with EMFAC2014. These instructions were originally provided for interagency consultation in May 2016 and were last updated in September 2020. EPA, FHWA, and ARB concurred.

Documentation of the Conformity Analysis for the 2023 FTIP and 2022 RTP is provided in Appendix C, including:

- 2022 RTP Conformity EMFAC Spreadsheet
- 2022 RTP Conformity Paved Road Spreadsheet

- 2022 RTP Conformity Unpaved Road Dust Spreadsheet
- 2022 RTP Conformity Construction Spreadsheet
- 2022 RTP Conformity Totals Spreadsheet
- 2022 RTP 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 2018 PM2.5 Plan does not include any additional TCMs for the San Joaquin Valley.

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

C. IDENTIFICATION OF 2002 RACM THAT REQUIRE TIMELY IMPLEMENTATION DOCUMENTATION

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

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

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

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

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

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

The Project TID table that was prepared at the request of FHWA for the 2004 Conformity Analysis, has been updated in each subsequent conformity analysis. 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, Kern Council of Governments undertook a process to identify and evaluate potential control measures that could be included in the 2022 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 2022 RTP included:

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

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

With the adoption of each new RTP, the MPOs will consider the feasibility of these measures, as well as identify any other new PM-10 measures that would be relevant to the San Joaquin Valley. Kern Council of Governments also considered PM-10 commitments from other PM-10 nonattainment areas that had been developed since the previous RTP was approved. Federal websites were reviewed for any PM-10 plans that have been approved since 2016. New PM-10 plans that have been reviewed include:

A. 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.

B. Juneau's Mendenhall Valley, AK PM-10 Limited Maintenance Plan submitted July 22, 2020 (EPA approval effective November 24, 2021). The maintenance 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.

C. Wallula, WA Second PM-10 Maintenance Plan submitted November 22, 2019 (EPA approval effective June 1, 2020). The plan relies on fugitive dust controls from livestock operations.

D. Eagle River, AK PM-10 Nonattainment Plan submitted on November 10, 2020 (EPA approval effective December 9, 2021) The plan control measures include paving gravel roads with recycle asphalt product.

E. Pinehurst, ID PM-10 Limited Maintenance Plan submitted September 29, 2017 (EPA approval effective October 11, 2018. The plan primarily relies on control strategies for residential wood smoke. No additional PM-10 dust measures are included.

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

Based on consultation with CARB and the Air District, Kern Council of Governments considered priority funding allocations in the 2022 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

Kern COG and its member jurisdictions consider both short- and long-term PM-10 emission reductions to be a priority as part of adopted policy. Every two to three years, Kern COG conducts a Congestion Mitigation and Air Quality (CMAQ) "Call for Projects" that includes funding for PM-10 projects by five categories including one for PM mitigating projects listed in measures 1-3 above. Funding levels and goals are set by Kern COG as part of each funding cycle, including a commitment to cost effectiveness. Additional points are given based on the level of emissions reductions and BACM status. Currently, Caltrans has incorporated rubberized asphalt as general policy to meet recycled content requirements on high volume state highway facilities.

In 2003, Caltrans established a goal of using at least 15 percent rubberized asphalt concrete compared to all flexible pavement by weight; Caltrans has exceeded this goal each year. In 2005, AB 338 was passed and requires Caltrans to gradually phase in the use of crumb rubber, which is used to make rubberized-asphalt concrete, on state highway construction and repair projects, to the extent feasible. Kern COG will consider member agency project proposals for use of rubberized asphalt in accordance with adopted program policies including, cost-effectiveness policies.

CHAPTER 5:
INTERAGENCY CONSULTATION

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

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

A. INTERAGENCY CONSULTATION

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

The draft boilerplate conformity document was distributed for interagency consultation on March 17, 2022. Comments received have been addressed and incorporated into this version of the analysis.

In addition, the CMAQ Policy Threshold Evaluation was transmitted for interagency consultation in May, 2021. No changes to the CMAQ Policy were recommended. The San Joaquin Valley MPO CMAQ policy contains language that says the cost-effectiveness threshold will be evaluated with every FTIP; whereas, the policy itself is to be reviewed with every RTP. As part of the 2023 FTIP development, the threshold was reviewed. The review indicated that a threshold should be increased to $63/lb. No adverse comments were received

The Conformity Analysis for the 2023 FTIP and 2022 RTP was developed in consultation with Kern Council of Governments local partner agencies, including member jurisdictions, Caltrans, and local transit agencies.

The 2023 FTIP, 2022 RTP, and corresponding conformity analysis and environmental document were released on April 22, 2022 for a 55-day public comment period, followed by adoption on July 21, 2022. Federal approval is anticipated on or before December 31, 2022.

Kern COG has represented Transit providers on the TTAC and RPAC which make recommendations on the TIP/RTP and corresponding conformity analysis, and addition Kern COG works closely with Kern APCD and SJVAPCD through the IAC process.

B. PUBLIC CONSULTATION

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

All MPOs in the San Joaquin Valley have standard public involvement procedures. Kern Council of Governments 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 approved the plan and the budgets 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 revisions 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 24-Hour PM2.5 Standards:

For 1997 24-hour PM2.5 Standards, the applicable conformity test is the emission budget test, using budgets established in the 2018 PM2.5 Plan. EPA approved 2018 PM2.5 Plan elements pertaining to the 1997 24-hour PM2.5 standard on January 28, 2022, inclusive of a trading mechanism. 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.

1997 Annual PM2.5 Standards:

For 1997 annual PM2.5 Standards, the applicable conformity test is the emission budget test, using budgets established in the 2016 PM2.5 Plan and the 2021 SIP revision to the 2018 PM2.5 Plan. EPA found the 1997 annual PM2.5 budgets adequate on February 10, 2022 (effective February 25, 2022). Final action on the trading mechanism is still pending at this time. The modeling results for all analysis years indicate that the on-road vehicle PM2.5 and NOx emissions predicted for the "Build" scenarios are less than the emissions budget. The TIP/RTP therefore satisfy the conformity emissions test for PM2.5 and nitrogen oxides.

2006 PM2.5 Standard:

On July 22, 2020, EPA approved portions of the 2018 PM2.5 Plan that pertain to the 2006 24-hour PM2.5 standard, including new transportation conformity budgets and trading mechanism. For the 2006 PM2.5 standard, the applicable conformity test is the emission budget test, using approved budgets established in the 2018 PM2.5 Plan. 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:

On November 26, 2021, EPA issued final approval of the 2016 Moderate Area PM2.5 Plan and portions of the 2018 PM2.5 plan that pertain to the moderate requirements for the 2012 PM2.5 standard. The approval also included reclassification to serious. On December 29, 2021, EPA proposed approval of the SIP elements and conformity budgets that pertain to the 2012 annual PM2.5 serious area requirements (final action expected by end of the year). Until the new 2012 serious area PM2.5 standard budgets are found adequate or approved, the SJV will conduct conformity determination for the 2012 annual PM2.5 standard using budgets established in the 2018 PM2.5 and 2018 PM2.5 Plan for moderate nonattainment.

For the 2012 PM2.5 standards, the applicable conformity test is the emissions budget test, using moderate area budgets. 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. However, if the serious 2018 PM2.5 Plan conformity budgets are approved or found adequate, the

"upcoming budget test" also demonstrates conformity to the new 2012 PM2.5 budgets. 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 2023 FTIP and the 2022 RTP is supported.

Other Kern Areas:

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

For the Mojave Desert ozone area, EPA finalized approval of the Eastern Kern 2017 Ozone SIP on June 25, 2021, thus the applicable conformity test for both the 2008 and 2015 ozone standards is the emissions budget test using the established budgets for ROG and NOx for an average summer (ozone) season day. 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.

For Indian Wells Valley PM-10, the applicable conformity test is the emissions budget test, using the PM-10 Attainment demonstration, Maintenance Plan, and Redesignation Request budgets for PM-10 and NOx. This Plan was approved by EPA on May 7, 2003 (effective June 6, 2003). In addition, this conformity analysis includes an "upcoming budget test" demonstrating conformity to the Indian Wells Valley Second 10-Year Maintenance Plan budgets for PM-10 and NOx. This Plan was proposed to be approved on October 13, 2021 with final approval expected by end of the year. The modeling results for all analysis years indicate that the PM-10 emissions predicted for the "Build" scenarios are less than the emissions budgets for 2013, 2020, and 2025. The TIP/RTP therefore satisfy the conformity emissions tests for PM-10.

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

Table 6-1:
Conformity Results Summary

2022 RTP Conformity Analysis Results Summary -- Kern

Standard	Analysis Year	Emissions Total		DID YOU PASS?	
		ROG (tons/day)	NOx (tons/day)	ROG	NOx
2008 and 2015 Ozone	2023 Budget	4.5	14.5		
	2023	4.2	10.9	YES	YES
	2026 Budget	4.2	14.4		
	2026	3.8	9.9	YES	YES
	2029 Budget	4.0	14.3		
	2029	3.5	9.0	YES	YES
	2031 Budget	3.9	14.3		
	2031	3.3	8.6	YES	YES
	2037	2.8	7.9	YES	YES
	2046	2.6	7.7	YES	YES

Standard	Analysis Year	Emissions Total		DID YOU PASS?	
		PM-10 (tons/day)	NOx (tons/day)	PM-10	NOx
PM-10	2020 Budget	7.4	23.3		
	2022	6.4	16.7	YES	YES
	2020 Budget	7.4	23.3		
	2029	6.2	9.3	YES	YES
	Adjusted 2020 Budget	7.9	22.6		
	2037	7.9	8.2	YES	YES
	2020 Budget	7.4	23.3		
	2046	6.6	7.9	YES	YES

Standard	Analysis Year	Emissions Total		DID YOU PASS?	
		PM2.5 (tons/day)	NOx (tons/day)	PM2.5	NOx
1997 24-Hour PM2.5 Standard	2020 Budget	0.8	23.3		
	2023	0.6	11.3	YES	YES
	2020 Budget	0.8	23.3		
	2029	0.6	9.3	YES	YES
	2020 Budget	0.8	23.3		
	2037	0.6	8.2	YES	YES
	2020 Budget	0.8	23.3		
	2046	0.6	7.9	YES	YES

Standard	Analysis Year	Emissions Total		DID YOU PASS?	
		PM2.5 (tons/day)	NOx (tons/day)	PM2.5	NOx
1997 Annual PM2.5 Standard	2023 Budget	0.7	13.3		
	2023	0.6	11.4	YES	YES
	2023 Budget	0.7	13.3		
	2029	0.6	9.4	YES	YES
	2023 Budget	0.7	13.3		
	2037	0.6	8.2	YES	YES
	2023 Budget	0.7	13.3		
	2046	0.7	8.0	YES	YES

Standard	Analysis Year	Emissions Total		DID YOU PASS?	
		PM2.5 (tons/day)	NOx (tons/day)	PM2.5	NOx
2006 PM2.5 Winter 24-Hour Standard	2023 Budget	0.7	13.6		
	2023	0.6	11.7	YES	YES
	2024 Budget	0.7	13.4		
	2024	0.6	11.3	YES	YES
	2024 Budget	0.7	13.4		
	2031	0.6	9.1	YES	YES
	2024 Budget	0.7	13.4		
	2037	0.6	8.4	YES	YES
	2024 Budget	0.7	13.4		
	2046	0.7	8.1	YES	YES

Standard	Analysis Year	Emissions Total		DID YOU PASS?	
		PM2.5 (tons/day)	NOx (tons/day)	PM2.5	NOx
2012 Annual PM2.5 Standard (Moderate)	2022 Budget	0.8	19.4		
	2022	0.7	16.8	YES	YES
	2022 Budget	0.8	19.4		
	2025	0.6	10.6	YES	YES
	2022 Budget	0.8	19.4		
	2029	0.6	9.4	YES	YES
	2022 Budget	0.8	19.4		
	2037	0.6	8.2	YES	YES
	2022 Budget	0.8	19.4		
	2046	0.7	8.0	YES	YES

UPCOMING BUDGET TEST

(Note: EPA Action is Pending as of This Analysis; The 2012 PM2.5 Moderate Budget Test Above Will be Used if EPA Doesn't Determine Adequacy or Approval of the New Serious Area Budgets before Federal Approval of the 2022 RTP Conformity Analysis)

Standard	Analysis Year	Emissions Total		DID YOU PASS?	
		PM2.5 (tons/day)	NOx (tons/day)	PM2.5	NOx
2012 Annual PM2.5 Standard (Serious)	2022 Budget	0.8	19.4		
	2022	0.7	16.8	YES	YES
	2025 Budget	0.8	12.8		
	2025	0.6	10.6	YES	YES
	2025 Budget	0.8	12.8		
	2029	0.6	9.4	YES	YES
	2025 Budget	0.8	12.8		
	2037	0.6	8.2	YES	YES
	2025 Budget	0.8	12.8		
	2046	0.7	8.0	YES	YES

2022 RTP Conformity Results Summary -- Kern (Mojave Desert)

Standard	Analysis Year	Emissions Total		DID YOU PASS?	
		ROG (tons/day)	NOx (tons/day)	ROG	NOx
2008 and 2015 Ozone	2020 Budget	1.3	3.6		
	2023	0.8	1.8	YES	YES
	2026	0.7	1.6	YES	YES
	2029	0.6	1.4	YES	YES
	2037	0.5	1.2	YES	YES
	2046	0.4	1.1	YES	YES

2022 RTP Conformity Results Summary -- Kern (Indian Wells Valley)

Standard	Analysis Year	Emissions Total	DID YOU PASS?
		PM-10 (tons/day)	PM-10
PM-10 (First Maintenance Plan)	2013 Budget	1.7	
	2022	0.2	YES
	2013 Budget	1.7	
	2029	0.2	YES
	2013 Budget	1.7	
	2037	0.3	YES
	2013 Budget	1.7	
	2046	0.2	YES

UPCOMING BUDGET TEST

(Note: EPA Action is Pending as of This Analysis; The PM10 Budget Test Above Will be Used if EPA Doesn't Determine Adequacy or Approval of the New PM10 Budgets before Federal Approval of the 2022 RTP Conformity Analysis)

Standard	Analysis Year	Emissions Total	DID YOU PASS?
		PM-10 (tons/day)	PM-10
PM-10 (Second Maintenance Plan)	2020 Budget	0.4	
	2022	0.3	YES
	2025 Budget	0.5	
	2025	0.3	YES
	2025 Budget	0.5	
	2029	0.3	YES
	2025 Budget	0.5	
	2037	0.4	YES
	2025 Budget	0.5	
	2046	0.3	YES

REFERENCES

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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.	Ch. 1 P.12-14	
§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	Ch. 1 P.16(PM10) P. 23-26	
§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)	Ch. 1 P.17-21	
§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	Ch. 1 P.17-19	
§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.	E.S. P. 1-2	
§93.104 (e)	If the conformity determination is being made to meet the timelines included in this section, document when the new motor vehicle emissions budget was approved or found adequate.	N/A	
§93.106	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.	Ch. 1 P. 21-23 App. B	

40 CFR	Criteria	Page	Comments
§93.108	Document that the TIP/RTP is fiscally constrained (23 CFR 450).	E.S. P. 1-2	
§93.109 (a, b)	Document that the TIP/RTP complies with any applicable conformity requirements of air quality implementation plans (SIPs) and court orders.	Ch. 1,2,3,4,5,6 P. 12-21, 37, 39-46, 47-53	
§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.	Ch. 1 P. 14-21	
§93.109(e)	CO or PM10: Document if the area has a limited maintenance plan and from where that information comes	Ch. 1 P. 16-17	
§93.109(f)	Document if motor vehicle emissions are an insignificant contributor and in what SIP that determination is found	Ch. 1 P. 18	
§93.110 (a, b)	Document the use of latest planning assumptions (source and year) at the "time the conformity analysis begins," including current and future population, employment, travel and congestion. Document the use of the most recent available vehicle registration data. Document the date upon which the conformity analysis was begun.	Ch. 2 P. 28-38	
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,)	E.S. P.5 Ch. 2 P. 28	
§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).	Ch. 2 P. 33-34, 37-38	
§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.	Ch. 3 P. 39-40	
§93.112	Document fulfillment of the interagency and public consultation requirements outlined in a specific implementation plan according to §51.390 or, if a	Ch. 5 P. 54-55	

40 CFR	Criteria	Page	Comments
	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.		
§93.113	Document timely implementation of all TCMs in approved SIPs. Document that implementation is consistent with schedules in the applicable SIP and document whether anything interferes with timely implementation. Document any delayed TCMs in the applicable SIP and describe the measures being taken to overcome obstacles to implementation.	Ch. 4 P. 47-53 App. D	
§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).	Ch. 2 P. 35 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)).	Ch. 1 P. 14-27	
§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.	Ch. 1 P. 12-27 Ch. 6 P. 53-55	
§93.118 (b)	Document for which years consistency with motor vehicle emissions budgets must be shown.	Ch. 1 P. 21-23	
§93.118 (d)	Document the use of the appropriate analysis years in the regional emissions analysis for areas with SIP budgets, and the analysis results for these years. Document any interpolation performed to meet tests for years in which specific analysis is not required.	Ch. 1 P. 21-23 Ch. 6 Table 6-1	
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	Ch. 1 P. 25-27	

40 CFR	Criteria	Page	Comments
	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)).		
§93.119[i] (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.	Ch. 1 P. 21-23	
§93.119 (e)	Document the appropriate baseline year.	Ch. 1 P. 19-21	
§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.	Ch. 1 P. 23-24 Ch. 3 P. 38-39	
§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.	Ch. 1 P. 19-21	
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	Ch. 2 P. 35 App. B App. C (VMT)	
§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).	Ch. 4 P. 47-53 App. 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).	N\A	

40 CFR	Criteria	Page	Comments
	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).		
§93.122 (b)(1)(i)[ii]	Document that a network-based travel model is in use that is validated against observed counts for a base year no more than 10 years before the date of the conformity determination. Document that the model results have been analyzed for reasonableness and compared to historical trends and explain any significant differences between past trends and forecasts (for per capita vehicle-trips, VMT, trip lengths mode shares, time of day, etc.).	Ch. 2 P. 32-37	
§93.122 (b)(1)(ii) [ii]	Document the land use, population, employment, and other network-based travel model assumptions.	Ch. 2 P. 28-38	
§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.	Ch. 2 P. 28-38	
§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.	Ch. 2 P. 29 -33	
§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.	Ch. 2 P. 33	
§93.122 (b)(1)(vi) [ii]	Document how travel models are reasonably sensitive to changes in time, cost, and other factors affecting travel choices.	Ch. 2 P. 34 -35	
§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.	Ch. 2 P. 33	
§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.	Ch. 2 P. 34	
§93.122 (d)	In areas not subject to §93.122(b), document the continued use of modeling techniques or the use of appropriate alternative techniques to estimate vehicle miles traveled	Ch. 2 P. 32-33	

40 CFR	Criteria	Page	Comments
§93.122 (e, f)	Document, in areas where a SIP identifies construction-related PM10 or PM2.5 as significant pollutants, the inclusion of PM10 and/or PM2.5 construction emissions in the conformity analysis.	Ch. 3 P. 42-46	
§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	
	(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.	Ch. 2 P. 35 App. B	

[i] Note that some areas are required to complete both Interim emissions tests.
[ii] 40 CFR 93.122(b) refers only to serious, severe and extreme ozone areas and serious CO areas above 200,000 population. 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)).

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

APPENDIX B

TRANPORTATION PROJECT LISTING

Appendix B - Highway Project Listing on Regionally Significant Route Segments and Year Number of Lanes Modeled																				
									(each direction)											
SORT KEY	AGENCY	AIR BASIN	STREET	BEGIN	END	Type of Imprvmnt.	RTP PROJECT ID/Other ID	COST (RTP, Other)	22	23	24	25	26	29	31	37	46			
1	**Bakersfield**																			
2	Bakersfield	SJV	7th STANDARD RD	SANTA FE	ZERKER RD				2	2	2	2	2	2	2	2	2			
3	Bakersfield	SJV	7th STANDARD RD	JEWETTA	VERDUGO				2	2	2	2	2	2	2	2	2			
4	Bakersfield	SJV	7th STANDARD RD	VERDUGO	CALLOWAY				2	2	2	2	2	2	2	2	2			
5	Bakersfield	SJV	AIRPORT	STATE RD	SR99				3	3	3	3	3	3	3	3	3			
6	Bakersfield	SJV	ALFRED HARRELL	MT VERNON	CHINA GRADE LOOP				2	2	2	2	2	2	2	2	2			
7	Bakersfield	SJV	ALFRED HARRELL	CHINA GRADE LOOP	FAIRFAX				2	2	2	2	2	2	3	3	3			
8	Bakersfield	SJV	ALFRED HARRELL	FAIRFAX	WEST END HARTPARK	Add Lanes	Local		2	2	2	2	2	2	2	2	2			
9	Bakersfield	SJV	ALFRED HARRELL	WEST END HARTPARK	LAKE MING	Add Lanes	Local		1	1	1	1	1	1	2	2	2			
10	Bakersfield	SJV	ALFRED HARRELL	LAKE MING	PALADINO	Add Lanes	Local		1	1	1	1	1	1	2	2	2			
11	Bakersfield	SJV	ALFRED HARRELL	PALADINO	SR178	Add Lanes	Local		1	1	1	1	1	1	2	2	2			
12	Bakersfield	SJV	ALLEN	SR58	BRIMHALL	Add Lanes	Local		3	3	3	3	3	3	3	3	3			
13	Bakersfield	SJV	ALLEN	BRIMHALL	WESTSIDE PARKWAY				3	3	3	3	3	3	3	3	3			
14	Bakersfield	SJV	ALLEN	WESTSIDE PARKWAY	STOCKDALE				3	3	3	3	3	3	3	3	3			
15	Bakersfield	SJV	ALLEN	STOCKDALE	MING AVE				3	3	3	3	3	3	3	3	3			
16	Bakersfield	SJV	ALLEN	MING AVE	WHITE LN				1/2	1/2	1/2	1/2	1/2	1/2	3	3	3			
17	Bakersfield	SJV	ALLEN	WHITE LN	CAMPUS PARK				1	1	1	1	1	1	2	2	2			
18	Bakersfield	SJV	ALLEN	CAMPUS PARK	PANAMA LN				1	1	1	1	1	1	2	2	2			
19	Bakersfield	SJV	ALLEN	PANAMA LN	SR 119				1	1	1	1	1	1	1	1	1			
20	Bakersfield	SJV	ASHE RD	PANAMA LN	SR 119				2	2	2	2	2	2	2	2	2			
21	Bakersfield	SJV	BRIMHALL RD	Rudd Road	RENFRO RD				2	2	2	2	2	2	2	2	2			
22	Bakersfield	SJV	BRIMHALL RD	RENFRO RD	ALLEN				2	2	2	2	2	2	2	2	2			
23	Bakersfield	SJV	BUENA VISTA RD	WHITE LN	HARRIS RD				2	2	2	2	2	2	2	2	2			
24	Bakersfield	SJV	BUENA VISTA RD	HARRIS RD	PANAMA LN				2	2	2	2	2	2	2	2	2			
25	Bakersfield	SJV	BUENA VISTA RD	PANAMA LN	SR 119				2	2	2	2	2	2	2	2	2			
26	Bakersfield	SJV	BUENA VISTA RD	SR 119	CURNOW RD				1	1	1	1	1	1	2	2	2			
27	Bakersfield	SJV	CALLOWAY	ETCHART	SNOW	Add Lanes	Local		1	1	1	1	1	1	2	2	2			
28	Bakersfield	SJV	CALLOWAY	SNOW	NORRIS				2	2	2	3	3	3	3	3	3			
29	Bakersfield	SJV	CALLOWAY	NORRIS	OLIVE				3/2	3/2	3/2	3/2	3/2	3/2	3/2	3/2	3/2			
30	Bakersfield	SJV	CALLOWAY	OLIVE	NORIEGA				3	3	3	3	3	3	3	3	3			
31	Bakersfield	SJV	CALLOWAY	NORIEGA	HAGEMAN				3	3	3	3	3	3	3	3	3			
32	Bakersfield	SJV	CALLOWAY	HAGEMAN	MEACHAM				3	3	3	3	3	3	3	3	3			
33	Bakersfield	SJV	CALLOWAY	MEACHAM	SR58				3	3	3	3	3	3	3	3	3			
34	Bakersfield	SJV	CALLOWAY	BRIMHALL	WESTSIDE PARKWAY				3	3	3	3	3	3	3	3	3			
35	Bakersfield	SJV	CALLOWAY	WESTSIDE PARKWAY	STOCKDALE				3	3	3	3	3	3	3	3	3			
36	Bakersfield	SJV	CALIFORNIA	STOCKDALE	MOHAWK				3	3	3	3	3	3	3	3	3			
37	Bakersfield	SJV	CALIFORNIA	MOHAWK	REAL				3	3	3	3	3	3	3	3	3			
38	Bakersfield	SJV	CALIFORNIA	REAL	SR99				3	3	3	3	3	3	3	3	3			
39	Bakersfield	SJV	CALIFORNIA	SR99	OAK				3	3	3	3	3	3	3	3	3			
40	Bakersfield	SJV	CALIFORNIA	OAK	A ST				3/2	3/2	3/2	3/2	3/2	3/2	3/2	3	3			

Appendix B - Highway Project Listing on Regionally Significant Route Segments and Year Number of Lanes Modeled																			
									(each direction)										
SORT KEY	AGENCY	AIR BASIN	STREET	BEGIN	END	Type of Imprvmnt.	RTP PROJECT ID/Other ID	COST (RTP, Other)	22	23	24	25	26	29	31	37	46
41	Bakersfield	SJV	CALIFORNIA	A ST	H ST				3	3	3	3	3	3	3	3	3
42	Bakersfield	SJV	CALIFORNIA	H ST	CHESTER				3	3	3	3	3	3	3	3	3
43	Bakersfield	SJV	CALIFORNIA	CHESTER	L ST				3	3	3	3	3	3	3	3	3
44	Bakersfield	SJV	CALIFORNIA	L ST	N ST				3	3	3	3	3	3	3	3	3
45	Bakersfield	SJV	CALIFORNIA	N ST	Q ST				3	3	3	3	3	3	3	3	3
46	Bakersfield	SJV	CALIFORNIA	Q ST	UNION				3	3	3	3	3	3	3	3	3
47	Bakersfield	SJV	CALIFORNIA	UNION	BAKER				3	3	3	3	3	3	3	3	3
48	Bakersfield	SJV	CALIFORNIA	BAKER	KING				3	3	3	3	3	3	3	3	3
49	Bakersfield	SJV	CALIFORNIA	KING	BEALE				3	3	3	3	3	3	3	3	3
50	Bakersfield	SJV	CALIFORNIA	BEALE	HALEY				3	3	3	3	3	3	3	3	3
51	Bakersfield	SJV	CALIFORNIA	HALEY	WASHINGTON				2	2	2	2	2	2	2	2	2
52	Bakersfield	SJV	CASA LOMA	UNION	MADISON				2	2	2	2	2	2	2	2	2
53	Bakersfield	SJV	CASA LOMA	MADISON	COTTONWOOD				2	2	2	2	2	2	2	2	2
54	Bakersfield	SJV	CASA LOMA	COTTONWOOD	WASHINGTON				1	1	1	1	2	2	2	2	2
55	Bakersfield	SJV	CASA LOMA	WASHINGTON	FAIRFAX				0	0	0	0	0	0	2	2	2
56	Bakersfield	SJV	CHESTER	34TH ST	COLUMBUS				2	2	2	2	2	2	2	2	2
57	Bakersfield	SJV	CHESTER	30TH ST	34TH ST				2	2	2	2	2	2	2	2	2
58	Bakersfield	SJV	CHESTER	SR178	30TH ST				2	2	2	2	2	2	2	2	2
59	Bakersfield	SJV	COFFEE	7TH STANDARD	ETCHART	Add Lanes	Local		2	2	2	2	2	2	3	3	3
60	Bakersfield	SJV	COFFEE	ETCHART	SNOW	Add Lanes	Local		2	2	2	2	2	2	3	3	3
61	Bakersfield	SJV	COFFEE	NORRIS	OLIVE	Add Lanes	Local		3/2	3/2	3/2	3/2	3/2	3/2	3	3	3
62	Bakersfield	SJV	COFFEE	OLIVE	HAGEMAN				3	3	3	3	3	3	3	3	3
63	Bakersfield	SJV	COFFEE	HAGEMAN	MEANY				3	3	3	3	3	3	3	3	3
64	Bakersfield	SJV	COFFEE	MEANY	DOWNING				3	3	3	3	3	3	3	3	3
65	Bakersfield	SJV	COFFEE	DOWNING	GRANITE FALLS				3	3	3	3	3	3	3	3	3
66	Bakersfield	SJV	COFFEE	GRANITE FALLS	SR58				3	3	3	3	3	3	3	3	3
67	Bakersfield	SJV	COFFEE	SR58	BRIMHALL				3	3	3	3	3	3	3	3	3
68	Bakersfield	SJV	COFFEE	BRIMHALL	WESTSIDE PARKWAY				3	3	3	3	3	3	3	3	3
69	Bakersfield	SJV	COFFEE	WESTSIDE PARKWAY	TRUXTUN				3	3	3	3	3	3	3	3	3
70	Bakersfield	SJV	COFFEE	TRUXTUN	STOCKDALE				3	3	3	3	3	3	3	3	3
71	Bakersfield	SJV	CENTENNIAL CORRIDOR	SR 58	WESTSIDE PARKWAY	New Freeway	KER08RTP020	$698,000,000	3	3	3	3	3	3	3	3	3
72	Bakersfield	SJV	COTTONWOOD	SR 58	PANAMA RD				1	1	1	1	2	2	2	2	2
73	Bakersfield	SJV	FAIRFAX RD	ALFRED HARRELL HIGHWAY	PALADINO DR				1	1	1	2	2	2	2	2	2
74	Bakersfield	SJV	FAIRFAX RD	REDBANK RD	PANAMA LN				1	1	1	1	1	1	2	2	2
75	Bakersfield	SJV	FAIRVIEW RD	MONITOR ST	SOUTH UNION AVE				1	1	1	1	1	1	2	2	2
76	Bakersfield	SJV	GOSFORD	SR119	MC KEE				2	2	2	2	2	2	2	2	2
77	Bakersfield	SJV	GOSFORD	MC KEE	MC CUTCHEN				2	2	2	2	2	2	2	2	2
78	Bakersfield	SJV	GOSFORD	MC CUTCHEN	PANAMA LN				2	2	2	2	2	2	2	2	2
79	Bakersfield	SJV	GOSFORD	PANAMA LN	HARRIS				3	3	3	3	3	3	3	3	3
80	Bakersfield	SJV	GOSFORD	HARRIS	PACHECO				3	3	3	3	3	3	3	3	3

Appendix B - Highway Project Listing on Regionally Significant Route Segments and Year Number of Lanes Modeled																			
									(each direction)										
SORT KEY	AGENCY	AIR BASIN	STREET	BEGIN	END	Type of Imprvmnt.	RTP PROJECT ID/Other ID	COST (RTP, Other)	22	23	24	25	26	29	31	37	46
81	Bakersfield	SJV	GOSFORD	PACHECO	DISTRICT				3	3	3	3	3	3	3	3	3
82	Bakersfield	SJV	GOSFORD	DISTRICT	WHITE LN				3	3	3	3	3	3	3	3	3
83	Bakersfield	SJV	GOSFORD	WHITE LN	S LAURELGLEN				3	3	3	3	3	3	3	3	3
84	Bakersfield	SJV	GOSFORD	S LAURELGLEN	N LAURELGLEN				3	3	3	3	3	3	3	3	3
85	Bakersfield	SJV	GOSFORD	N LAURELGLEN	MING				3	3	3	3	3	3	3	3	3
86	Bakersfield	SJV	GOSFORD	MING	CAMINO MEDIA				3	3	3	3	3	3	3	3	3
87	Bakersfield	SJV	GOSFORD	CAMINO MEDIA	STOCKDALE				3	3	3	3	3	3	3	3	3
88	Bakersfield	SJV	HAGEMAN	ALLEN	OLD FARM				3	3	3	3	3	3	3	3	3
89	Bakersfield	SJV	HAGEMAN	OLD FARM	JEWETTA				3	3	3	3	3	3	3	3	3
90	Bakersfield	SJV	HAGEMAN	JEWETTA	VERDUGO				3	3	3	3	3	3	3	3	3
91	Bakersfield	SJV	HAGEMAN	VERDUGO	CALLOWAY				3	3	3	3	3	3	3	3	3
92	Bakersfield	SJV	HAGEMAN	CALLOWAY	MAIN PLAZA				3	3	3	3	3	3	3	3	3
93	Bakersfield	SJV	HAGEMAN	MAIN PLAZA	RIVERLAKES				3	3	3	3	3	3	3	3	3
94	Bakersfield	SJV	HAGEMAN	RIVERLAKES	COFFEE				3	3	3	3	3	3	3	3	3
95	Bakersfield	SJV	HAGEMAN	COFFEE	PATTON				3	3	3	3	3	3	3	3	3
96	Bakersfield	SJV	HAGEMAN	PATTON	FRUITVALE				3	3	3	3	3	3	3	3	3
97	Bakersfield	SJV	HAGEMAN	FRUITVALE	MOHAWK				3	3	3	3	3	3	3	3	3
98	Bakersfield	SJV	HAGEMAN	MOHAWK	KNUDSEN DR				3	3	3	3	3	3	3	3	3
99	Bakersfield	SJV	HAGEMAN	KNUDSEN DR	SR 99	New Ramps	KER08RTP013	$68,900,000	0	0	0	3	3	3	3	3	3
100	Bakersfield	SJV	MCCUTCHEN RD	BUENA VISTA	GOSFORD				1	1	1	2	2	2	2	2	2
101	Bakersfield	SJV	MCCUTCHEN RD	GOSFORD	STINE				2	2	2	2	2	2	2	2	2
102	Bakersfield	SJV	HOSKING	STINE	AKERS RD				2	2	2	2	2	2	2	2	2
103	Bakersfield	SJV	HOSKING	AKERS RD	WIBLE RD				2	2	2	2	2	2	2	2	2
104	Bakersfield	SJV	HOSKING	WIBLE RD	SO. H ST	Add Lanes	KER08RTP009	$31,000,000	3	3	3	3	3	3	3	3	3
105	Bakersfield	SJV	HOSKING	SO. H ST	UNION				2	2	2	2	2	2	2	2	2
106	Bakersfield	SJV	JEWETTA AVE	SNOW	HAGEMAN				2	2	2	2	2	2	2	2	2
107	Bakersfield	SJV	JEWETTA AVE	HAGEMAN	MEACHAM				2	2	2	2	2	2	2	2	2
108	Bakersfield	SJV	MANOR	ROBERTS LN	UNION				2	2	2	2	2	2	2	2	2
109	Bakersfield	SJV	MASTERSON ST	ALFRED HARRELL HWY	PALADINO DR				2	2	2	2	2	2	2	2	2
110	Bakersfield	SJV	MASTERSON ST	PALADINO DR	SR 178				2	2	2	2	2	2	2	2	2
111	Bakersfield	SJV	MING AVE	WEST BELTWAY	S ALLEN				2	2	2	2	2	2	2	2	2
112	Bakersfield	SJV	MING AVE	S ALLEN	BUENA VISTA				2	2	2	2	2	2	2	2	2
113	Bakersfield	SJV	MING AVE	BUENA VISTA	GRAND LAKES				3	3	3	3	3	3	3	2	3
114	Bakersfield	SJV	MING AVE	GRAND LAKES	OLD RIVER RD				3	3	3	3	3	3	3	2	3
115	Bakersfield	SJV	MING AVE	OLD RIVER RD	HAGGIN OAKS				3	3	3	3	3	3	3	2	3
116	Bakersfield	SJV	MING AVE	HAGGIN OAKS	GOSFORD				3	3	3	3	3	3	3	2	3
117	Bakersfield	SJV	MING AVE	GOSFORD	EL PORTAL				3	3	3	3	3	3	3	2	3
118	Bakersfield	SJV	MING AVE	EL PORTAL	ASHE				3	3	3	3	3	3	3	2	3
119	Bakersfield	SJV	MING AVE	ASHE	NEW STINE				3	3	3	3	3	3	3	2	3
120	Bakersfield	SJV	MING AVE	NEW STINE	STINE RD				3	3	3	3	3	3	3	2	3

Appendix B - Highway Project Listing on Regionally Significant Route Segments and Year Number of Lanes Modeled																			
									(each direction)										
SORT KEY	AGENCY	AIR BASIN	STREET	BEGIN	END	Type of Imprvmnt.	RTP PROJECT ID/Other ID	COST (RTP, Other)	22	23	24	25	26	29	31	37	46
121	Bakersfield	SJV	MING AVE	STINE	AKERS				3	3	3	3	3	3	3	2	3
122	Bakersfield	SJV	MING AVE	AKERS	REAL				3	3	3	3	3	3	3	2	3
123	Bakersfield	SJV	MING AVE	REAL	WIBLE				3	3	3	3	3	3	3	2	3
124	Bakersfield	SJV	MING AVE	WIBLE	HUGHES LN				3	3	3	3	3	3	3	2	3
125	Bakersfield	SJV	MING AVE	HUGHES LN	H ST				2	2	2	2	2	2	2	2	2
126	Bakersfield	SJV	MING AVE	H ST	CHESTER				2	2	2	2	2	2	2	2	2
127	Bakersfield	SJV	MING AVE	CHESTER	P ST				2	2	2	2	2	2	2	2	2
128	Bakersfield	SJV	MING AVE	P ST	UNION				2	2	2	2	2	2	2	2	2
129	Bakersfield	SJV	MOHAWK	HAGEMAN	DOWNING				2	2	2	2	2	2	2	2	3
130	Bakersfield	SJV	MOHAWK	ROSEDALE	TRUXTUN	New Arterial	KER08RTP004	$377,000,000	3	3	3	3	3	3	3	2	3
131	Bakersfield	SJV	MOHAWK	SR 58	SR 58/Rosedale Highway 0.5 mi s/o				3	3	3	3	3	3	3	2	3
132	Bakersfield	SJV	MONTEREY	UNION	ALTA VISTA				3	3	3	3	3	3	3	3	3
133	Bakersfield	SJV	MONTEREY	ALTA VISTA	BAKER				3	3	3	3	3	3	3	3	3
134	Bakersfield	SJV	MONTEREY	BAKER	BEALE				3	3	3	3	3	3	3	3	3
135	Bakersfield	SJV	MONTEREY	BEALE	HALEY				3	3	3	3	3	3	3	3	3
136	Bakersfield	SJV	MONTEREY	HALEY	NILES				3	3	3	3	3	3	3	3	3
137	Bakersfield	SJV	MORNING DR	ALFRED HARRELL HWY	PALADINO DR				0	0	0	1	1	1	1	1	1
138	Bakersfield	SJV	MORNING DR	PALADINO DR	SR 178				2	2	2	2	2	2	2	3	3
139	Bakersfield	SJV	MORNING DR	SR 178	COLLEGE				1	1	1	1	1	1	1	1	1
140	Bakersfield	SJV	MT VERNON	COLUMBUS	SR178				2	2	2	2	2	2	2	2	2
141	Bakersfield	SJV	MT VERNON	SR58	BELLE TERRACE				2	2	2	2	2	2	2	2	2
142	Bakersfield	SJV	MT VERNON	BELLE TERRACE	CASA LOMA DR				1	1	1	1	1	1	2	2	2
143	Bakersfield	SJV	MT VERNON	WHITE LN/MULLER RD	PANAMA LN				0	0	0	0	0	0	0	1	1
144	Bakersfield	SJV	N. CHESTER	COLUMBUS	BEARDSLEY				2	2	2	2	2	2	2	2	2
145	Bakersfield	SJV	NEW STINE RD	WILSON	MING				3	3	3	3	3	3	3	3	3
146	Bakersfield	SJV	NEW STINE RD	MING	SUNDALE				3	3	3	3	3	3	3	3	3
147	Bakersfield	SJV	NEW STINE RD	SUNDALE	BELLE TERRACE				3	3	3	3	3	3	3	3	3
148	Bakersfield	SJV	NEW STINE RD	BELLE TERRACE	STOCKDALE				3	3	3	3	3	3	3	3	3
149	Bakersfield	SJV	NILES	UNION	ALTA VISTA				3	3	3	3	3	3	3	3	3
150	Bakersfield	SJV	NILES	ALTA VISTA	BAKER				3	3	3	3	3	3	3	3	3
151	Bakersfield	SJV	NILES	BAKER	BEALE				3	3	3	3	3	3	3	3	3
152	Bakersfield	SJV	NILES	BEALE	HALEY				3	3	3	3	3	3	3	3	3
153	Bakersfield	SJV	NILES	HALEY	MONTEREY				3	3	3	3	3	3	3	3	3
154	Bakersfield	SJV	OAK ST	CALIFORNIA AVE	SR 178 / 24th ST				2	2	2	3	3	3	3	3	3
155	Bakersfield	SJV	OLD_RIVER	STOCKDALE	CAMINO MEDIA				3	3	3	3	3	3	3	3	3
156	Bakersfield	SJV	OLD_RIVER	CAMINO MEDIA	MING				3	3	3	3	3	3	3	3	3
157	Bakersfield	SJV	OLD_RIVER	MING	WHITE LN				3	3	3	3	3	3	3	3	3
158	Bakersfield	SJV	OLD_RIVER	WHITE LN	CAMPUS PARK				3	3	3	3	3	3	3	3	3
159	Bakersfield	SJV	OLD_RIVER	CAMPUS PARK	PACHECO				3	3	3	3	3	3	3	3	3
160	Bakersfield	SJV	OLD_RIVER	PACHECO	HARRIS				3	3	3	3	3	3	3	3	3

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

									(each direction)								
SORT KEY	AGENCY	AIR BASIN	STREET	BEGIN	END	Type of Imprvmnt.	RTP PROJECT ID/Other ID	COST (RTP, Other)	22	23	24	25	26	29	31	37	46
161	Bakersfield	SJV	OLD_RIVER	HARRIS	PANAMA LN	Add Lanes	Local		2	2	2	2	2	2	2	2	2
162	Bakersfield	SJV	OLD_RIVER	PANAMA LN	BERKSHIRE	Add Lanes	Local		1	1	1	2	2	2	2	2	2
163	Bakersfield	SJV	OLD_RIVER	BERKSHIRE	MCCUTCHEN(HOSKING)	Add Lanes	Local		1	1	1	2	2	2	2	2	2
164	Bakersfield	SJV	OLD STINE	MING AVE	BELLE TERRACE				1	1	1	2	2	2	2	2	2
165	Bakersfield	SJV	OLIVE DR	RUDD RD (WEST BELTWAY)	ALLEN				1	2	2	2	2	2	2	2	2
166	Bakersfield	SJV	OLIVE DR	ALLEN	JEWETTA				2	2	2	2	2	2	2	2	2
167	Bakersfield	SJV	OSWELL	SR178	BERNARD	Add Lanes	Local		3	3	3	3	3	3	3	3	3
168	Bakersfield	SJV	OSWELL	BRUNDAGE	SR58				2	2	2	2	2	2	2	2	2
169	Bakersfield	SJV	PALADINO DR	FAIRFAX	MORNING DR				2	2	2	2	2	2	2	2	2
170	Bakersfield	SJV	PALADINO DR	MORNING DR	MASTERSON Street				1	1	1	1	2	2	2	2	2
171	Bakersfield	SJV	PALADINO DR	MASTERSON Street	ALFRED HARRELL HWY				0	0	0	0	0	0	1	1	1
172	Bakersfield	SJV	PANAMA_LN	ALLEN	WINDERMERE ST	Add Lanes	Local		1	1	1	2	2	2	2	3	3
173	Bakersfield	SJV	PANAMA_LN	WINDERMERE ST	BUENA VISTA BLVD	Add Lanes	Local		1	1	1	2	2	2	2	3	3
174	Bakersfield	SJV	PANAMA_LN	BUENA VISTA	MOUNTAIN VISTA	Add Lanes	Local		2	2	2	2	2	2	2	3	3
175	Bakersfield	SJV	PANAMA_LN	MOUNTAIN VISTA	OLD RIVER RD	Add Lanes	Local		1	1	1	2	2	2	2	3	3
176	Bakersfield	SJV	PANAMA_LN	OLD RIVER RD	PROGRESS	Add Lanes	Local		1	1	1	2	2	2	2	3	3
177	Bakersfield	SJV	PANAMA_LN	PROGRESS	GOSFORD	Add Lanes	Local		1	1	1	2	2	2	2	3	3
178	Bakersfield	SJV	PANAMA_LN	GOSFORD	RELIANCE	Add Lanes	Local		1/2	1/2	3	3	3	3	3	3	3
179	Bakersfield	SJV	PANAMA_LN	RELIANCE	ASHE	Add Lanes	Local		1/2	1/2	3	3	3	3	3	3	3
180	Bakersfield	SJV	PANAMA_LN	ASHE	GOLDEN GATE	Add Lanes	Local		3/2	3/2	3	3	3	3	3	3	3
181	Bakersfield	SJV	PANAMA_LN	GOLDEN GATE	STINE RD	Add Lanes	Local		3/2	3/2	3	3	3	3	3	3	3
182	Bakersfield	SJV	PANAMA_LN	STINE RD	AKERS				3	3	3	3	3	3	3	3	3
183	Bakersfield	SJV	PANAMA_LN	AKERS	WIBLE				3	3	3	3	3	3	3	3	3
184	Bakersfield	SJV	PANAMA_LN	WIBLE	SR99				3	3	3	3	3	3	3	3	3
185	Bakersfield	SJV	PANAMA_LN	SR99	H ST				3	3	3	3	3	3	3	3	3
186	Bakersfield	SJV	PANAMA_LN	H ST	MONITOR	Add Lanes	Local		2	2	2	2	2	2	3	3	3
187	Bakersfield	SJV	PANAMA_LN	MONITOR	UNION	Add Lanes	Local		2	2	2	2	2	2	3	3	3
188	Bakersfield	SJV	PANAMA_LN	UNION	COTTONWOOD				2	2	2	2	2	2	2	2	2
189	Bakersfield	SJV	PANAMA LN	COTTONWOOD	SR184				1	1	1	1	1	2	2	2	2
190	Bakersfield	SJV	PANORAMA DR	1700 FEET N COLUMBUS	UNION				2	2	2	2	2	2	2	2	2
191	Bakersfield	SJV	QUAIL CREEK RD	SNOW	7th STANDARD RD				0	0	0	2	2	2	2	2	2
192	Bakersfield	SJV	REAL RD	STOCKDALE	SR58				2	2	2	2	2	2	2	2	2
193	Bakersfield	SJV	RENFRO RD	7th STANDARD RD	OLIVE DR				0	0	0	0	0	0	0	1	1
194	Bakersfield	SJV	RENFRO RD	OLIVE DR	REINA RD				1	1	1	2	2	2	2	2	2
195	Bakersfield	SJV	RENFRO RD	JOHNSON RD	STOCKDALE HWY				2	2	2	2	2	2	2	2	2
196	Bakersfield	SJV	SANTA FE WAY	RUDD RD (West Beltway)	HAGEMAN RD				1	1	1	1	2	2	2	2	2
197	Bakersfield	SJV	SNOW RD	RENFRO RD	ALLEN				1	1	1	2	2	2	2	2	2
198	Bakersfield	SJV	SNOW RD	JEWETTA AVE	CALLOWAY DR				2/1	2/1	2/1	2	2	2	2	2	2
199	Bakersfield	SJV	SNOW RD	COFFEE RD	FRUITVALE AVE				1	1	1	2	2	2	2	2	2
200	Bakersfield	SJV	SO.CHESTER	UNION	PLANZ RD				2	2	2	2	2	2	2	2	2

Appendix B - Highway Project Listing on Regionally Significant Route Segments and Year Number of Lanes Modeled																			
									(each direction)										
SORT KEY	AGENCY	AIR BASIN	STREET	BEGIN	END	Type of Imprvmnt.	RTP PROJECT ID/Other ID	COST (RTP, Other)	22	23	24	25	26	29	31	37	46
201	Bakersfield	SJV	SO.CHESTER	PLANZ RD	WILSON				2	2	2	2	2	2	2	2	2
202	Bakersfield	SJV	SO.CHESTER	MING	BELLE TERRACE				2	2	2	2	2	2	2	2	2
203	Bakersfield	SJV	SO.CHESTER	BELLE TERRACE	SR58				2	2	2	2	2	2	2	2	2
204	Bakersfield	SJV	SO.CHESTER	SR58	BRUNDAGE				2	2	2	2	2	2	2	2	2
205	Bakersfield	SJV	SO.CHESTER	BRUNDAGE	4TH ST				2	2	2	2	2	2	2	2	2
206	Bakersfield	SJV	SO.CHESTER	4TH ST	CALIFORNIA				2	2	2	2	2	2	2	2	2
207	Bakersfield	SJV	SO.CHESTER	CALIFORNIA	TRUXTUN				2	2	2	2	2	2	2	2	2
208	Bakersfield	SJV	SO.CHESTER	TRUXTUN	18TH ST				2	2	2	2	2	2	2	2	2
209	Bakersfield	SJV	SO.CHESTER	18TH ST	21ST ST				2	2	2	2	2	2	2	2	2
210	Bakersfield	SJV	SO.CHESTER	21ST ST	SR178				2	2	2	2	2	2	2	2	2
211	Bakersfield	SJV	SO. H ST	ARVIN-EDSION CANAL	HOSKING				2	2	2	2	2	2	2	2	2
212	Bakersfield	SJV	SO. H ST	HOSKING	SR119				1	1	1	1	2	2	2	2	2
213	Bakersfield	SJV	STINE RD	WILSON	PLANZ RD				3	3	3	3	3	3	3	3	3
214	Bakersfield	SJV	STINE RD	PLANZ RD	WHITE LN				3	3	3	3	3	3	3	3	3
215	Bakersfield	SJV	STINE RD	WHITE LN	DISTRICT				3	3	3	3	3	3	3	3	3
216	Bakersfield	SJV	STINE RD	DISTRICT	PACHECO				3	3	3	3	3	3	3	3	3
217	Bakersfield	SJV	STINE RD	PACHECO	HARRIS				3	3	3	3	3	3	3	3	3
218	Bakersfield	SJV	STINE RD	HARRIS	PANAMA LN				3	3	3	3	3	3	3	3	3
219	Bakersfield	SJV	STINE RD	PANAMA LN	BERKSHIRE				2	2	2	2	2	2	2	2	2
220	Bakersfield	SJV	STINE RD	BERKSHIRE	HOSKING				2	2	2	2	2	2	2	2	2
221	Bakersfield	SJV	STINE RD	HOSKING	MC KEE				2	2	2	2	2	2	2	2	2
222	Bakersfield	SJV	STINE RD	MC KEE	SR119				2	2	2	2	2	2	2	2	2
223	Bakersfield	SJV	STOCKDALE	SR 43	NORD				1	1	1	1	1	2	2	2	2
224	Bakersfield	SJV	STOCKDALE	NORD	WEGIS	New Freeway	KER08RTP020	$698,000,000	2	2	2	2	2	3	3	3	3
225	Bakersfield	SJV	STOCKDALE	WEGIS	HEATH	New Freeway	KER08RTP020	$698,000,000	2	2	2	2	2	3	3	3	3
226	Bakersfield	SJV	STOCKDALE	HEATH	CLAUDIA AUTUMN DR	New Freeway	KER08RTP020	$698,000,000	2	2	2	2	2	2	2	2	2
227	Bakersfield	SJV	STOCKDALE	CLAUDIA AUTUMN DR	RENFRO	New Freeway	KER08RTP020	$698,000,000	2	2	2	2	2	2	2	2	2
228	Bakersfield	SJV	STOCKDALE	RENFRO	ALLEN				3	3	3	3	3	3	3	3	3
229	Bakersfield	SJV	STOCKDALE	ALLEN	JEWETTA				3	3	3	3	3	3	3	3	3
230	Bakersfield	SJV	STOCKDALE	JEWETTA	BUENA VISTA BLVD				3	3	3	3	3	3	3	3	3
231	Bakersfield	SJV	STOCKDALE	BUENA VISTA	CALLOWAY				3	3	3	3	3	3	3	3	3
232	Bakersfield	SJV	STOCKDALE	CALLOWAY	COFFEE				3	3	3	3	3	3	3	3	3
233	Bakersfield	SJV	STOCKDALE	COFFEE	ASHE				3	3	3	3	3	3	3	3	3
234	Bakersfield	SJV	STOCKDALE	ASHE	CALIFORNIA				3	3	3	3	3	3	3	3	3
235	Bakersfield	SJV	STOCKDALE	CALIFORNIA	MONTCLAIR				3	3	3	3	3	3	3	3	3
236	Bakersfield	SJV	STOCKDALE	MONTCLAIR	STINE RD				3	3	3	3	3	3	3	3	3
237	Bakersfield	SJV	STOCKDALE	STINE	REAL				3	3	3	3	3	3	3	3	3
238	Bakersfield	SJV	STOCKDALE	REAL	SR99				3	3	3	3	3	3	3	3	3
239	Bakersfield	SJV	STOCKDALE	SR99	OAK				3	3	3	3	3	3	3	3	3
240	Bakersfield	SJV	TRUXTUN AVE	OAK	BEECH	Add Lanes	Local		2	2	2	2	2	2	2	3	3

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									(each direction)										
SORT KEY	AGENCY	AIR BASIN	STREET	BEGIN	END	Type of Imprvmnt.	RTP PROJECT ID/Other ID	COST (RTP, Other)	22	23	24	25	26	29	31	37	46
241	Bakersfield	SJV	TRUXTUN AVE	BEECH	PINE ST	Add Lanes	Local		2	2	2	2	2	2	2	3	3
242	Bakersfield	SJV	TRUXTUN AVE	PINE	B ST	Add Lanes	Local		2	2	2	2	2	2	2	3	3
243	Bakersfield	SJV	TRUXTUN AVE	B ST	F ST	Add Lanes	Local		2	2	2	2	2	2	2	3	3
244	Bakersfield	SJV	TRUXTUN AVE	F ST	H ST	Add Lanes	Local		2	2	2	2	2	2	2	3	3
245	Bakersfield	SJV	TRUXTUN AVE	H ST	CHESTER				3/2	3/2	3/2	3/2	3/2	3/2	3/2	3	3
246	Bakersfield	SJV	TRUXTUN AVE	CHESTER	M ST				3	3	3	3	3	3	3	3	3
247	Bakersfield	SJV	TRUXTUN AVE	M ST	N ST				3	3	3	3	3	3	3	3	3
248	Bakersfield	SJV	TRUXTUN AVE	N ST	Q ST				3	3	3	3	3	3	3	3	3
249	Bakersfield	SJV	TRUXTUN AVE	Q ST	UNION				3	3	3	3	3	3	3	3	3
250	Bakersfield	SJV	UNION	MANOR	COLUMBUS				3	3	3	3	3	3	3	3	3
251	Bakersfield	SJV	UNION	COLUMBUS	34TH ST				3	3	3	3	3	3	3	3	3
252	Bakersfield	SJV	UNION	34TH ST	30TH ST				3	3	3	3	3	3	3	3	3
253	Bakersfield	SJV	UNION	30TH ST	NILES				3	3	3	3	3	3	3	3	3
254	Bakersfield	SJV	UNION	NILES	MONTEREY				3	3	3	3	3	3	3	3	3
255	Bakersfield	SJV	UNION	MONTEREY	KENTUCKY				3	3	3	3	3	3	3	3	3
256	Bakersfield	SJV	UNION	KENTUCKY	SR204				3	3	3	3	3	3	3	3	3
257	Bakersfield	SJV	UNION	SR204	21ST ST				3	3	3	3	3	3	3	3	3
258	Bakersfield	SJV	UNION	21ST ST	18TH ST				3	3	3	3	3	3	3	3	3
259	Bakersfield	SJV	UNION	18TH ST	TRUXTUN				3	3	3	3	3	3	3	3	3
260	Bakersfield	SJV	UNION	TRUXTUN	CALIFORNIA				3	3	3	3	3	3	3	3	3
261	Bakersfield	SJV	UNION	CALIFORNIA	4TH ST				3	3	3	3	3	3	3	3	3
262	Bakersfield	SJV	UNION	4TH ST	BRUNDAGE				3	3	3	3	3	3	3	3	3
263	Bakersfield	SJV	UNION	BRUNDAGE	SR58				3	3	3	3	3	3	3	3	3
264	Bakersfield	SJV	UNION	SR58	BELLE TERRACE	Add Lanes	Local		3	3	3	3	3	3	3	3	3
265	Bakersfield	SJV	UNION	MING	WILSON	Add Lanes	Local		2	2	2	3	3	3	3	3	3
266	Bakersfield	SJV	UNION	WILSON	PLANZ	Add Lanes	Local		2	2	2	3	3	3	3	3	3
267	Bakersfield	SJV	UNION	PLANZ	CHESTER	Add Lanes	Local		2	2	2	3	3	3	3	3	3
268	Bakersfield	SJV	UNION	CHESTER	WHITE LN	Add Lanes	Local		2	2	2	3	3	3	3	3	3
269	Bakersfield	SJV	UNION	PACHECO	FAIRVIEW RD	Add Lanes	Local		2	2	2	2	2	2	3	3	3
270	Bakersfield	SJV	UNION	FAIRVIEW RD	PANAMA LN	Add Lanes	Local		2	2	2	2	2	2	3	3	3
271	Bakersfield	SJV	UNION	PANAMA LN	BERKSHIRE	Add Lanes	Local		2	2	2	2	2	2	3	3	3
272	Bakersfield	SJV	UNION	BERKSHIRE	HOSKING	Add Lanes	Local		2	2	2	2	2	2	3	3	3
273	Bakersfield	SJV	VINELAND RD	PALADINO DR	SR 178				2	2	2	2	2	2	2	2	2
274	Bakersfield	SJV	VINELAND RD	SR 178	SR 184/Kern Canyon Road				2	2	2	2	2	2	2	2	2
275	Bakersfield	SJV	WHITE LN/Muller Road	COTTONWOOD RD	OSWELL				0	0	0	0	0	0	2	2	2
276	Bakersfield	SJV	WHITE LN	BUENA VISTA	MOUNTAIN VISTA				3	3	3	3	3	3	3	3	3
277	Bakersfield	SJV	WHITE LN	MOUNTAIN VISTA	OLD RIVER RD				3	3	3	3	3	3	3	3	3
278	Bakersfield	SJV	WHITE LN	OLD RIVER RD	PARK VIEW				3	3	3	3	3	3	3	3	3
279	Bakersfield	SJV	WHITE LN	PARK VIEW	PIN OAK PARK				3	3	3	3	3	3	3	3	3
280	Bakersfield	SJV	WHITE LN	PIN OAK PARK	GOSFORD				3	3	3	3	3	3	3	3	3

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									(each direction)										
SORT KEY	AGENCY	AIR BASIN	STREET	BEGIN	END	Type of Imprvmnt.	RTP PROJECT ID/Other ID	COST (RTP, Other)	22	23	24	25	26	29	31	37	46
281	Bakersfield	SJV	WHITE LN	GOSFORD	LILY				3	3	3	3	3	3	3	3	3
282	Bakersfield	SJV	WHITE LN	LILY	ASHE				3	3	3	3	3	3	3	3	3
283	Bakersfield	SJV	WHITE LN	ASHE	WILSON				3	3	3	3	3	3	3	3	3
284	Bakersfield	SJV	WHITE LN	WILSON	CLOVE				3	3	3	3	3	3	3	3	3
285	Bakersfield	SJV	WHITE LN	CLOVE	STINE RD				3	3	3	3	3	3	3	3	3
286	Bakersfield	SJV	WHITE LN	STINE RD	AKERS				3	3	3	3	3	3	3	3	3
287	Bakersfield	SJV	WHITE LN	AKERS	WIBLE RD				3	3	3	3	3	3	3	3	3
288	Bakersfield	SJV	WHITE LN	WIBLE RD	SR99				3	3	3	3	3	3	3	3	3
289	Bakersfield	SJV	WHITE LN	SR99	HUGHES LN				3	3	3	3	3	3	3	3	3
290	Bakersfield	SJV	WHITE LN	HUGHES LN	H ST				3/1	3/2	3/2	3/2	3/2	3/2	3/2	3/2	3/2
291	Bakersfield	SJV	WHITE LN	H ST	MONITOR				2	2	2	2	2	2	2	2	2
292	Bakersfield	SJV	WHITE LN	MONITOR	UNION				2	2	2	2	2	2	2	2	2
293	Bakersfield	SJV	WIBLE	SR 119	CURNOW RD				1	1	1	1	1	1	2	2	2
294	Bakersfield	SJV	WEST URBAN CORRIDOR	7TH STANDARD	SR 58/Rosedale Highway	New Freeway	KER08RTP102	$115,793,000	0	0	0	0	0	0	0	2	2
295	Bakersfield	SJV	WEST URBAN CORRIDOR	SR58	WESTSIDE PARKWAY	New Freeway	KER08RTP016	$170,000,000	0	0	0	0	0	0	0	3	3
296	Bakersfield	SJV	WEST URBAN CORRIDOR	WESTSIDE PARKWAY	PACHECO		KER08RTP016		0	0	0	0	0	0	0	0	0
297	Bakersfield	SJV	WEST URBAN CORRIDOR	PACHECO	WHITE LN		KER08RTP097		0	0	0	0	0	0	0	0	0
298	Bakersfield	SJV	WEST URBAN CORRIDOR	WHITE LN	SR 119		KER08RTP097		0	0	0	0	0	0	0	0	0
	Caltrans																		
299	Caltrans	SJV	ELLINGTON	11TH AVE	SR155				1	1	1	1	1	1	1	1	1
300	Caltrans	SJV	I-5	COUNTY LINE	LAVAL				4	4	4	4	4	4	4	4	4
301	Caltrans	SJV	I-5	LAVAL	SR99				4	4	4	4	4	4	4	4	4
302	Caltrans	SJV	I-5	SR99	SR166		06-45680		2	2	2	2	2	2	2	2	2
303	Caltrans	SJV	I-5	SR166	OLD RIVER RD		06-45680		2	2	2	2	2	2	2	2	2
304	Caltrans	SJV	I-5	OLD RIVER RD	SR223		06-45680		2	2	2	2	2	2	2	2	2
305	Caltrans	SJV	I-5	SR223	SR119		06-45680		2	2	2	2	2	2	2	2	2
306	Caltrans	SJV	I-5	SR119	SR43		06-45680		2	2	2	2	2	2	2	2	2
307	Caltrans	SJV	I-5	SR43	STOCKDALE		06-45680		2	2	2	2	2	2	2	2	2
308	Caltrans	SJV	I-5	STOCKDALE	SR58		06-45680		2	2	2	2	2	2	2	2	2
309	Caltrans	SJV	I-5	SR58	7TH STANDARD		06-45680		2	2	2	2	2	2	2	2	2
310	Caltrans	SJV	I-5	7TH STANDARD	ROWLEE		06-45680		2	2	2	2	2	2	2	2	2
311	Caltrans	SJV	I-5	ROWLEE	LERDO HWY		06-45680		2	2	2	2	2	2	2	2	2
312	Caltrans	SJV	I-5	LERDO HWY	SR46		06-45680		2	2	2	2	2	2	2	2	2
313	Caltrans	SJV	I-5	SR46	TWISSELMAN				2	2	2	2	2	2	2	2	2
314	Caltrans	SJV	I-5	TWISSELMAN	COUNTY LINE				2	2	2	2	2	2	2	2	2
315	Caltrans	IWV	SR14	SR395	POOLE				2			2		2		2	2
316	Caltrans D9	IWV	SR14	POOLE	INYOKERN				2			2		2		2	2
317	Caltrans D9	IWV	SR14	INYOKERN	SR178	Add Lanes	KER08RTP006	$42,000,000	2			2		2		2	2
318	Caltrans D9	IWV	SR14	SR178	6 mile s of 178	Add Lanes	KER08RTP017	$42,000,000	1			1		2		2	2
319	Caltrans D9	IWV	SR14	6 mile s of 178	REDROCK RANDSBURG	Add Lanes	KER08RTP024	$32,000,000	1			1		1		1	2

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

									(each direction)								
SORT KEY	AGENCY	AIR BASIN	STREET	BEGIN	END	Type of Imprvmnt.	RTP PROJECT ID/Other ID	COST (RTP, Other)	22	23	24	25	26	29	31	37	46
320	Caltrans D9	MD	SR14	REDROCK RANDSBURG	JAWBONE CANYON					2			2	2		2	2
321	Caltrans D9	MD	SR14	JAWBONE CANYON	CALIFORNIA CITY					2			2	2		2	2
322	Caltrans D9	MD	SR14	CALIFORNIA CITY	SR58BYPASS					2			2	2		2	2
323	Caltrans D9	MD	SR14	SR58BYPASS	DEAVER					2			2	2		2	2
324	Caltrans D9	MD	SR14	DEAVER	SR58					2			2	2		2	2
325	Caltrans D9	MD	SR14	ALTUS	SR58					2			2	2		2	2
326	Caltrans D9	MD	SR14	CAMELOT	ALTUS					2			2	2		2	2
327	Caltrans D9	MD	SR14	PURDY	CAMELOT					2			2	2		2	2
328	Caltrans D9	MD	SR14	SILVER QUEEN	PURDY					2			2	2		2	2
329	Caltrans D9	MD	SR14	BACKUS	SILVER QUEEN					2			2	2		2	2
330	Caltrans D9	MD	SR14	DAWN	BACKUS					2			2	2		2	2
331	Caltrans D9	MD	SR14	ROSAMOND	DAWN					2			2	2		2	2
332	Caltrans D9	MD	SR14	A AVE	ROSAMOND					2			2	2		2	2
333	Caltrans	SJV	SR119	SR33	GARDENER FIELD				1	1	1	1	1	1	1	1	1
334	Caltrans	SJV	SR119	GARDENER FIELD	2ND ST				1	1	1	1	1	1	1	1	1
335	Caltrans	SJV	SR119	2ND ST	ASH				1	1	1	1	1	1	1	1	1
336	Caltrans	SJV	SR119	ASH	HARRISON				1	1	1	1	1	1	1	1	1
337	Caltrans	SJV	SR119	HARRISON	MIDWAY				1	1	1	1	1	1	1	1	1
338	Caltrans	SJV	SR119	MIDWAY	ELK HILLS				1	1	1	1	1	1	1	1	1
339	Caltrans	SJV	SR119	ELK HILLS	CHERRY AVE	Add Lanes			1	1	1	1	1	1	1	2	2
340	Caltrans	SJV	SR119	CHERRY AVE	TUPMAN	Add Lanes	KER08RTP022	$115,000,000	1	1	1	1	1	1	1	1	1
341	Caltrans	SJV	SR119	TUPMAN	SR43				1	1	1	1	1	1	1	1	1
342	Caltrans	SJV	SR119	SR43	I-5				1	1	1	1	1	1	1	1	1
343	Caltrans	SJV	SR119	I-5	NORD	Add Lanes	KER08RTP099	$31,000,000	1	1	1	1	1	1	1	1	2
344	Caltrans	SJV	SR119	NORD	HEATH	Add Lanes	KER08RTP099	$31,000,000	1	1	1	1	1	1	1	1	2
345	Caltrans	SJV	SR119	HEATH	RENFRO	Add Lanes	KER08RTP099	$31,000,000	1	1	1	1	1	1	1	1	2
346	Caltrans	SJV	SR119	RENFRO	ALLEN	Add Lanes	KER08RTP099	$31,000,000	1	1	1	1	1	1	1	1	2
347	Caltrans	SJV	SR119	ALLEN	BARLOW	Add Lanes	KER08RTP099	$31,000,000	1	1	1	1	1	1	1	1	2
348	Caltrans	SJV	SR119	BARLOW	BUENA VISTA BLVD	Add Lanes	KER08RTP099	$31,000,000	1	1	1	1	1	1	1	1	2
349	Caltrans	SJV	SR119	BUENA VISTA BLVD	GREEN	Add Lanes	Local		1	1	1	1	1	1	2	2	2
350	Caltrans	SJV	SR119	GREEN	OLD RIVER RD	Add Lanes	Local		1	1	1	1	1	1	2	2	2
351	Caltrans	SJV	SR119	OLD RIVER RD	PROGRESS	Add Lanes	Local		1	1	1	1	1	1	2	2	2
352	Caltrans	SJV	SR119	PROGRESS	GOSFORD	Add Lanes	Local		1	1	1	1	1	1	2	2	2
353	Caltrans	SJV	SR119	GOSFORD	ASHE	Add Lanes	Local	akersfield funded	1	1	1	1	1	1	2	2	2
354	Caltrans	SJV	SR119	ASHE	STINE RD	Add Lanes	Local		1	1	1	1	1	1	2	2	2
355	Caltrans	SJV	SR119	STINE RD	VAN HORN	Add Lanes	Local		1	1	1	1	1	1	2	2	2
356	Caltrans	SJV	SR119	VAN HORN	WIBLE RD	Add Lanes	Local		1	1	1	1	1	1	2	2	2
357	Caltrans	SJV	SR119	WIBLE RD	SR99	Add Lanes	Local		1	1	1	1	1	1	2	2	2
358	Caltrans	SJV	SR155	SR99	FREMONT				1	1	1	1	1	1	1	1	1
359	Caltrans	SJV	SR155	FREMONT	HIGH				1	1	1	1	1	1	1	1	1

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

									(each direction)								
SORT KEY	AGENCY	AIR BASIN	STREET	BEGIN	END	Type of Imprvmnt.	RTP PROJECT ID/Other ID	COST (RTP, Other)	22	23	24	25	26	29	31	37	46
360	Caltrans	SJV	SR155	HIGH	LEXINGTON				1	1	1	1	1	1	1	1	1
361	Caltrans	SJV	SR155	LEXINGTON	MAST AVE				1	1	1	1	1	1	1	1	1
362	Caltrans	SJV	SR155	MAST AVE	BROWNING				1	1	1	1	1	1	1	1	1
363	Caltrans	SJV	SR155	BROWNING	BOWMAN RD	Add Lanes	Local		1	1	1	1	1	1	2	2	2
364	Caltrans	SJV	SR155	BOWMAN RD	FAMOSO PORTERVILLE	Add Lanes	Local		1	1	1	1	1	1	2	2	2
365	Caltrans	SJV	SR155	FAMOSO PORTERVILLE	SR65				1	1	1	1	1	1	1	1	1
366	Caltrans	SJV	SR155	SR65	WOODY GRANITE				1	1	1	1	1	1	1	1	1
367	Caltrans	SJV	SR155	WOODY GRANITE	GRANITE				1	1	1	1	1	1	1	1	1
368	Caltrans	SJV	SR155	GRANITE	JACK RANCH				1	1	1	1	1	1	1	1	1
369	Caltrans	SJV	SR155	JACK RANCH	RANCHERIA RD				1	1	1	1	1	1	1	1	1
370	Caltrans	MD	SR155	RANCHERIA	WOFFORD					1			1	1		1	1
371	Caltrans	MD	SR155	WOFFORD	SAWMILL					2			2	2		2	2
372	Caltrans	MD	SR155	SAWMILL	SR178					1			1	1		1	1
373	Caltrans	SJV	SR166	SR33	OLD RIVER RD				1	1	1	1	1	1	1	1	1
374	Caltrans	SJV	SR166	OLD RIVER RD	I-5				1	1	1	1	1	1	1	1	1
375	Caltrans	SJV	SR166	I-5	SR99				1	1	1	1	1	1	1	1	1
376	Caltrans	SJV	SR178	SR58/SR99	BUCK OWENS	Add Lanes	KER08RTP014	$55,000,000	4	4	4	4	4	4	4	4	4
377	Caltrans	SJV	SR178	BUCK OWENS	OAK	Add Lanes	KER08RTP014	$55,000,000	4	4	4	4	4	4	4	4	4
378	Caltrans	SJV	SR178	OAK	BEECH	Add Lanes	KER08RTP014	$55,000,000	3	3	3	3	3	3	3	3	3
379	Caltrans	SJV	SR178	BEECH	PINE ST	Add Lanes	KER08RTP014	$55,000,000	3	3	3	3	3	3	3	3	3
380	Caltrans	SJV	SR178	PINE ST	BAY ST	Add Lanes	KER08RTP014	$55,000,000	3	3	3	3	3	3	3	3	3
381	Caltrans	SJV	SR178	BAY ST	D ST	Add Lanes	KER08RTP014	$55,000,000	3	3	3	3	3	3	3	3	3
382	Caltrans	SJV	SR178	D ST	F ST	Add Lanes	KER08RTP014	$55,000,000	4	4	4	4	4	4	4	4	4
383	Caltrans	SJV	SR178	F ST	H ST	Add Lanes	KER08RTP014	$55,000,000	4	4	4	4	4	4	4	4	4
384	Caltrans	SJV	SR178	H ST	CHESTER	Add Lanes	KER08RTP014	$55,000,000	4	4	4	4	4	4	4	4	4
385	Caltrans	SJV	SR178	CHESTER	M ST	Add Lanes	KER08RTP014	$55,000,000	4	4	4	4	4	4	4	4	4
386	Caltrans	SJV	SR178	M ST	SR204				3	3	3	3	3	3	3	3	3
387	Caltrans	SJV	SR178	SR204	ALTA VISTA	Add Lanes	KER08RTP026	$140,500,000	3	3	3	3	3	3	3	3	4
388	Caltrans	SJV	SR178	ALTA VISTA	BEALE	Add Lanes	KER08RTP026	$140,500,000	3	3	3	3	3	3	3	3	4
389	Caltrans	SJV	SR178	BEALE	HALEY	Add Lanes	KER08RTP026	$140,500,000	3	3	3	3	3	3	3	3	4
390	Caltrans	SJV	SR178	HALEY	MT VERNON	Add Lanes	KER08RTP026	$140,500,000	3	3	3	3	3	3	3	3	4
391	Caltrans	SJV	SR178	MT VERNON	OSWELL	Add Lanes	KER08RTP026	$140,500,000	3	3	3	3	3	3	3	3	4
392	Caltrans	SJV	SR178	OSWELL	FAIRFAX				3	3	3	3	3	3	3	3	3
393	Caltrans	SJV	SR178	FAIRFAX	MORNING DR		KER08RTP111	$58,800,000	2	2	2	2	2	2	2	3	3
394	Caltrans	SJV	SR178	MORNING DR	VINELAND	Add Lanes	KER08RTP111	$58,800,000	2	2	2	2	2	2	2	3	3
395	Caltrans	SJV	SR178	VINELAND	SR184	Add Lanes	KER08RTP025	$119,000,000	2	2	2	2	2	2	2	2	2
396	Caltrans	SJV	SR178	SR184	MASTERSON Street	Add Lanes	KER08RTP025	$119,000,000	3	3	3	3	3	3	3	3	3
397	Caltrans	SJV	SR178	MASTERSON Street	COMANCHE	Add Lanes	KER08RTP025	$119,000,000	2	2	2	2	2	2	2	2	2
398	Caltrans	SJV	SR178	COMANCHE	MIRAMONTE	Add Lanes	KER08RTP025	$119,000,000	2	2	2	2	2	2	2	3	3
399	Caltrans	SJV	SR178	MIRAMONTE	RANCHERIA RD		KER08RTP084		1	1	1	1	1	1	1	2	2

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

									(each direction)								
SORT KEY	AGENCY	AIR BASIN	STREET	BEGIN	END	Type of Imprvmnt.	RTP PROJECT ID/Other ID	COST (RTP, Other)	22	23	24	25	26	29	31	37	46
400	Caltrans	SJV/MD	SR178	RANCHERIA RD	SR155				1	1	1	1	1	1	1	1	1
401	Caltrans	MD	SR178	SR155	LAKE ISABELLA BLVD					1			1	1		1	1
402	Caltrans	MD	SR178	LAKE ISABELLA BLVD	SIERRA WY					1			1	1		1	1
403	Caltrans	MD	SR178	SIERRA WY	KELSO VALLEY					1			1	1		1	1
404	Caltrans D9	MD/IWV	SR178	KELSO VALLEY	SR14					1			1	1		1	1
405	Caltrans D9	IWV	SR178	SR14	SR395				1			1		1		1	1
406	Caltrans D9	IWV	SR178	SR395	JACKS RANCH				2			2		2		2	2
407	Caltrans D9	IWV	SR178	JACKS RANCH	BRADY				2			2		2		2	2
408	Caltrans D9	IWV	SR178	BRADY	MAHAN				2			2		2		2	2
409	Caltrans D9	IWV	SR178	MAHAN	DOWNS				2			2		2		2	2
410	Caltrans D9	IWV	SR178	DOWNS	NORMA				2			2		2		2	2
411	Caltrans D9	IWV	SR178	NORMA	CHINA LAKE				2			2		2		2	2
412	Caltrans D9	IWV	SR178	INYOKERN	WARD				2			2		2		2	2
413	Caltrans D9	IWV	SR178	WARD	DRUMMOND				2			2		2		2	2
414	Caltrans D9	IWV	SR178	DRUMMOND	LAS FLORES				2			2		2		2	2
415	Caltrans D9	IWV	SR178	LAS FLORES	RIDGECREST BLVD				2			2		2		2	2
416	Caltrans D9	IWV	SR178	CHINA LAKE	GATEWAY				2			2		2		2	2
417	Caltrans D9	IWV	SR178	GATEWAY	RICHMOND				2			2		2		2	2
418	Caltrans D9	IWV	SR178	RICHMOND	COUNTY LINE				1			1		1		1	1
419	Caltrans	SJV	SR184	MESA MARIN DR	SR178	Add Lanes	KER08RTP101		1	1	1	1	1	2	2	2	2
420	Caltrans	SJV	SR184	VINELAND	MESA MARIN DR	Add Lanes	KER08RTP101		1	1	1	1	1	2	2	2	2
421	Caltrans	SJV	SR184	MONICA ST	VINELAND	Add Lanes	KER08RTP101		1	1	1	1	1	2	2	2	2
422	Caltrans	SJV	SR184	SHALANE	MONICA ST	Add Lanes	KER08RTP101		1	1	1	1	1	2	2	2	2
423	Caltrans	SJV	SR184	MORNING DR	SHALANE	Add Lanes	KER08RTP101		1	1	1	1	1	2	2	2	2
424	Caltrans	SJV	SR184	NILES	PIONEER				1	1	1	1	1	1	2	2	2
425	Caltrans	SJV	SR184	PIONEER	MILLS				1	1	1	1	1	1	2	2	2
426	Caltrans	SJV	SR184	MILLS	EDISON				1	1	1	1	1	2	2	2	2
427	Caltrans	SJV	SR184	EDISON	BRUNDAGE				2	2	2	2	2	2	2	2	2
428	Caltrans	SJV	SR184	BRUNDAGE	SR58				2	2	2	2	2	2	2	2	2
429	Caltrans	SJV	SR184	SR58	KERRNITA	most part 2 lan	KER08RTP100	$10,500,000	2	2	2	2	2	2	2	2	2
430	Caltrans	SJV	SR184	KERRNITA	REDBANK		KER08RTP100	$10,500,000	1	1	1	1	1	1	1	1	2
431	Caltrans	SJV	SR184	REDBANK	WILSON		KER08RTP100	$10,500,000	1	1	1	1	1	1	1	1	2
432	Caltrans	SJV	SR184	WILSON	MULLER		KER08RTP100	$10,500,000	1	1	1	1	1	1	1	1	2
433	Caltrans	SJV	SR184	MULLER	WHITE LN		KER08RTP100	$10,500,000	1	1	1	1	1	1	1	1	2
434	Caltrans	SJV	SR184	WHITE LN	HERMOSA		KER08RTP100	$10,500,000	1	1	1	1	1	1	1	1	2
435	Caltrans	SJV	SR184	HERMOSA	FAIRVIEW RD		KER08RTP100	$10,500,000	1	1	1	1	1	1	1	1	2
436	Caltrans	SJV	SR184	FAIRVIEW RD	PANAMA LN		KER08RTP100	$10,500,000	1	1	1	1	1	1	1	1	2
437	Caltrans	SJV	SR184	PANAMA LN	KAM AVE		KER08RTP100	$10,500,000	1	1	1	1	1	1	1	1	2
438	Caltrans	SJV	SR184	KAM AVE	MOUNTAIN VIEW		KER08RTP100	$10,500,000	1	1	1	1	1	1	1	1	2
439	Caltrans	SJV	SR184	MOUNTAIN VIEW	MC KEE		KER08RTP100	$10,500,000	1	1	1	1	1	1	1	1	2

Appendix B - Highway Project Listing on Regionally Significant Route Segments and Year Number of Lanes Modeled																			
									(each direction)										
SORT KEY	AGENCY	AIR BASIN	STREET	BEGIN	END	Type of Imprvmnt.	RTP PROJECT ID/Other ID	COST (RTP, Other)	22	23	24	25	26	29	31	37	46
440	Caltrans	SJV	SR184	MC KEE	SR119/PANAMA RD		KER08RTP100	$10,500,000	1	1	1	1	1	1	1	1	2
441	Caltrans	SJV	SR184	SR119/PANAMA RD	HALL				2	2	2	2	2	2	2	2	2
442	Caltrans	SJV	SR184	HALL	DI GIORGIO		Local		2	2	2	2	2	2	2	2	2
443	Caltrans	SJV	SR184	DI GIORGIO	TRI DUNCON		Local		1	1	1	1	1	1	1	2	2
444	Caltrans	SJV	SR184	TRI DUNCON	BUENA VISTA BLVD		Local		1	1	1	1	1	1	1	2	2
445	Caltrans	SJV	SR184	BUENA VISTA BLVD	SUNSET BLVD		Local		1	1	1	1	1	1	1	2	2
446	Caltrans	SJV	SR184	SUNSET BLVD	SR223		Local		1	1	1	1	1	1	1	2	2
447	Caltrans	MD	SR202	SR58	TEHACHAPI BLVD					2			2	2		2	2
448	Caltrans	MD	SR202	TEHACHAPI BLVD	RED APPLE					2			2	2		2	2
449	Caltrans	MD	SR202	RED APPLE	VALLEY BLVD					2			2	2		2	2
450	Caltrans	MD	SR202	VALLEY BLVD	GOLDEN HILLS					1			1	1		2	2
451	Caltrans	MD	SR202	GOLDEN HILLS	WOODFORD TEHACHAPI					1			1	1		1	1
452	Caltrans	MD	SR202	WOODFORD TEHACHAPI	SCHOUT					1			1	1		1	1
453	Caltrans	MD	SR202	SCHOUT	BANDUCCI					1			1	1		1	1
454	Caltrans	MD	SR202	BANDUCCI	CUMMINGS VALLEY					1			1	1		1	1
455	Caltrans	MD	SR202	CUMMINGS VALLEY	BEAR VALLEY					1			1	1		1	1
456	Caltrans	MD	SR202	BEAR VALLEY	GIRAUDO					1			1	1		1	1
457	Caltrans	SJV	SR204	UNION	Q ST				3	3	3	3	3	3	3	3	3
458	Caltrans	SJV	SR204	Q ST	M ST				3	3	3	3	3	3	3	3	3
459	Caltrans	SJV	SR204	M ST	CHESTER				3	3	3	3	3	3	3	3	3
460	Caltrans	SJV	SR204	CHESTER	F ST		Local		2	2	2	2	2	3	3	3	3
461	Caltrans	SJV	SR204	F ST	SR99		Local		2	2	2	2	2	3	3	3	3
462	Caltrans	SJV	SR223	I-5	OLD RIVER RD				1	1	1	1	1	1	1	1	1
463	Caltrans	SJV	SR223	OLD RIVER RD	WIBLE RD				1	1	1	1	1	1	1	1	1
464	Caltrans	SJV	SR223	WIBLE RD	SR99				1	1	1	1	1	1	1	1	1
465	Caltrans	SJV	SR223	SR99	UNION		06-44390		1	1	1	1	1	1	1	1	1
466	Caltrans	SJV	SR223	UNION	FAIRFAX		06-44390		1	1	1	1	1	1	1	1	1
467	Caltrans	SJV	SR223	FAIRFAX	SR184		06-44390		1	1	1	1	1	1	1	1	1
468	Caltrans	SJV	SR223	SR184	VINELAND		06-44390		1	1	1	1	1	1	1	1	1
469	Caltrans	SJV	SR223	VINELAND	EDISON		06-44390		1	1	1	1	1	1	1	1	1
470	Caltrans	SJV	SR223	EDISON	MALAGA		06-44390		1	1	1	1	1	1	1	1	1
471	Caltrans	SJV	SR223	MALAGA	COMANCHE		06-44390		1	1	1	1	1	1	1	1	1
472	Caltrans	SJV	SR223	COMANCHE	CAMPUS				2	2	2	2	2	2	2	2	2
473	Caltrans	SJV	SR223	CAMPUS	TEJON				2	2	2	2	2	2	2	2	2
474	Caltrans	SJV	SR223	TEJON	TOWER LINE				1	1	1	1	1	1	1	1	1
475	Caltrans	SJV	SR223	TOWER LINE	GENERAL BEALE				1	1	1	1	1	1	1	1	1
476	Caltrans	SJV	SR223	GENERAL BEALE	SR58				1	1	1	1	1	1	1	1	1
477	Caltrans	SJV	SR33	BARKER	TWISSELMAN				1	1	1	1	1	1	1	1	1
478	Caltrans	SJV	SR33	TWISSELMAN	SR46				1	1	1	1	1	1	1	1	1
479	Caltrans	SJV	SR33	SR46	LERDO HWY				1	1	1	1	1	1	1	1	1

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

									(each direction)								
SORT KEY	AGENCY	AIR BASIN	STREET	BEGIN	END	Type of Imprvmnt.	RTP PROJECT ID/Other ID	COST (RTP, Other)	22	23	24	25	26	29	31	37	46
480	Caltrans	SJV	SR33	LERDO HWY	LOST HILLS				1	1	1	1	1	1	1	1	1
481	Caltrans	SJV	SR33	LOST HILLS	LOKERN				1	1	1	1	1	1	1	1	1
482	Caltrans	SJV	SR33	LOKERN	SR58				1	1	1	1	1	1	1	1	1
483	Caltrans	SJV	SR33	SR58	SR58				1	1	1	1	1	1	1	1	1
484	Caltrans	SJV	SR33	SR58	BILL KIRBY				1	1	1	1	1	1	1	1	1
485	Caltrans	SJV	SR33	BILL KIRBY	MIDWAY				1	1	1	1	1	1	1	1	1
486	Caltrans	SJV	SR33	MIDWAY	ASH				1	1	1	1	1	1	1	1	1
487	Caltrans	SJV	SR33	ASH	HILLARD				1	1	1	1	1	1	1	1	1
488	Caltrans	SJV	SR33	HILLARD	10TH ST				2	2	2	2	2	2	2	2	2
489	Caltrans	SJV	SR33	10TH ST	6TH ST				2	2	2	2	2	2	2	2	2
490	Caltrans	SJV	SR33	6TH ST	1ST ST				2	2	2	2	2	2	2	2	2
491	Caltrans	SJV	SR33	1ST ST	MAIN ST				1	1	1	1	1	1	1	1	1
492	Caltrans	SJV	SR33	MAIN ST	SR119				1	1	1	1	1	1	1	1	1
493	Caltrans	SJV	SR33	SR119	WOOD				1	1	1	1	1	1	1	1	1
494	Caltrans	SJV	SR33	WOOD	CADET				1	1	1	1	1	1	1	1	1
495	Caltrans	SJV	SR33	CADET	BUSH				1	1	1	1	1	1	1	1	1
496	Caltrans	SJV	SR33	BUSH	SR166				1	1	1	1	1	1	1	1	1
497	Caltrans	SJV	SR33	SR166	CERRO NOROESTE				1	1	1	1	1	1	1	1	1
498	Caltrans	SJV	SR33	CERRO NOROESTE	COUNTY LINE				1	1	1	1	1	1	1	1	1
499	Caltrans D9	IWV	SR395	COUNTY LINE	SR14				2			2		2		2	2
500	Caltrans D9	IWV	SR395	SR14	INYOKERN				1			1		1		2	2
501	Caltrans D9	IWV	SR395	INYOKERN	BOWMAN RD	Passing Lanes	KER08RTP089	$20,000,000	1			1		1		1	1
502	Caltrans D9	IWV	SR395	BOWMAN RD	CHINA LAKE	Passing Lanes	KER08RTP089	$20,000,000	1			1		1		1	1
503	Caltrans D9	IWV	SR395	CHINA LAKE	SEARLES				1			1		1		2	2
504	Caltrans D9	MD	SR395	SEARLES	GARLOCK					1			1	1		2	2
505	Caltrans D9	MD	SR395	GARLOCK	JOBERG					1			1	1		2	2
506	Caltrans D9	MD	SR395	JOBERG	COUNTY LINE					1			1	1		2	2
507	Caltrans	SJV	SR43	COUNTY LINE	CECIL AVE				1	1	1	1	1	1	1	1	1
508	Caltrans	SJV	SR43	CECIL AVE	SR155				1	1	1	1	1	1	1	1	1
509	Caltrans	SJV	SR43	SR155	POND				1	1	1	1	1	1	1	1	1
510	Caltrans	SJV	SR43	POND	SHERWOOD				1	1	1	1	1	1	1	1	1
511	Caltrans	SJV	SR43	SHERWOOD	SR46				1	1	1	1	1	1	1	1	1
512	Caltrans	SJV	SR43	SR46	5TH ST				1	1	1	1	1	1	1	1	1
513	Caltrans	SJV	SR43	5TH ST	6TH ST				1	1	1	1	1	1	1	1	1
514	Caltrans	SJV	SR43	6TH ST	7TH ST				1	1	1	1	1	1	1	1	1
515	Caltrans	SJV	SR43	7TH ST	POSO DR				1	1	1	1	1	1	1	1	1
516	Caltrans	SJV	SR43	POSO DR	FILBURN				2	2	2	2	2	2	2	2	2
517	Caltrans	SJV	SR43	FILBURN	JACKSON				2	2	2	2	2	2	2	2	2
518	Caltrans	SJV	SR43	JACKSON	KIMBERLINA RD				2	2	2	2	2	2	2	2	2
519	Caltrans	SJV	SR43	KIMBERLINA	POPLAR				2	2	2	2	2	2	2	2	2

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

									(each direction)								
SORT KEY	AGENCY	AIR BASIN	STREET	BEGIN	END	Type of Imprvmnt.	RTP PROJECT ID/Other ID	COST (RTP, Other)	22	23	24	25	26	29	31	37	46
520	Caltrans	SJV	SR43	POPLAR	SHAFTER				2	2	2	2	2	2	2	2	2
521	Caltrans	SJV	SR43	SHAFTER	CENTRAL				2	2	2	2	2	2	2	2	2
522	Caltrans	SJV	SR43	CENTRAL	LERDO HWY				2	2	2	2	2	2	2	2	2
523	Caltrans	SJV	SR43	LERDO HWY	LOS ANGELES	Local			1	1	1	1	1	1	1	1	2
524	Caltrans	SJV	SR43	LOS ANGELES	7TH STANDARD	Local			1	1	1	1	1	1	1	1	2
525	Caltrans	SJV	SR43	7TH STANDARD	BAKER				1	1	1	1	1	1	1	1	1
526	Caltrans	SJV	SR43	BAKER	SNOW				1	1	1	1	1	1	1	1	1
527	Caltrans	SJV	SR43	SNOW	KRATZMEYER				1	1	1	1	1	1	1	1	1
528	Caltrans	SJV	SR43	KRATZMEYER	REINA				1	1	1	1	1	1	1	1	1
529	Caltrans	SJV	SR43	REINA	HAGEMAN				1	1	1	1	1	1	1	1	1
530	Caltrans	SJV	SR43	HAGEMAN	SR58				1	1	1	1	1	1	1	1	1
531	Caltrans	SJV	SR43	SR58	PALM				1	1	1	1	1	1	1	1	1
532	Caltrans	SJV	SR43	PALM	BRIMHALL				1	1	1	1	1	1	1	1	1
533	Caltrans	SJV	SR43	BRIMHALL	STOCKDALE				1	1	1	1	1	1	1	1	1
534	Caltrans	SJV	SR43	STOCKDALE	PANAMA LN				1	1	1	1	1	1	1	1	1
535	Caltrans	SJV	SR43	PANAMA LN	I-5				1	1	1	1	1	1	1	1	1
536	Caltrans	SJV	SR43	I-5	SR119				1	1	1	1	1	1	1	1	1
537	Caltrans	SJV	SR46	COUNTY LINE	KECKS	Add Lanes	KER08RTP003	$232,000,000	2	2	2	2	2	2	2	2	2
538	Caltrans	SJV	SR46	KECKS	BITTERWATER VALLEY	Add Lanes	KER08RTP003	$232,000,000	2	2	2	2	2	2	2	2	2
539	Caltrans	SJV	SR46	BITTERWATER VALLEY	SR33	Add Lanes	KER08RTP003	$232,000,000	2	2	2	2	2	2	2	2	2
540	Caltrans	SJV	SR46	SR33	Brown Material Road	Add Lanes	KER08RTP003	$232,000,000	1	1	1	1	1	1	1	2	2
541	Caltrans	SJV	SR46	Brown Material Road	CA Aquaduct	Add Lanes	KER08RTP018	$37,000,000	1	1	2	2	2	2	2	2	2
542	Caltrans	SJV	SR46	CA Aquaduct	LOST HILLS RD	Add Lanes	KER08RTP018	$40,000,000	2	2	2	2	2	2	2	2	2
543	Caltrans	SJV	SR46	LOST HILLS RD	I-5	Add Lanes	KER14RTP001	$27,000,000	2	2	2	2	2	2	2	2	2
544	Caltrans	SJV	SR46	I-5	CORCORAN				1	1	1	1	1	1	1	1	1
545	Caltrans	SJV	SR46	CORCORAN	ROWLEE				1	1	1	1	1	1	1	1	1
546	Caltrans	SJV	SR46	ROWLEE	WILDWOOD				1	1	1	1	1	1	1	1	1
547	Caltrans	SJV	SR46	WILDWOOD	SCOFIELD				1	1	1	1	1	1	1	1	1
548	Caltrans	SJV	SR46	SCOFIELD	LEONARD				1	1	1	1	1	1	1	1	1
549	Caltrans	SJV	SR46	LEONARD	WESTERN				1	1	1	1	1	1	1	1	1
550	Caltrans	SJV	SR46	WESTERN	MAGNOLIA				1	1	1	1	1	1	1	1	1
551	Caltrans	SJV	SR46	MAGNOLIA	CENTRAL				1	1	1	1	1	1	1	1	1
552	Caltrans	SJV	SR46	CENTRAL	PALM				1	1	1	1	1	1	1	1	1
553	Caltrans	SJV	SR46	PALM	GRIFFITH				1	1	1	1	1	1	1	1	1
554	Caltrans	SJV	SR46	GRIFFITH	F ST				1	1	1	1	1	1	1	1	1
555	Caltrans	SJV	SR46	F ST	SR43				1	1	1	1	1	1	1	1	1
556	Caltrans	SJV	SR46	SR43	ROOT				1	1	1	1	1	1	1	1	1
557	Caltrans	SJV	SR46	ROOT	SR99				1	1	1	1	1	1	1	1	1
558	Caltrans	SJV	SR58	COUNTY LINE	SR33				1	1	1	1	1	1	1	1	1
559	Caltrans	SJV	SR58	SR33	LOKERN				1	1	1	1	1	1	1	1	1

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

									(each direction)								
SORT KEY	AGENCY	AIR BASIN	STREET	BEGIN	END	Type of Imprvmnt.	RTP PROJECT ID/Other ID	COST (RTP, Other)	22	23	24	25	26	29	31	37	46
560	Caltrans	SJV	SR58	LOKERN	BUTTONWILLOW				1	1	1	1	1	1	1	1	1
561	Caltrans	SJV	SR58	BUTTONWILLOW	MEADOW ST				2	2	2	2	2	2	2	2	2
562	Caltrans	SJV	SR58	MEADOW ST	I-5				1	1	1	1	1	1	1	1	1
563	Caltrans	SJV	SR58	I-5	BRANDT				1	1	1	1	1	1	1	1	1
564	Caltrans	SJV	SR58	BRANDT	SR43				1	1	1	1	1	1	1	1	1
565	Caltrans	SJV	SR58	SR43	CHERRY		KER08RTP092		1	1	1	1	1	2	2	2	2
566	Caltrans	SJV	SR58	CHERRY	SUPERIOR		KER08RTP092		1	1	1	1	1	2	2	2	2
567	Caltrans	SJV	SR58	SUPERIOR	GREELEY		KER08RTP092		1	1	1	1	1	2	2	2	2
568	Caltrans	SJV	SR58	GREELEY	DRIVER		KER08RTP092		1	1	1	1	1	2	2	2	2
569	Caltrans	SJV	SR58	DRIVER	NORD		KER08RTP092		1	1	1	1	1	2	2	2	2
570	Caltrans	SJV	SR58	NORD	WEGIS		KER08RTP092		1	1	1	1	1	2	2	2	2
571	Caltrans	SJV	SR58	WEGIS	HEATH		KER08RTP092		1	1	1	1	1	2	2	2	2
572	Caltrans	SJV	SR58	HEATH	RENFRO		KER08RTP092		1	1	1	1	1	2	2	3	3
573	Caltrans	SJV	SR58	RENFRO	JENKINS		KER08RTP092		1	1	1	1	1	2	2	3	3
574	Caltrans	SJV	SR58	JENKINS	ALLEN		KER08RTP092		1	1	1	1	1	2	2	3	3
575	Caltrans	SJV	SR58	ALLEN	OLD FARM	Add Lanes	KER08RTP090	$8,800,000	3	3	3	3	3	3	3	3	3
576	Caltrans	SJV	SR58	OLD FARM	JEWETTA	Add Lanes	KER08RTP090	$8,800,000	3	3	3	3	3	3	3	3	3
577	Caltrans	SJV	SR58	JEWETTA	VERDUGO	Add Lanes	KER08RTP090	$8,800,000	3	3	3	3	3	3	3	3	3
578	Caltrans	SJV	SR58	VERDUGO	CALLOWAY	Add Lanes	KER08RTP090	$8,800,000	3	3	3	3	3	3	3	3	3
579	Caltrans	SJV	SR58	CALLOWAY	MAIN PLAZA	Add Lanes	KER08RTP007	$29,000,000	3	3	3	3	3	3	3	3	3
580	Caltrans	SJV	SR58	MAIN PLAZA	COFFEE		KER08RTP007	$29,000,000	3	3	3	3	3	3	3	3	3
581	Caltrans	SJV	SR58	COFFEE	PATTON		KER08RTP007	$29,000,000	3	3	3	3	3	3	3	3	3
582	Caltrans	SJV	SR58	PATTON	WEAR	Add Lanes	KER08RTP007	$29,000,000	3	3	3	3	3	3	3	3	3
583	Caltrans	SJV	SR58	WEAR	FRUITVALE	Add Lanes	KER08RTP007	$29,000,000	3	3	3	3	3	3	3	3	3
584	Caltrans	SJV	SR58	FRUITVALE	MOHAWK	Add Lanes	KER08RTP007	$29,000,000	3	3	3	3	3	3	3	3	3
585	Caltrans	SJV	SR58	MOHAWK	LANDCO	Add Lanes	KER08RTP118 KER08RTP007	$27,000,000 $29,000,000	3	3	3	3	3	3	3	3	3
586	Caltrans	SJV	SR58	LANDCO	GIBSON	Add Lanes	KER08RTP007	$29,000,000	3	3	3	3	3	3	3	3	3
587	Caltrans	SJV	SR58	GIBSON	SR99	Add Lanes	KER08RTP007	$29,000,000	3	3	3	3	3	3	3	3	3
588	Caltrans	SJV	SR58	REAL	SR99				0	0	0	0	0	0	0	0	0
589	Caltrans	SJV	SR58	SR99	H STREET		KER08RTP019 KER08RTP020	$31,000,000 $47,400,000	var.	2-5	var.	2-5	var.	var.	var.	3-6	3-6
589A	Caltrans	SJV	SR58 (GAP CLOSURE)-EB	SR 99 OFF-RAMP	SR 99 ON-RAMP		KER08RTP019 KER08RTP020	$31,000,000 $47,400,000	2	2	2	2	2	3	3	3	3
589B	Caltrans	SJV	SR58 (GAP CLOSURE)-EB	SR 99 ON-RAMP	H STREET OFF-RAMP		KER08RTP019 KER08RTP020	$31,000,000 $47,400,000	5	5	5	5	5	6	6	6	6
589C	Caltrans	SJV	SR58 (GAP CLOSURE)-WB	H ON-RAMP	SR 99 NB		KER08RTP019 KER08RTP020	$31,000,000 $47,400,000	4	4	4	4	4	5	5	5	5
589D	Caltrans	SJV	SR58 (GAP CLOSURE)-WB	SR 99 NB	SR 99 SB		KER08RTP019 KER08RTP020	$31,000,000 $47,400,000	3	3	3	3	3	4	4	4	4
589E	Caltrans	SJV	SR58 (GAP CLOSURE)-WB	SR 99 SB	SR 99 ON-RAMP NB		KER08RTP019 KER08RTP020	$31,000,000 $47,400,000	2	2	2	2	2	3	3	3	3

Appendix B - Highway Project Listing on Regionally Significant Route Segments and Year Number of Lanes Modeled									(each direction)								
SORT KEY	AGENCY	AIR BASIN	STREET	BEGIN	END	Type of Imprvmnt.	RTP PROJECT ID/Other ID	COST (RTP, Other)	22	23	24	25	26	29	31	37	46
590	Caltrans	SJV	SR58	H STREET	CHESTER		KER08RTP019 KER08RTP020	$31,000,000 $47,400,000	3	3	3	3	3	4	4	4	4
590A	Caltrans	SJV	SR58 (GAP CLOSURE)-EB	H STREET OFF RAMP	CHESTER ON-RAMP		KER08RTP019 KER08RTP020	$31,000,000 $47,400,000	3	3	3	3	3	4	4	4	4
590B	Caltrans	SJV	SR58 (GAP CLOSURE)-WB	CHESTER OFF-RAMP	H STREET ON-RAMP		KER08RTP019 KER08RTP020	$31,000,000 $47,400,000	3	3	3	3	3	4	4	4	4
591	Caltrans	SJV	SR58	CHESTER	UNION		KER08RTP019 KER08RTP020	$31,000,000 $47,400,000	4	4	4	4	4	5	5	5	5
591A	Caltrans	SJV	SR58 (GAP CLOSURE)-EB	CHESTER ON-RAMP	UNION OFF-RAMP		KER08RTP019 KER08RTP020	$31,000,000 $47,400,000	4	4	4	4	4	5	5	5	5
591B	Caltrans	SJV	SR58 (GAP CLOSURE)-WB	UNION ON-RAMP	CHESTER OFF-RAMP		KER08RTP019 KER08RTP020	$31,000,000 $47,400,000	4	4	4	4	4	5	5	5	5
592	Caltrans	SJV	SR58	UNION	COTTONWOOD	Add Lanes	KER08RTP019 KER08RTP093	$50,000,000 $47,400,000	3	3	3	3	3	4	4	4	4
593	Caltrans	SJV	SR58	COTTONWOOD	MT VERNON		KER08RTP093	$47,400,000	3	3	3	3	3	4	4	4	4
594	Caltrans	SJV	SR58	MT VERNON	OSWELL		KER08RTP093	$47,400,000	3	3	3	3	3	4	4	4	4
595	Caltrans	SJV	SR58	OSWELL	FAIRFAX		KER08RTP093	$47,400,000	3	3	3	3	3	4	4	4	4
596	Caltrans	SJV	SR58	FAIRFAX	SR184				3	3	3	3	3	3	3	3	3
597	Caltrans	SJV	SR58	SR184	EDISON				2	2	2	2	2	2	2	2	2
598	Caltrans	SJV	SR58	EDISON	COMANCHE				2	2	2	2	2	2	2	2	2
599	Caltrans	SJV	SR58	COMANCHE	TOWER LINE				2	2	2	2	2	2	2	2	2
600	Caltrans	SJV	SR58	TOWER LINE	GENERAL BEALE				2	2	2	2	2	2	2	2	2
601	Caltrans D9	SJV	SR58	GENERAL BEALE	BENA RD	Truck Lanes	EA09-37960, 0919000011		2	2	2	2	2	2	2	2	2
602	Caltrans D9	SJV	SR58	BENA RD	BEALVILLE	Truck Lanes	EA09-37960, 0919000011		2	2	2	2	2	2	2	2	2
603	Caltrans D9	SJV	SR58	BEALVILLE	BROOM RD	Truck Lanes	EA09-37960, 0919000011		2	2	2	2	2	2	2	2	2
604	Caltrans D9	MD	SR58	BROOM RD	SR 202	Truck Lanes	EA09-37960, 0919000011			2			2	2		2	2
605	Caltrans D9	MD	SR58	SR202	MILL					2			2	2		2	2
606	Caltrans D9	MD	SR58	MILL	DENNISON					2			2	2		2	2
607	Caltrans D9	MD	SR58	DENNISON	TEHACHAPI BLVD					2			2	2		2	2
608	Caltrans D9	MD	SR58	TEHACHAPI BLVD	SAND CANYON					2			2	2		2	2
609	Caltrans D9	MD	SR58	SAND CANYON	RANDSBURG CUTOFF					2			2	2		2	2
610	Caltrans D9	MD	SR58	RANDSBURG CUTOFF	SR14					2			2	2		2	2
611	Caltrans D9	MD	SR58	SR14	20 MULE TEAM PARKWAY					2			2	2		2	2
612	Caltrans D9	MD	SR58	20 MULE TEAM PARKWAY	OLD 58					2			2	2		2	2
613	Caltrans D9	MD	SR58	OLD 58	CALIFORNIA CITY					2			2	2		2	2
614	Caltrans D9	MD	SR58	CALIFORNIA CITY	MUROC					2			2	2		2	2
615	Caltrans D9	MD	SR58	MUROC	CLAY MINE					2			2	2		2	2
616	Caltrans D9	MD	SR58	CLAY MINE	20 MULE TEAM PARKWAY					2			2	2		2	2
617	Caltrans D9	MD	SR58	20 MULE TEAM	GEPHART					2			2	2		2	2
618	Caltrans D9	MD	SR58	GEPHART	BORAX					2			2	2		2	2
619	Caltrans D9	MD	SR58	BORAX	COUNTY LINE					2			2	2		2	2
620	Caltrans	SJV	SR65	COUNTY LINE	SR155				1	1	1	1	1	1	1	1	1
621	Caltrans	SJV	SR65	SR155	SHERWOOD				1	1	1	1	1	1	1	1	1

Appendix B - Highway Project Listing on Regionally Significant Route Segments and Year Number of Lanes Modeled																			
									(each direction)										
SORT KEY	AGENCY	AIR BASIN	STREET	BEGIN	END	Type of Imprvmnt.	RTP PROJECT ID/Other ID	COST (RTP, Other)	22	23	24	25	26	29	31	37	46
622	Caltrans	SJV	SR65	SHERWOOD	FAMOSO RD				1	1	1	1	1	1	1	1	1
623	Caltrans	SJV	SR65	FAMOSO RD	MERCED AVE				1	1	1	1	1	1	1	1	1
624	Caltrans	SJV	SR65	MERCED AVE	LERDO HWY				1	1	1	1	1	1	1	1	1
625	Caltrans	SJV	SR65	LERDO HWY	JAMES				1	1	1	1	1	1	1	1	1
626	Caltrans	SJV	SR65	JAMES	7TH STANDARD	Local	KER08RTP094	$3,000,000	1	1	1	2	2	2	2	2	2
627	Caltrans	SJV	SR65	7TH STANDARD	SR99				2	2	2	2	2	2	2	2	2
628	Caltrans	SJV	SR99	COUNTY LINE	CECIL AVE				3	3	3	3	3	3	3	3	3
629	Caltrans	SJV	SR99	CECIL	SR155				3	3	3	3	3	3	3	3	3
630	Caltrans	SJV	SR99	SR155	WOOLLOMES				3	3	3	3	3	3	3	3	3
631	Caltrans	SJV	SR99	WOOLLOMES	POND				3	3	3	3	3	3	3	3	3
632	Caltrans	SJV	SR99	POND	SHERWOOD				3	3	3	3	3	3	3	3	3
633	Caltrans	SJV	SR99	SHERWOOD	SR46				3	3	3	3	3	3	3	3	3
634	Caltrans	SJV	SR99	SR46	KIMBERLINA RD				3	3	3	3	3	3	3	3	3
635	Caltrans	SJV	SR99	KIMBERLINA RD	MERCED AVE				3	3	3	3	3	3	3	3	3
636	Caltrans	SJV	SR99	MERCED	LERDO HWY				3	3	3	3	3	3	3	3	3
637	Caltrans	SJV	SR99	LERDO HWY	7TH STANDARD				3	3	3	3	3	3	3	3	3
638	Caltrans	SJV	SR99	7TH STANDARD	SR65		KER08RTP138	$90,800,000	3	3	3	3	3	3	3	4	4
639	Caltrans	SJV	SR99	SR65	OLIVE		KER08RTP138	$90,800,000	3	3	3	3	3	3	3	4	4
640	Caltrans	SJV	SR99	SNOW RD	SNOW RD	New Interchan	KER08RTP115	$138,200,000	-	-	-	-	-	-	-	x	x
641	Caltrans	SJV	SR99	OLIVE	OLIVE	Ramp Improve	KER08RTP021	$108,000,000	-	-	-	-	-	-	-	x	x
642	Caltrans	SJV	SR99	OLIVE	SR204		KER08RTP104	$12,000,000	5	5	5	5	5	5	5	5	5
643	Caltrans	SJV	SR99	SR204	AIRPORT				4	4	4	4	4	4	4	4	4
644	Caltrans	SJV	SR99	AIRPORT	SR58(24TH ST)				4	4	4	4	4	4	4	4	4
645	Caltrans	SJV	SR99	SR58(24TH ST)	CALIFORNIA				4	4	4	4	4	4	4	4	4
646	Caltrans	SJV	SR99	CALIFORNIA	STOCKDALE				4	4	4	4	4	4	4	4	4
647	Caltrans	SJV	SR99	STOCKDALE	MING				4	4	4	4	4	4	4	4	4
648	Caltrans	SJV	SR99	MING	Wilson Road				4	4	4	4	4	4	4	4	4
649	Caltrans	SJV	SR99	Wilson Road	WHITE LN	Add Lanes	KER08RTP077	$52,000,000	4	4	4	4	4	4	4	4	4
650	Caltrans	SJV	SR99	WHITE LN	PANAMA LN	Add Lanes	KER08RTP077	$52,000,000	4	4	4	4	4	4	4	4	4
651	Caltrans	SJV	SR99	PANAMA LN	HOSKING	Add Lanes	KER08RTP077	$52,000,000	4	4	4	4	4	4	4	4	4
652	Caltrans	SJV	SR99	SR119	HOSKING	Add Lanes	KER08RTP077	$52,000,000	4	4	4	4	4	4	4	4	4
653	Caltrans	SJV	SR99	SR223	SR119				3	3	3	3	3	3	3	3	3
654	Caltrans	SJV	SR99	HERRING RD	SR223				3	3	3	3	3	3	3	3	3
655	Caltrans	SJV	SR99	COPUS RD	HERRING RD				3	3	3	3	3	3	3	3	3
656	Caltrans	SJV	SR99	SR166	COPUS RD				3	3	3	3	3	3	3	3	3
657	Caltrans	SJV	SR99	I-5	SR166				3	3	3	3	3	3	3	3	3
658	Caltrans D9	MD	TUCKER RD	RED APPLE	VALLEY					2			2	2		2	2
659	Caltrans D9	MD	VALLEY BL	TUCKER	REEVES	Add Lanes	Local			2			2	2		2	2
660	Caltrans D9	MD	VALLEY BL	REEVES	GOLDEN HILLS	Add Lanes	Local			2			2	2		2	2
661	Caltrans	SJV	WESTSIDE PARKWAY	HEATH	WEST BELTWAY	New Freeway	KER08RTP016	$170,000,000	2	2	2	2	2	2	2	3	3

Appendix B - Highway Project Listing on Regionally Significant Route Segments and Year Number of Lanes Modeled																		
									(each direction)									
SORT KEY	AGENCY	AIR BASIN	STREET	BEGIN	END	Type of Imprvmnt.	RTP PROJECT ID/Other ID	COST (RTP, Other)	22	23	24	25	26	29	31	37	46
662	Caltrans	SJV	WESTSIDE PARKWAY	WEST BELTWAY	ALLEN	New Freeway	KER08RTP016	$170,000,000	2	2	2	2	2	3	3	3	3
663	Caltrans	SJV	WESTSIDE PARKWAY	ALLEN	JEWETTA	New Freeway	KER08RTP020	$698,000,000	3	3	3	3	3	3	3	3	3
664	Caltrans	SJV	WESTSIDE PARKWAY	JEWETTA	CALLOWAY	New Freeway	KER08RTP020	$698,000,000	3	3	3	3	3	3	3	3	3
665	Caltrans	SJV	WESTSIDE PARKWAY	CALLOWAY	COFFEE	New Freeway	KER08RTP020	$698,000,000	4/3	4/3	4/3	4/3	4/3	4/3	4/3	4/3	4/3
666	Caltrans	SJV	WESTSIDE PARKWAY	COFFEE	MOHAWK	New Freeway/	KER08RTP020	$698,000,000	4	4	4	4	4	4	4	4	4
667	Caltrans	SJV	WESTSIDE PARKWAY(PHA	MOHAWK	TRUXTUN	New Freeway/	KER08RTP020	$698,000,000	var.	2-4	var.	2-4	var.	var.	var.	2-4	2-4
667A	Caltrans	SJV	WESTSIDE PKWY-PH. 4-EB	MOHAWK OFF-RAMP	MOHAWK LOOP ON-RAMP	New Freeway	KER08RTP020	$698,000,000	3	3	3	3	3	3	3	3	9
667B	Caltrans	SJV	WESTSIDE PKWY-PH. 4-EB	MOHAWK LOOP ON-RAMP	TRUXTUN OFF RAMP	New Freeway	KER08RTP020	$698,000,000	4	4	4	4	4	4	4	4	4
667C	Caltrans	SJV	WESTSIDE PKWY-PH. 4-EB	TRUXTUN OFF-RAMP	SR 99 OFF-RAMP	New Freeway	KER08RTP020	$698,000,000	3	3	3	3	3	3	3	3	3
667D	Caltrans	SJV	WESTSIDE PKWY-PH. 4-WE	SR 99 ON-RAMP	MOHAWK OFF-RAMP	New Freeway	KER08RTP020	$698,000,000	3	3	3	3	3	3	3	3	3
667E	Caltrans	SJV	WESTSIDE PKWY-PH. 4-WE	MOHAWK OFF-RAMP	TRUXTUN ON RAMP	New Freeway	KER08RTP020	$698,000,000	2	2	2	2	2	2	2	2	2
667F	Caltrans	SJV	WESTSIDE PKWY-PH. 4-WE	TRUXTUN ON RAMP	MOHAWK ON-RAMP	New Freeway	KER08RTP020	$698,000,000	3	3	3	3	3	3	3	3	3
667G	Caltrans	SJV	WESTSIDE PKWY-PH. 4-WE	MOHAWK LOOP ON-RAMP	DIRECT ON-RAMP	New Freeway	KER08RTP020	$698,000,000	4	4	4	4	4	4	4	4	4
	Kern County																	
668	Kern County	SJV	7th STANDARD RD	SR 43/Enos Lane	SANTA FE WAY	Add Lanes	KER08RTP113	$11,500,000	1	1	1	1	1	1	2	2	3
669	Kern County	SJV	7th STANDARD RD	ZERKER RD	ALLEN	Add Lanes	KER08RTP005	$57,000,000	2	2	2	2	2	2	2	2	3
670	Kern County	SJV	7th STANDARD RD	ALLEN	OLD FARM	Add Lanes	KER08RTP005	$57,000,000	2	2	2	2	2	2	2	3	3
671	Kern County	SJV	7th STANDARD RD	OLD FARM	JEWETTA	Add Lanes	KER08RTP005	$57,000,000	2	2	2	2	2	2	2	3	3
672	Kern County	SJV	7th STANDARD RD	CALLOWAY	QUAIL CREEK	Add Lanes	KER08RTP005	$57,000,000	2	2	2	2	2	2	3	3	3
673	Kern County	SJV	7th STANDARD RD	QUAIL CREEK	COFFEE	Add Lanes	KER08RTP005	$57,000,000	2	2	2	2	2	2	3	3	3
674	Kern County	SJV	7th STANDARD RD	COFFEE	SR99				2	2	2	2	2	2	3	3	3
675	Kern County	SJV	7th STANDARD RD	SR99	SR99				2	2	2	2	2	2	3	3	3
676	Kern County	SJV	7th STANDARD RD	SR99	SR65				2	2	2	2	2	2	3	3	3
677	Kern County	SJV	7th STANDARD RD	SR65	PEGASUS				2	2	2	2	2	2	3	3	3
678	Kern County	SJV	7th STANDARD RD	PEGASUS	WINGS WAY				2	2	2	2	2	2	2	2	2
679	Kern County	SJV	7th STANDARD RD	WINGS WAY	AIRPORT	Add Lanes	Local		2/1	2/1	2/1	2	2	2	3	3	3
680	Kern County	SJV	7th STANDARD RD	AIRPORT	MC CRAY				2	2	2	2	2	2	3	3	3
681	Kern County	SJV	7th STANDARD RD	MC CRAY	CHESTER				2	2	2	2	2	2	3	3	3
682	Kern County	MD	90TH WEST	ROSAMOND	HOLIDAY	Add Lanes	Local			1			1	1		1	2
683	Kern County	MD	90TH WEST	HOLIDAY	GASKELL	Add Lanes	Local			1			1	1		1	2
684	Kern County	MD	90TH WEST	GASKELL	A AVE	Add Lanes	Local			1			1	1		1	2
685	Kern County	SJV	AIRPORT	7TH STANDARD	DAY	Add Lanes	Local		1	1	1	2	2	2	2	3	3
686	Kern County	SJV	AIRPORT	DAY	SKYWAY	Add Lanes	Local		1	1	1	2	2	2	2	2	2
687	Kern County	SJV	AIRPORT	SKYWAY	NORRIS				2	2	2	2	2	2	2	2	2
688	Kern County	SJV	AIRPORT	NORRIS	DECATUR/OLIVE	Add Lanes	Local		2	2	2	2	2	2	3	3	3
689	Kern County	SJV	AIRPORT	DECATUR/OLIVE	ROBERTS LN	Add Lanes	Local		2	2	2	2	2	2	3	3	3
690	Kern County	SJV	AIRPORT	ROBERTS LN	STATE RD				2	2	2	2	2	2	3	3	3
691	Kern County	SJV	ALLEN	NORIEGA	HAGEMAN				2/1	2/1	2/1	2/1	2/1	2/1	2	2	2
692	Kern County	SJV	ALLEN	HAGEMAN	MEACHAM	Add Lanes	Local		2	2	2	2	2	2	3	3	3

Appendix B - Highway Project Listing on Regionally Significant Route Segments and Year Number of Lanes Modeled																		
									(each direction)									
SORT KEY	AGENCY	AIR BASIN	STREET	BEGIN	END	Type of Imprvmnt.	RTP PROJECT ID/Other ID	COST (RTP, Other)	22	23	24	25	26	29	31	37	46
693	Kern County	SJV	ALLEN	MEACHAM	SR58	Add Lanes	Local		2/1	2/1	2/1	2/1	2/1	2/1	3	3	3
694	Kern County	SJV	ASHE RD	SR 119	REMERO RD				1	1	1	1	1	1	2	2	2
695	Kern County	SJV	BRECKENRIDGE RD	SR 184/Morning Drive	VINELAND RD				1	1	1	1	1	1	2	2	2
696	Kern County	SJV	BRECKENRIDGE RD	VINELAND RD	Edison /Masterson				1	1	1	1	1	1	1	1	2
697	Kern County	SJV	BRECKENRIDGE RD	Edison /Masterson	BEAUJOLIAS				1	1	1	1	1	1	1	1	2
698	Kern County	SJV	BRECKENRIDGE RD	BEAUJOLIAS	COMANCHE DR				1	1	1	1	1	1	1	1	2
699	Kern County	SJV	CALLOWAY	7TH STANDARD	ETCHART	Add Lanes	Local		1	1	1	1	1	1	2	2	3
700	Kern County	SJV	CALLOWAY	SR58	GREENACRES DR	Add Lanes	Local		2	2	2	2	2/3	2/3	2/3	2/3	2/3
701	Kern County	SJV	CALLOWAY	GREENACRES DR	HOLLAND ST	Add lane	Local	$920, 402	2	2	2	2	2/3	2/3	2/3	3	3
702	Kern County	SJV	CALLOWAY	HOLLAND ST	SLIKKER				2	2	2	2	2	2	2	3	3
703	Kern County	SJV	CALLOWAY	SLIKKER	BRIMHALL	Add Lanes	Local		2	2	2	2	2	2	2	3	3
704	Kern County	SJV	CALIFORNIA	WASHINGTON	MT VERNON				2	2	2	2	2	2	2	3	3
705	Kern County	SJV	CALIFORNIA	MT VERNON	EDISON				2	2	2	2	2	2	2	2	2
706	Kern County	SJV	CHASE AVE	Masterson Street	COMANCHE DR				0	0	0	0	0	0	1	1	1
707	Kern County	SJV	CHINA GRADE	CHESTER	MANOR				2	2	2	2	2	2	2	2	2
708	Kern County	SJV	CHINA GRADE	MANOR	MONTE CRISTO	Add Lanes	Local		1	1	1	1	1	1	2	2	2
709	Kern County	SJV	CHINA GRADE	MONTE CRISTO	CHINA GRADE LOOP/ROUND M	Add Lanes	Local		1	1	1	1	1	1	2	2	2
710	Kern County	SJV	CHINA GRADE	CHINA GRADE LOOP/ROUND M	ALFRED HARRELL	Add Lanes	Local		1	1	1	1	1	1	2	2	2
711	Kern County	IWV	CHINA LAKE BL	SPRINGER	MAHAN				1			1		1		1	1
712	Kern County	IWV	CHINA LAKE BL	MAHAN	SR395				1			1		1		1	1
713	Kern County	SJV	COFFEE	SNOW	NORRIS	Add Lanes	Local		1	1	1	1	1	1	2	2	3
714	Kern County	SJV	COMANCHE DR	Alfred Harrell Highway	SR 58				1	1	1	1	1	1	2	2	2
715	Kern County	SJV	COMANCHE DR	SR 58	MULLER				1	1	1	1	1	1	1	2	2
716	Kern County	SJV	EDISON RD	SR 178	BRECKENRIDGE RD				0	0	0	0	0	0	0	1	2
717	Kern County	SJV	EDISON RD	BRECKENRIDGE RD	Edison Highway				0	0	0	0	0	0	0	0	1
718	Kern County	SJV	FAIRFAX RD	SR 58	REDBANK RD				1	1	1	1	1	1	1	2	2
719	Kern County	SJV	FRUITVALE AVE	SNOW	NORRIS				1	1	1	1	1	1	2	2	2
720	Kern County	SJV	FRUITVALE AVE	HAGEMAN RD	SR 58/Rosedale Highway				1	1	1	1	1	1	2	2	3
721	Kern County	SJV	GILMORE	FRUITVALE AVE	LANDCO				0	0	0	0	0	0	1	1	1
722	Kern County	SJV	GOSFORD	SR119	CURNOW				1	1	1	1	1	1	1	1	1
723	Kern County	SJV	HAGEMAN	NORD RD	WEGIS AVE				1	1	1	1	1	1	2	2	2
724	Kern County	SJV	HAGEMAN	WEGIS AVE	HEATH RD				1	1	1	1	1	1	2	2	3
725	Kern County	SJV	HAGEMAN	HEATH RD	RUDD				1	1	1	1	1	1	2	2	3
726	Kern County	SJV	HAGEMAN	RUDD	RENFRO				1	1	1	1	1	1	2	3	3
727	Kern County	SJV	HAGEMAN	RENFRO	JENKINS				1	1	1	1	1	1	2	3	3
728	Kern County	SJV	HAGEMAN	JENKINS	SANTA FE				2	2	2	2	2	2	2	3	3
729	Kern County	SJV	HAGEMAN	SANTA FE	ALLEN				3/2	3/2	3/2	3/2	3/2	3/2	3	3	3
730	Kern County	SJV	HEATH RD	HAGEMAN RD	SR 58/Rosedale Highway				1	1	1	1	1	1	2	2	2
731	Kern County	SJV	HEATH RD	SR 58/Rosedale Highway	Stockdale Highway				1	1	1	1	1	1	2	2	2
732	Kern County	SJV	MANOR	MC CRAY	CHESTER				2	2	2	2	2	2	2	2	2

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

									(each direction)								
SORT KEY	AGENCY	AIR BASIN	STREET	BEGIN	END	Type of Imprvmnt.	RTP PROJECT ID/Other ID	COST (RTP, Other)	22	23	24	25	26	29	31	37	46
733	Kern County	SJV	MANOR	CHESTER	DAY				2	2	2	2	2	2	2	2	2
734	Kern County	SJV	MANOR	DAY	CHINA GRADE LOOP				2	2	2	2	2	2	2	2	2
735	Kern County	SJV	MANOR	CHINA GRADE LOOP	NORRIS				2	2	2	2	2	2	2	2	2
736	Kern County	SJV	MANOR	NORRIS	ROBERTS LN				2	2	2	2	2	2	2	2	2
737	Kern County	SJV	MEACHAM	RENFRO RD	JENKINS RD				1	1	1	1	1	1	2	2	2
738	Kern County	SJV	MEACHAM	JENKINS RD	ALLEN				1	1	1	1	1	1	1	2	2
739	Kern County	SJV	MOHAWK	HAGEMAN	DOWNING				2	2	2	2	2	2	2	3	3
740	Kern County	SJV	MOHAWK	DOWNING	SR58				2	2	2	2	2	2	2	3	3
741	Kern County	SJV	MT VERNON	SR178	BERNARD				2	2	2	2	2	2	2	2	2
742	Kern County	SJV	MT VERNON	BERNARD	COLLEGE				2	2	2	2	2	2	2	2	2
743	Kern County	SJV	MT VERNON	COLLEGE	FLOWER				2	2	2	2	2	2	2	2	2
744	Kern County	SJV	MT VERNON	FLOWER	NILES				2	2	2	2	2	2	2	2	2
745	Kern County	SJV	MT VERNON	NILES	KENTUCKY				2	2	2	2	2	2	2	2	2
746	Kern County	SJV	MT VERNON	KENTUCKY	EDISON HWY				2	2	2	2	2	2	2	2	2
747	Kern County	SJV	MT VERNON	EDISON HWY	CALIFORNIA				2	2	2	2	2	2	2	2	2
748	Kern County	SJV	MT VERNON	CALIFORNIA	VIRGINIA				2	2	2	2	2	2	2	2	2
749	Kern County	SJV	MT VERNON	VIRGINIA	BRUNDAGE				2	2	2	2	2	2	2	2	2
750	Kern County	SJV	NO. CHESTER	BEARDSLEY	ROBERTS LN				2	2	2	2	2	2	2	2	2
751	Kern County	SJV	NO. CHESTER	ROBERTS LN	DECATUR				2	2	2	2	2	2	2	2	2
752	Kern County	SJV	NO. CHESTER	DECATUR	NORRIS				2	2	2	2	2	2	2	2	2
753	Kern County	SJV	NO. CHESTER	NORRIS	CHINA GRADE LOOP				2	2	2	2	2	2	2	2	2
754	Kern County	SJV	NO. CHESTER	CHINA GRADE LOOP	DAY				2	2	2	2	2	2	2	2	2
755	Kern County	SJV	NO. CHESTER	DAY	MANOR				2	2	2	2	2	2	2	2	2
756	Kern County	SJV	NILES	MONTEREY	MT VERNON				2	2	2	2	2	2	2	2	2
757	Kern County	SJV	NILES	MT VERNON	OSWELL				2	2	2	2	2	2	2	2	2
758	Kern County	SJV	NILES	OSWELL	STERLING RD				2	2	2	2	2	2	2	2	2
759	Kern County	SJV	NILES	STERLING RD	FAIRFAX				2	2	2	2	2	2	2	2	2
760	Kern County	SJV	NILES	FAIRFAX	BRENTWOOD				2	2	2	2	2	2	2	2	2
761	Kern County	SJV	NILES	BRENTWOOD	PARK DR				2	2	2	2	2	2	2	2	2
762	Kern County	SJV	NILES	PARK DR	SR184				2	2	2	2	2	2	2	2	2
763	Kern County	SJV	NORRIS RD	CHESTER AVE	MANOR				1	1	1	1	1	1	2	2	2
764	Kern County	SJV	NORRIS RD	SR 99	AIRPORT DR				1	1	1	1	1	1	2	2	2
765	Kern County	MD	OLD 58	ROSEWOOD	SR58BYPASS					2			2	2		2	2
766	Kern County	MD	OLD 58	ARROYO	ROSEWOOD					2			2	2		2	2
767	Kern County	MD	OLD 58	SR14	ARROYO					2			2	2		2	2
768	Kern County	MD	OLD 58	SR14	UNITED					2			2	2		2	2
769	Kern County	MD	OLD 58	UNITED	5TH ST					2			2	2		2	2
770	Kern County	MD	OLD 58	5TH	SR58BYPASS					2			2	2		2	2
771	Kern County	SJV	OLD RIVER	MCCUTCHEN(HOSKING)	SR119				1	1	1	1	1	1	1	1	1
772	Kern County	SJV	OLD RIVER	SR119	CURNOW				1	1	1	1	1	1	1	1	1

Appendix B - Highway Project Listing on Regionally Significant Route Segments and Year Number of Lanes Modeled																			
									(each direction)										
SORT KEY	AGENCY	AIR BASIN	STREET	BEGIN	END	Type of Imprvmnt.	RTP PROJECT ID/Other ID	COST (RTP, Other)	22	23	24	25	26	29	31	37	46
773	Kern County	SJV	OSWELL	BERNARD	COLLEGE	Add Lanes	Local		2	2	2	2	2	2	2	2	2
774	Kern County	SJV	OSWELL	COLLEGE	NILES	Add Lanes	Local		2	2	2	2	2	2	2	2	2
775	Kern County	SJV	OSWELL	NILES	KENTUCKY	Add Lanes	Local		2	2	2	2	2	2	2	2	2
776	Kern County	SJV	OSWELL	KENTUCKY	PIONEER DR	Add Lanes	Local		2	2	2	2	2	2	2	2	2
777	Kern County	SJV	OSWELL	PIONEER DR	EDISON HWY	Add Lanes	Local		2	2	2	2	2	2	2	2	2
778	Kern County	SJV	OSWELL	EDISON HWY	VIRGINIA	Add Lanes	Local		2	2	2	2	2	2	2	2	2
779	Kern County	SJV	OSWELL	VIRGINIA	BRUNDAGE	Add Lanes	Local		2	2	2	2	2	2	2	2	2
780	Kern County	SJV	OSWELL	WHITE LN	PANAMA LN				0	0	0	0	0	0	0	1	1
781	Kern County	SJV	PANAMA LN	SR 43/ENOS LN	RENFRO				1	1	1	1	1	1	1	2	2
782	Kern County	SJV	PANAMA LN	RENFRO	ALLEN	Add Lanes	Local		1	1	1	1	1	1	1	2	2
783	Kern County	SJV	PANAMA RD	UNION	SR184				1	1	1	1	1	1	1	1	1
784	Kern County	MD	RANDSBURG CUTOFF	SR14	SR58BYPASS					1			1	1		1	1
785	Kern County	SJV	PATTON WAY	MEANY	SR 58/Rosedale Highway				1	1	1	1	1	1	1	2	2
786	Kern County	SJV	QUAIL CREEK RD	NORRIS	SNOW ROAD				1	1	1	1	1	1	2	2	2
787	Kern County	SJV	REDBANK	FAIRFAX	SR 184/Weedpatch Highway				1	1	1	1	1	1	2	2	2
788	Kern County	SJV	RENFRO RD	REINA	JOHNSON RD				1	1	1	1	1	1	1	2	2
789	Kern County	MD	ROSAMOND BL	TEHACHAPI WILLOW SPRINGS	80TH ST					1			1	1		1	2
790	Kern County	MD	ROSAMOND BL	80TH ST	70TH ST					1			1	1		1	2
791	Kern County	MD	ROSAMOND BL	70TH ST	65TH ST					1			1	1		1	2
792	Kern County	MD	ROSAMOND BL	65TH ST	60TH ST					1			1	1		1	2
793	Kern County	MD	ROSAMOND BL	60TH ST	50TH ST	Add Lanes	Local			1			1	1		2	2
794	Kern County	MD	ROSAMOND BL	50TH ST	40TH ST	Add Lanes	Local			1			1	1		2	2
795	Kern County	MD	ROSAMOND BL	40TH ST	35TH ST	Add Lanes	Local			1			1	1		2	2
796	Kern County	MD	ROSAMOND BL	35TH ST	30TH ST	Add Lanes	Local			2			2	2		3	3
797	Kern County	MD	ROSAMOND BL	25TH ST	SR14	Add Lanes	Local			2			2	2		3	3
798	Kern County	MD	ROSAMOND BL	SR14	20TH ST	Add Lanes	Local			2			2	2		3	3
799	Kern County	MD	ROSAMOND BL	20TH ST	SIERRA HWY	Add Lanes	Local			2			2	2		3	3
800	Kern County	MD	ROSAMOND BL	SIERRA HWY	15TH ST	Add Lanes	Local			2			2	2		3	3
801	Kern County	MD	ROSAMOND BL	15TH ST	10TH ST	Add Lanes	Local			2			2	2		3	3
802	Kern County	SJV	SNOW RD	Allen Road	OLD FARM RD				1/2	1/2	1/2	2	2	2	2	2	2
803	Kern County	SJV	SNOW RD	OLD FARM RD	JEWETTA AVE				1/2	1/2	1/2	2	2	2	2	2	2
804	Kern County	SJV	SNOW RD	CALLOWAY DR	QUAIL CREEK RD				2	2	2	2	2	2	2	2	2
805	Kern County	SJV	SNOW RD	QUAIL CREEK RD	COFFEE RD				1	1	1	2	2	2	2	2	2
806	Kern County	SJV	SNOW RD	FRUITVALE AVE	Golden State Highway				1	1	1	1	1	1	2	2	2
807	Kern County	SJV	SO.CHESTER	WILSON	MING				2	2	2	2	2	2	2	2	2
808	Kern County	SJV	TAFT HWY	SR99	H ST	Add Lanes	Local		1	1	1	1	1	1	2	2	2
809	Kern County	SJV	TAFT HWY	H ST	UNION				1	1	1	1	1	1	2	2	2
810	Kern County	MD	TEHACHAPI WILLOW SPRI	IRONE	ROSAMOND					1			1	1		1	1
811	Kern County	MD	TEHACHAPI WILLOW SPRI	HAMILTON	IRONE					1			1	1		1	1
812	Kern County	MD	TEHACHAPI WILLOW SPRI	HIGHLINE	DENNISON					1			1	1		1	1

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

									(each direction)								
SORT KEY	AGENCY	AIR BASIN	STREET	BEGIN	END	Type of Imprvmnt.	RTP PROJECT ID/Other ID	COST (RTP, Other)	22	23	24	25	26	29	31	37	46
813	Kern County	MD	TEHACHAPI WILLOW SPRI	ABAJO	HIGHLINE					1			1	1		1	1
814	Kern County	SJV	UNION	BELLE TERRACE	MING	Add Lanes	Local		3	3	3	3	3	3	3	3	3
815	Kern County	SJV	UNION	WHITE LN	PACHECO	Add Lanes	Local		2	2	2	2	2	2	2	3	3
816	Kern County	SJV	UNION	HOSKING	MC KEE	Add Lanes	Local		2	2	2	2	2	2	2	3	3
817	Kern County	SJV	UNION	MC KEE	SR119	Add Lanes	Local		2	2	2	2	2	2	2	3	3
818	Kern County	SJV	VERDUGO LN	MEACHAM	ROSEDALE HIGHTWAY				1	1	1	1	1	1	1	2	2
819	Kern County	SJV	VINELAND RD	SR 58	EDISON HIGHWAY				1	1	1	1	1	1	1	1	2
820	Kern County	SJV	VINELAND RD	EDISON HIGHWAY	Eucalyptus Drive				1	1	1	1	1	1	1	1	2
821	Kern County	SJV	VINELAND RD	Eucalyptus Drive	PIONEER DR				1	1	1	1	1	1	1	1	2
822	Kern County	SJV	VINELAND RD	PIONEER DR	SR 184/Morning Drive				0	0	0	0	0	0	0	0	1
823	Kern County	SJV	WHITE LN(MULLER RD)	OSWELL	FAIRFAX				0	0	0	0	0	0	0	0	2
	California City																
824	California City	MD	CAL CITY BL	SR14	RAILROAD					1			1	1		1	1
825	California City	MD	CAL CITY BL	RAILROAD	BARON BLVD					1			1	1		1	1
826	California City	MD	CAL CITY BL	BARON BLVD	NEURALIA					2			2	2		2	2
827	California City	MD	CAL CITY BL	NEURALIA	HACIENDA					2			2	2		2	2
828	California City	MD	CAL CITY BL	RANDSBURG MOJAVE	HACIENDA					2			2	2		2	2
829	California City	MD	CAL CITY BL	REDWOOD	RANDSBURG MOJAVE					2			2	2		2	2
830	California City	MD	CAL CITY BL	CARSON	REDWOOD					1			1	1		1	1
	Ridgecrest																
831	Ridgecrest	IWV	CHINA LAKE BL	RIDGECREST BLVD	UPJOHN				2			2		2		2	2
832	Ridgecrest	IWV	CHINA LAKE BL	UPJOHN	BOWMAN RD				2			2		2		2	2
833	Ridgecrest	IWV	CHINA LAKE BL	BOWMAN RD	COLLEGE HEIGHTS				2			2		2		2	2
834	Ridgecrest	IWV	CHINA LAKE BL	COLLEGE HEIGHTS	DOLPHIN				1			1		1		1	1
835	Ridgecrest	IWV	CHINA LAKE BL	DOLPHIN	DOWNS				1			1		1		1	1
836	Ridgecrest	IWV	CHINA LAKE BL	DOWNS	SPRINGER				1			1		1		1	1
	Shafter																
837	Shafter	SJV	LERDO HWY	POPLAR	SHAFTER				1	1	1	1	1	1	1	1	1
838	Shafter	SJV	LERDO HWY	SHAFTER	SR43				1	1	1	1	1	1	1	1	1
839	Shafter	SJV	LERDO HWY	SR43	MANNEL				2	2	2	2	2	2	2	2	2
840	Shafter	SJV	LERDO HWY	MANNEL	BEECH				2	2	2	2	2	2	2	2	2
841	Shafter	SJV	LERDO HWY	BEECH	CHERRY				2	2	2	2	2	2	2	2	2
842	Shafter	SJV	LERDO HWY	CHERRY	ZACHARY				2	2	2	2	2	2	2	2	2
843	Shafter	SJV	LERDO HWY	ZACHARY	ZERKER				2	2	2	2	2	2	2	2	2
844	Shafter	SJV	LERDO HWY	ZERKER	SR99				2	2	2	2	2	2	2	2	2

Transportation Project Listing - Exempt Projects

Jurisdiction/ Agency	TIP Project ID	CTIPS ID (If available)	Description	Est. Cost	Exempt Code (per CTIPS)	Air Basins
Bakersfield	KER161011	20400000841	DOWNTOWN BICYCLE CONNECTIVITY PROJECT	$1,367,000	3.02	San Joaquin
Bakersfield	KER180505	20400000860	IN BAKERSFIELD: STOCKDALE HWY AT SR 43/ENOS LN; CONSTRUCT ROUNDABOUT	$8,006,173	5.01	San Joaquin
Bakersfield	KER191004	20400000900	BAKERSFIELD: BOUNDED BY 7TH STANDARD RD, KERN RIVER PARKWAY AND APPROX 6 MILES FRIANT-KERN CANAL; CONSTRUCT CLASS I MULTI-USE PATH	$8,200,000	3.02	San Joaquin
Bakersfield	KER211002	20400000952	IN BAKERSFIELD: CHESTER AVENUE BETWEEN 4TH STREET AND BRUNDAGE LANE; CONSTRUCTION OF CENTER MEDIANS, CONTINENTAL CROSSWALKS, AND BIKE LANES WITH ADDITIONAL PAVEMENT MARKINGS	$791,000	3.02	San Joaquin
Cal. City	KER200502	20400000917	IN CALIFORNIA CITY: MENDIBURU RD FROM HACIENDA BLVD TO NEURALIA RD; SURFACE UNPAVED STREET	$1,978,278	1.10	Mojave Desert
Cal. City	KER220502	20400000963	CALIFORNIA CITY: REDWOOD BLVD FROM 560 FT EAST OF HACIENDA BLVD TO 98TH ST; SURFACE UNPAVED SHOULDERS/ROADWAY, INSTALL CLASS II BIKE LANES, SIDEWALKS AND RAISED MEDIAN ISLAND APPROX 1,500 FT	$966,700	1.06	Mojave Desert
Caltrans	KER210201	20400000928	GROUPED PROJECTS FOR BRIDGE REHABILITATION AND RECONSTRUCTION - SHOPP PROGRAM	$7,845,000	1.19	Various
Caltrans	KER210202	20400000929	GROUPED PROJECTS FOR SAFETY IMPROVEMENTS - SHOPP COLLISION REDUCTION PROGRAM	$28,187,000	1.09	Various
Caltrans	KER210205	20400000932	GROUPED PROJECTS FOR PAVEMENT RESURFACING AND/OR REHABILITATION - SHOPP ROADWAY PRESERVATION PROGRAM	$691,111,000	1.10	Various
Caltrans	KER210207	20400000934	GROUPED PROJECTS FOR SAFETY IMPROVEMENTS, SHOULDER IMPROVEMENTS, PAVEMENT RESURFACING AND/OR REHABILITATION - MINOR PROGRAM	$4,580,000	1.10	Various
Caltrans	KER220201	20400000966	GROUPED PROJECTS FOR SHOULDER IMPROVEMENTS - SHOPP ROADSIDE PRESERVATION PROGRAM	$10,170,000	1.13	Various

Transportation Project Listing - Exempt Projects

Jurisdiction/ Agency	TIP Project ID	CTIPS ID (If available)	Description	Est. Cost	Exempt Code (per CTIPS)	Air Basins
Delano	KER211001	20400000941	IN DELANO: VARIOUS LOCATIONS; CONSTRUCT 68 CURB RAMPS, 87 CROSSWALKS, ADVANCED STOP AND YIELD BARS, 12 R1-6 CENTER PEDESTRIAN SIGNS, 12 RRFB SIGNALS, ADVANCED PEDESTRIAN CROSSING/YIELD SIGNS, AND NI WORK PLAN	$1,178,000	3.02	San Joaquin
Delano	KER211003	20400000953	IN DELANO: AT 38 LOCATIONS; CONSTRUCT 6,547 FT NEW 4.5 FT WIDE SIDEWALKS, STRIPE 83,378 LFT CLASS II BIKE LANES, MARK 60,950 LFT CLASS III BIKE ROUTES	$925,000	3.02	San Joaquin
Delano	KER220801	20400000956	IN DELANO: 2727 WEST INDUSTRY ROAD; PURCHASE OF TRANSIT MAINTENANCE FACILITY ($2,000,000 toll credits)	$10,000,000	2.11	San Joaquin
Delano	KER220802	20400000957	IN DELANO: PURCHASE OF 2 (24) PASSENGER REPLACEMENT CUTAWAY BUSES (CNG) ($75,000 toll credits)	$500,000	2.10	San Joaquin
GET	KER180503	20400000858	METRO BAKERSFIELD PROGRAM FOR FREE TRANSIT FARE TRIPS DURING UNHEALTHY AIR QUALITY DAYS	$681,658	2.01	San Joaquin
GET	KER190804	20400000893	BAKERSFIELD: LONG RANGE IT PLAN, SECURITY EQUIPMENT AND CAMERAS FOR TRANSIT CENTERS FY 2018-19	$246,580	2.04	San Joaquin
GET	KER190805	20400000894	BAKERSFIELD: DOWNTOWN TRANSIT CENTER FY 2018-19	$190,388	5.06	San Joaquin
GET	KER190806	20400000895	BAKERSFIELD: SOUTHWEST TRANSIT CENTER FY 2018-19	$190,388	5.06	San Joaquin
GET	KER200805	20400000906	IN BAKERSFIELD: LONG RANGE IT PLAN, SECURITY EQUIPMENT AND CAMERAS FOR TRANSIT CENTERS FY 2019-20	$172,250	2.04	San Joaquin
GET	KER200807	20400000908	IN BAKERSFIELD: PURCHASE OF FOUR REPLACEMENT HYDROGEN BUSES FY 2020-21	$5,200,000	2.10	San Joaquin
GET	KER200812	20400000935	IN BAKERSFIELD: PURCHASE OF 18 CNG GAL BUSES TO EXPAND RYDE PROGRAM FOR FY 2020-21	$2,011,865	2.10	San Joaquin

Transportation Project Listing - Exempt Projects

Jurisdiction/ Agency	TIP Project ID	CTIPS ID (If available)	Description	Est. Cost	Exempt Code (per CTIPS)	Air Basins
GET	KER210801	20400000937	IN BAKERSFIELD: PLANNING OF FACILITY UPGRADE TO DEPLOY ON-SITE HYDROGEN FUEL-CELL POWERED BUSES	$200,319	4.01	San Joaquin
GET	KER210802	20400000938	IN BAKERSFIELD: PRIMARY AND SECONDARY FIREWALLS FOR MAIN, DOWNTOWN, SOUTHWEST FACILITIES, BC CAMPUS AND NEW CSUB CENTER	$45,000	2.04	San Joaquin
GET	KER210803	20400000939	IN BAKERSFIELD: PREVENTIVE MAINTENANCE FY 2021-22	$7,500,000	2.01	San Joaquin
GET	KER210805	20400000942	IN BAKERSFIELD: COMPUTER REPLACEMENT FOR MAIN AND DOWNTOWN FACILITY FY 2021-22	$25,000	2.04	San Joaquin
GET	KER210806	20400000943	IN BAKERSFIELD: MODIFICATION TO BODY SHOP FOR HYDROGEN BUSES	$60,000	2.04	San Joaquin
GET	KER210807	20400000944	IN BAKERSFIELD: MAINTENANCE SCAFFOLDING FOR HYDROGEN BUSES	$80,000	2.04	San Joaquin
GET	KER210808	20400000945	IN BAKERSFIELD: AT VARIOUS FACILITY LOCATIONS: PURCHASE AND INSTALL ELECTRONIC DYNAMIC SIGNS	$300,000	2.04	San Joaquin
GET	KER210809	20400000946	IN BAKERSFIELD: PUCHASE AND INSTALL EIGHT NEW SHADES FOR BUS STOPS	$80,000	2.07	San Joaquin
GET	KER210810	20400000947	IN BAKERSFIELD: 1920B GOLDEN STATE AVENUE; CONSTRUCT HYDROGEN FUELING STATION	$4,372,321	2.05	San Joaquin
GET	KER210811	20400000948	IN BAKERSFIELD: CONSTRUCT EAST BAKERSFIELD TRANSIT CENTER (ENVIRONMENTAL PHASE ONLY)	$250,000	5.06	San Joaquin
GET	KER210812	20400000949	IN BAKERSFIELD: COMPUTER REPLACEMENT FOR MAIN AND DOWNTOWN FACILITY FY 2022-23	$30,000	2.04	San Joaquin
GET	KER210813	20400000950	IN BAKERSFIELD: DOWNTOWN AND SOUTHWEST TRANSIT CENTER; TRANSIT CENTER RELOCATION STUDY	$300,000	4.01	San Joaquin
GET	KER210814	20400000951	IN BAKERSFIELD: PURCHASE OF FIVE REPLACEMENT 21 FT CNG PARA-TRANSIT VEHICLES	$625,000	2.11	San Joaquin
KCOG	KER210101	20400000927	PLANNING, PROGRAMMING AND MONITORING	$2,191,000	4.01	Various

Transportation Project Listing - Exempt Projects

Jurisdiction/ Agency	TIP Project ID	CTIPS ID (If available)	Description	Est. Cost	Exempt Code (per CTIPS)	Air Basins
KCOG	KER220401	20400000958	IN KERN COUNTY: REGIONAL TRAFFIC COUNT PROGRAM; NON-INFRASTRUCTURE PROJECT THAT CONSISTS OF MOTORIZED AND NON-MOTORIZED TRAFFIC COUNTS	$180,000	4.01	Various
KCOG	KER220501	20400000962	KERN COUNTY: COMMUTEKERN RIDESHARE PROGRAM	$561,005	3.01	Various
Kern Co.	KER161010	20400000840	VARSITY ROAD PEDESTRIAN AND BICYCLE PROJECT	$833,000	3.02	San Joaquin
Kern Co.	KER191002	20400000898	IN BAKERSFIELD: SOUTH CHESTER AVE, MING AVE TO SANDRA DR; PEDESTRIAN SAFETY, ACCESSIBILITY, CROSSING IMPROVEMENTS	$2,257,000	3.02	San Joaquin
Kern Co.	KER191003	20400000899	IN LAKE ISABELLA: WALK ISABELLA - LAKE ISABELLA BLVD AND ERSKINE CREEK RD: PEDESTRIAN AND CYCLIST SAFETY AND ACCESSIBILITY IMPROVEMENTS	$6,086,000	3.02	Mojave Desert
Kern Co.	KER200403	20400000913	NEAR WELDON: SIERRA WAY AT SOUTH FORK KERN RIVER (.05 MILES); BRIDGE (PE PHASE ONLY, FOR NEPA ENVIRONMENTAL DOCUMENT APPROVAL)	$51,977	4.05	San Joaquin
Kern Co.	KER200810	20400000925	IN KERN COUNTY: PURCHASE 4 REPLACEMENT DIESEL BUSES	$522,025	2.10	Various
Kern Co.	KER200811	20400000926	IN MOJAVE: CONSTRUCT BUS MAINTENANCE FACILITY	$2,000,000	2.11	Mojave Desert
Kern Co.	KER220402	20400000959	KERN COUNTY: BUENA VISTA BLVD FROM SOUTH VINELAND RD TO SOUTH EDISON RD; RECONSTRUCT 1 MILE OF OF ROAD BY RECOMPACTING THE SUBGRADE AND INSTALLING NEW ROAD BASE	$1,807,297	1.10	San Joaquin
McFarland	KER200404	20400000914	MCFARLAND: 2ND ST FROM WESTSIDE CORNER OF HARLOW AVE TO CALIFORNIA AVE; LANDSCAPE AND PEDESTRIAN IMPROVEMENTS	$498,271	4.09	San Joaquin
McFarland	KER220403	20400000960	MCFARLAND: INTERSECTION OF W. PERKINS AVE AND 3RD ST; IMPROVE SAFER COMMUTE AND INCREASE SAFETY BY INSTALLING FLASHING STOP LIGHTS, HIGH VISABILITY FLASHING CROSSWALK, RESURFACING ROAD ON A CROSSWALK AND SURROUNDING CROSSWALK AREA, STRIPING ROAD, AND ADA RAMPS	$447,307	1.06	San Joaquin

Transportation Project Listing - Exempt Projects

Jurisdiction/ Agency	TIP Project ID	CTIPS ID (If available)	Description	Est. Cost	Exempt Code (per CTIPS)	Air Basins
Ridgecrest	KER200508	20400000923	RIDGECREST: CITY CORPORATION YARD; INSTALL ELECTRIC VEHICLE CHARGING STATION AND SOLAR PHOTOVOLTAIC SYSTEM	$634,200	2.05	Indian Wells
Shafter	KER200405	20400000915	SHAFTER: ZERKER RD FROM NORTH OF THE FRIANT KERN CANAL TO APPROXIMATELY 3,500 LF NORTH; RECONSTRUCTION	$775,000	1.10	San Joaquin
Shafter	KER220404	20400000961	SHAFTER: 7TH STANDARD RD FROM FRIANT KERN CANAL TO ZACHARY AVE; RECONSTRUCT EXISTING ASPHALT PAVEMENT IN THE WESTBOUND #2 LANE	$775,000	1.10	San Joaquin
Taft	KER220503	20400000964	TAFT: 550 SUPPLY RD; PURCHASE SIX REPLACEMENT ELECTRIC VANS; INSTALL CHARGING INFRASTRUCTURE AND SOLAR MICROGRID	$4,461,549	2.10	San Joaquin
Tehachapi	KER151014	20400000799	IN TEHACHAPI: SECTIONS OF H ST AND TEHACHAPI BLVD FROM MILL ST TO DENNISON RD; CONSTRUCT PEDESTRIAN AND RAIL CROSSING IMPROVEMENTS	$2,242,000	3.02	Mojave Desert
Tehachapi	KER191001	20400000897	IN TEHACHAPI: SRTS SNYDER AVENUE GAP CLOSURE PROJECT - VARIOUS LOCATIONS; INSTALL SIDEWALKS AND BIKE LANES, IMPROVE CROSSWALKS	$1,495,000	3.02	Mojave Desert
Tehachapi	KER200505	20400000920	TEHACHAPI: PINON STREET FROM BRANDON LANE EAST TO DENNISON ROAD; PAVE AN UNPAVED STREET AND INSTALL CLASS II BIKE LANE	$1,000,000	1.10	Mojave Desert
Tehachapi	KER211005	20400000955	IN TEHACHAPI: DENNISON ROAD BETWEEN TEHACHAPI BLVD AND PINON ST; INSTALL CURB, GUTTER, AND SIDEWALKS TO CLOSE GAPS ON DENNISON RD, IMPROVE PEDESTRIAN CROSSWALKS, INSTALL PEDESTRIAN SIGNAL, LIGHTING, AND INSTALLATION OF BIKE LANES	$2,437,000	3.02	Mojave Desert
Various	KER060601	20400000418	GROUPED PROJECTS FOR BRIDGE REHABILITATION AND RECONSTRUCTION - HIGHWAY BRIDGE PROGRAM (HBP)	$14,247,230	1.19	Various
Various	KER140601	20400000710	GROUPED PROJECTS FOR SAFETY IMPROVEMENTS -HIGHWAY SAFETY IMPROVEMENT PROGRAM (HSIP)	$1,080,400	1.06	Various

Transportation Project Listing - Exempt Projects

Jurisdiction/ Agency	TIP Project ID	CTIPS ID (If available)	Description	Est. Cost	Exempt Code (per CTIPS)	Air Basins
Various	KER180403	20400000855	GROUPED PROJECT FOR PAVEMENT RESURFACING AND/OR REHABILITATION	$46,841,614	1.10	Various
Various	KER180507	20400000862	GROUPED PROJECTS FOR SAFETY IMPROVEMENTS - SAFER ROADS - INCLUSIVE OF FEDERAL AID AND NON-FEDERAL AID ROADS	$28,454,223	1.06	Various
Various	KER180801	20400000885	GROUPED PROJECTS FOR OPERATING ASSISTANCE TO TRANSIT AGENCIES	$47,186,004	2.01	Various
Various	KER200506	20400000921	GROUPED PROJECTS FOR INTERSECTION CHANNELIZATION	$10,688,235	5.01	Various
Various	KER200507	20400000922	GROUPED PROJECTS FOR BICYCLE AND PEDESTRIAN FACILITIES	$1,196,630	3.02	Various
Various	KER210102	20400000936	GROUPED PROJECTS FOR ENGINEERING	$3,200,000	4.05	Various
Various	KER221001	20400000965	GROUPED PROJECTS FOR BICYCLE AND PEDESTRIAN FACILITIES - MOTORIZED	$1,154,240	3.02	Various
Wasco	KER210804	20400000940	IN WASCO: PURCHASE ONE REPLACEMENT CNG 23 FT BUS	$103,951	2.10	San Joaquin

APPENDIX C

CONFORMITY ANALYSIS DOCUMENTATION

- 2022 RTP Conformity EMFAC Spreadsheet
- 2022 RTP Conformity Paved Road Spreadsheet
- 2022 RTP Conformity Unpaved Road Dust Spreadsheet
- 2022 RTP Conformity Construction Spreadsheet
- 2022 RTP Conformity Totals Spreadsheet
- 2022 RTP Conformity PM10 Trading Spreadsheet

EMFAC Emissions (tons/day)

Kern

Pollutant	Source	Description									
				2023			2026	2029	2031	2037	2046
Ozone	EMFAC 2014 (Summer Run)	ROG Total Exhaust (All Vehicles Total)		4.13			3.76	3.46	3.26	2.80	2.59
2008 and 2015 standards											
(2016 Ozone SIP)											
		Conformity Total		4.20			3.80	3.50	3.30	2.80	2.60
Ozone	EMFAC 2014 (Summer Run)	NOx Total Exhaust (All Vehicles Total)		10.88			9.81	8.97	8.57	7.88	7.66
2008 and 2015 standards											
(2016 Ozone SIP)											
		Conformity Total		10.90			9.90	9.00	8.60	7.90	7.70
			2022					2029		2037	2046
PM-10	EMFAC 2014 (Annual Run)	PM-10 Total (All Vehicles Total)	1.41					1.42		1.47	1.54
(2007 Maintenance SIP)		* includes tire & brake wear									
		Conformity Total	1.41					1.42		1.47	1.54
PM-10	EMFAC 2014 (Annual Run)	NOx Total Exhaust (All Vehicles Total)	16.73					9.33		8.17	7.94
(2007 Maintenance SIP)											
		Conformity Total	16.73					9.33		8.17	7.94
				2023				2029		2037	2046
PM2.5 24-hour	EMFAC 2014 (Annual Run)	PM2.5 Total Exhaust (All Vehicles Total)		0.58				0.59		0.60	0.62
1997 standard		* includes tire & brake wear									
(2008 PM2.5 SIP)											
		Conformity Total		0.60				0.60		0.60	0.60
PM2.5 24-hour	EMFAC 2014 (Annual Run)	NOx Total Exhaust (All Vehicles Total)		11.35				9.33		8.17	7.94
1997 standard											
(2008 PM2.5 SIP)											
		Conformity Total		11.30				9.30		8.20	7.90

				2023				2029		2037	2046
PM2.5 Annual	EMFAC 2014 (Annual Run)	PM2.5 Total Exhaust (All Vehicles Total)		0.58				0.59		0.60	0.62
1997 standard		* includes tire & brake wear									
(2018 PM2.5 SIP)											
		Conformity Total		0.60				0.60		0.60	0.70
PM2.5 Annual	EMFAC 2014 (Annual Run)	NOx Total Exhaust (All Vehicles Total)		11.35				9.33		8.17	7.94
1997 standard											
(2018 PM2.5 SIP)											
		Conformity Total		11.40				9.40		8.20	8.00

				2023	2024				2031	2037	2046
PM2.5 24-hour	EMFAC 2014 (Winter Run)	PM2.5 Total Exhaust (All Vehicles Total)		0.58	0.58				0.59	0.60	0.62
2006 standard		* includes tire & brake wear									
(2018 PM2.5 SIP)											
		Conformity Total		0.60	0.60				0.60	0.60	0.70
PM2.5 24-hour	EMFAC 2014 (Winter Run)	NOx Total Exhaust (All Vehicles Total)		11.63	11.25				9.07	8.31	8.06
2006 standard											
(2018 PM2.5 SIP)											
		Conformity Total		11.70	11.30				9.10	8.40	8.10

			2022			2025		2029		2037	2046
PM2.5 Annual	EMFAC 2014 (Annual Run)	PM2.5 Total Exhaust (All Vehicles Total)	0.61			0.58		0.59		0.60	0.62
2012 standard		* includes tire & brake wear									
(Moderate Area											
2018 PM2.5 SIP)		***Conformity Total***	0.70			0.60		0.60		0.60	0.70
PM2.5 Annual	EMFAC 2014 (Annual Run)	NOx Total Exhaust (All Vehicles Total)	16.73			10.59		9.33		8.17	7.94
2012 standard											
(Moderate Area											
2018 PM2.5 SIP)		***Conformity Total***	16.80			10.60		9.40		8.20	8.00

UPCOMING BUDGET TEST
(Note: EPA Action is Pending as of This Analysis; The 2012 PM2.5 Moderate Budget Test Above Will be Used if EPA Doesn't Determine Adequacy or Approval of the New Serious Area Budgets before Federal Approval of the 2022 RTP Conformity Analysis)

			2022	2025	2029	2037	2046
PM2.5 Annual	EMFAC 2014 (Annual Run)	PM2.5 Total Exhaust (All Vehicles Total)	0.61	0.58	0.59	0.60	0.62
2012 standard		* includes tire & brake wear					
(Serious Area							
2018 PM2.5 SIP)		***Conformity Total***	0.70	0.60	0.60	0.60	0.70
PM2.5 Annual	EMFAC 2014 (Annual Run)	NOx Total Exhaust (All Vehicles Total)	16.73	10.59	9.33	8.17	7.94
2012 standard							
(Serious Area							
2018 PM2.5 SIP)		***Conformity Total***	16.80	10.60	9.40	8.20	8.00

EMFAC Emissions (tons/day)

KERN - MD

Pollutant	**Source**	**Description**	2023	2026	2029	2037	2046
2008 and 2015 Ozone	EMFAC 2014 (Summer Run)	ROG Total Exhaust (All Vehicles Total)	0.74	0.64	0.57	0.42	0.36
		Conformity Total	0.80	0.70	0.60	0.50	0.40
2008 and 2015 Ozone	EMFAC 2014 (Summer Run)	NOx Total Exhaust (All Vehicles Total)	1.77	1.52	1.35	1.17	1.09
		Conformity Total	1.80	1.60	1.40	1.20	1.10

Paved Road Dust Emissions (tons/day)

KERN 2022

			VMT Daily	VMT (million/year)	Base Emissions (PM10 tpy)	Rain Adj. Emissions (PM10 tpy)	Rain Adj. Emissions (PM10 tons/day)	District Rule 8061/ISR Control Rates	Control-Adjusted Emissions
Enter Freeway VMT ==>		Freeway	10,052,730	3,669	280.364	273.242	0.749	0.147	0.639
Enter Arterial VMT ==>		Arterial	8,778,292	3,204	407.392	397.043	1.088	0.337	0.721
Enter Collector VMT ==>		Collector	506,992	185	23.529	22.931	0.063	0.666	0.021
		Urban	604,827	221	210.290	204.948	0.562	0.679	0.180
Enter Total of Urban and Rural Local VMT Here =>	1,234,341	Rural	629,514	230	946.794	922.742	2.528	0.090	2.301
		Totals	20,572,355	7,509	1868.370	1820.907	4.989		3.862

KERN 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	11,027,389	4,025	307.547	299.734	0.821	0.147	0.700
Enter Arterial VMT ==>		Arterial	9,129,880	3,332	423.709	412.946	1.131	0.337	0.750
Enter Collector VMT ==>		Collector	514,968	188	23.899	23.292	0.064	0.666	0.021
		Urban	646,557	236	224.799	219.088	0.600	0.679	0.193
Enter Total of Urban and Rural Local VMT Here =>	1,319,504	Rural	672,947	246	1012.118	986.407	2.702	0.090	2.459
		Totals	21,991,742	8,027	1992.072	1941.467	5.319		4.124

KERN 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	11,860,376	4,329	330.778	322.375	0.883	0.147	0.753
Enter Arterial VMT ==>		Arterial	9,549,765	3,486	443.196	431.937	1.183	0.337	0.785
Enter Collector VMT ==>		Collector	538,948	197	25.012	24.377	0.067	0.666	0.022
		Urban	686,493	251	238.684	232.621	0.637	0.679	0.205
Enter Total of Urban and Rural Local VMT Here =>	1,401,006	Rural	714,513	261	1074.633	1047.334	2.869	0.090	2.611
		Totals	23,350,094	8,523	2112.303	2058.643	5.640		4.376

	KERN 2046												
			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	12,576,789	4,591	350.758	341.848	0.937	0.147	0.799				
Enter Arterial VMT ==>		Arterial	10,097,196	3,685	468.602	456.697	1.251	0.337	0.830				
Enter Collector VMT ==>		Collector	570,850	208	26.493	25.820	0.071	0.666	0.024				
		Urban	727,019	265	252.775	246.353	0.675	0.679	0.217				
Enter Total of Urban and Rural Local VMT Here =>	1,483,713	Rural	756,694	276	1138.073	1109.162	3.039	0.090	2.765				
		Totals	24,728,547	9,026	2236.700	2179.880	5.972		4.634				

DO NOT CHANGE ANY ITEMS BELOW THIS LINE

KERN

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

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

KERN

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

Paved Road Dust Emissions (tons/day)

KERN 2022

		VMT Daily	VMT (million/year)	Base Emissions (PM10 tpy)	Rain Adj. Emissions (PM10 tpy)	Rain Adj. Emissions (PM10 tons/day)
Enter Freeway VMT ==>	**Freeway**	**0**	0	0.000	0.000	0.000
Enter Arterial VMT ==>	**Arterial**	**422,229**	154	18.061	17.764	0.049
Enter Collector VMT ==>	**Collector**	**23,212**	8	0.993	0.977	0.003
Enter Local VMT ==>	**Local**	**28,432**	10	9.886	9.723	0.027
	Totals	**473,874**	**173**	**28.939**	**28.464**	**0.078**

KERN 2025

		VMT Daily	VMT (million/year)	Base Emissions (PM10 tpy)	Rain Adj. Emissions (PM10 tpy)	Rain Adj. Emissions (PM10 tons/day)
Enter Freeway VMT ==>	**Freeway**	**0**	0	0.000	0.000	0.000
Enter Arterial VMT ==>	**Arterial**	**422,094**	154	18.055	17.758	0.049
Enter Collector VMT ==>	**Collector**	**23,563**	9	1.008	0.991	0.003
Enter Local VMT ==>	**Local**	**28,446**	10	9.890	9.728	0.027
	Totals	**474,103**	**173**	**28.953**	**28.477**	**0.078**

KERN 2029

		VMT Daily	VMT (million/year)	Base Emissions (PM10 tpy)	Rain Adj. Emissions (PM10 tpy)	Rain Adj. Emissions (PM10 tons/day)
Enter Freeway VMT ==>	**Freeway**	**0**	0	0.000	0.000	0.000
Enter Arterial VMT ==>	**Arterial**	**422,932**	154	18.091	17.793	0.049
Enter Collector VMT ==>	**Collector**	**24,008**	9	1.027	1.010	0.003
Enter Local VMT ==>	**Local**	**28,528**	10	9.919	9.756	0.027
	Totals	**475,469**	**174**	**29.037**	**28.559**	**0.078**

Unpaved Road Dust Emissions (tons/day)

KERN 2022

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

KERN 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	74.0	10	270.1	270.100	242.654	0.665	0.484	0.343

KERN 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	74.0	10	270.1	270.100	242.654	0.665	0.484	0.343

KERN 2046

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

DO NOT CHANGE ANY ITEMS BELOW THIS LINE

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

	KERN 2037						
			VMT Daily	VMT (million/year)	Base Emissions (PM10 tpy)	Rain Adj. Emissions (PM10 tpy)	Rain Adj. Emissions (PM10 tons/day)
Enter Freeway VMT ==>		Freeway	0	0	0.000	0.000	0.000
Enter Arterial VMT ==>		Arterial	431,226	157	18.446	18.142	0.050
Enter Collector VMT ==>		Collector	24,716	9	1.057	1.040	0.003
Enter Local VMT ==>		Local	29,103	11	10.119	9.952	0.027
		Totals	485,045	177	29.621	29.134	0.080

	KERN 2046						
			VMT Daily	VMT (million/year)	Base Emissions (PM10 tpy)	Rain Adj. Emissions (PM10 tpy)	Rain Adj. Emissions (PM10 tons/day)
Enter Freeway VMT ==>		Freeway	0	0	0.000	0.000	0.000
Enter Arterial VMT ==>		Arterial	426,803	156	18.256	17.956	0.049
Enter Collector VMT ==>		Collector	25,707	9	1.100	1.082	0.003
Enter Local VMT ==>		Local	28,884	11	10.042	9.877	0.027
		Totals	481,394	176	29.398	28.915	0.079

DO NOT CHANGE ANY ITEMS BELOW THIS LINE

Rain Adjustment Factor	0.98
(24 rain days for Kern Mojave Desert)	

Road Type	Base EF (lb PM10/ VMT
Freeway	0.00011762
Arterial	0.000234382
Collector	0.000234382
Local	0.00190513

AP-42 Emission Factor Equation -- Used in CARB's methodology

EF = [k(sL)^0.91 * (W)^1.02] * (1-P/4N)

Where:

k = 0.0022 lb PM10 / VMT

sL = Silt Loading Factor

W = Average Vehicle Weigth; 2.4 TONS

P = Number of Rainfall Days

N = 365 Days per year

Rainfall Adjsutment Factor = (1-P/4N) = (1-24/4*365) = 0.9835

Road Type	Silt Loading lb PM10/VMT
Freeway	0.015
Arterial	0.032
Collector	0.032
Local	0.32

Unpaved Road Dust Emissions (tons/day)

KERN -- IWV 2022

	Miles	Vehicle Passes per Day	VMT (1000/year)	Base Emissions (PM10 tpy)	Rain Adj. Emissions (PM10 tpy)	Rain Adj. Emissions (PM10 tons/day)	Emissions (PM10 tons/day)
City/County	14.0	10	51.1	51.100	47.740	0.131	0.131

KERN -- IWV 2025

	Miles	Vehicle Passes per Day	VMT (1000/year)	Base Emissions (PM10 tpy)	Rain Adj. Emissions (PM10 tpy)	Rain Adj. Emissions (PM10 tons/day)	Emissions (PM10 tons/day)
City/County	14.0	10	51.1	51.100	47.740	0.131	0.131

KERN -- IWV 2029

	Miles	Vehicle Passes per Day	VMT (1000/year)	Base Emissions (PM10 tpy)	Rain Adj. Emissions (PM10 tpy)	Rain Adj. Emissions (PM10 tons/day)	Emissions (PM10 tons/day)
City/County	14.0	10	51.1	51.100	47.740	0.131	0.131

KERN -- IWV 2037

	Miles	Vehicle Passes per Day	VMT (1000/year)	Base Emissions (PM10 tpy)	Rain Adj. Emissions (PM10 tpy)	Rain Adj. Emissions (PM10 tons/day)	Emissions (PM10 tons/day)
City/County	14.0	10	51.1	51.100	47.740	0.131	0.131

KERN -- IWV 2042

	Miles	Vehicle Passes per Day	VMT (1000/year)	Base Emissions (PM10 tpy)	Rain Adj. Emissions (PM10 tpy)	Rain Adj. Emissions (PM10 tons/day)	Emissions (PM10 tons/day)
City/County	14.0	10	51.1	51.100	47.740	0.131	0.131

DO NOT CHANGE ANY ITEMS BELOW THIS LINE

Rain Adjustment Factor 0.93
(24 rain days for Kern Mojave Desert)

PM10 = 14 miles * 10 passes per day * 365 days per year * 2 lbs PM10 /VMT / 2000 lbs / ton * 0.9343 / 365
= 0.131 TPD

Where Rainfall Adustment = (365 - P) / 365

(365 - 24) / 365
= 0.9343

Road Construction Dust

KERN

Description								
	2022		2029		2037		2046	
	Year	Lane Miles	Year	Lane Miles	Year	Lane Miles	Year	Lane Miles
Baseline	2005	4790	2022	5706	2029	5866	2037	6804
Horizon	2022	5706	2029	5866	2037	6804	2046	6899
Difference	17	916	7	160	8	938	9	95
Lane Miles per Year		54		23		117		11
Acres Disturbed		209		89		455		41
Acre-Months		3762		1596		8186		737
Emissions (tons/year)		413.816		175.543		900.480		81.067
Annual Average Day Emissions (tons)		1.134		0.481		2.467		0.222
District Rule 8021 Control Rates		0.290		0.290		0.290		0.290
Total Emissions (tons per day)		**0.805**		**0.341**		**1.752**		**0.158**

Road Construction Dust

KERN - INDIAN WELLS VALLEY

Description	2022		2025		2029		2037		2046	
	Year	Lane Miles	Year	Lane Miles	Year	Lane Miles	Year	Lane Miles	Year	Lane Miles
Baseline	2005	360	2022	371	2025	372	2029	372	2037	405
Horizon	2022	371	2025	372	2029	372	2037	405	2046	420
Difference	17	11	3	1	4	0	8	33	9	15
Lane Miles per Year		1		0		0		4		2
Acres Disturbed		3		1		0		16		6
Acre-Months		45		23		0		288		116
Emissions (tons/year)		4.969		2.560		0.000		31.680		12.800
Total Emissions (tons per day)		**0.014**		**0.007**		**0.000**		**0.087**		**0.035**

2022 RTP Conformity Analysis Results Summary -- Kern

Standard	Analysis Year	Emissions Total		DID YOU PASS?	
		ROG (tons/day)	NOx (tons/day)	ROG	NOx
2008 and 2015 Ozone	2023 Budget	4.5	14.5		
	2023	4.2	10.9	YES	YES
	2026 Budget	4.2	14.4		
	2026	3.8	9.9	YES	YES
	2029 Budget	4.0	14.3		
	2029	3.5	9.0	YES	YES
	2031 Budget	3.9	14.3		
	2031	3.3	8.6	YES	YES
	2037	2.8	7.9	YES	YES
	2046	2.6	7.7	YES	YES

Standard	Analysis Year	Emissions Total		DID YOU PASS?	
		PM-10 (tons/day)	NOx (tons/day)	PM-10	NOx
PM-10	2020 Budget	7.4	23.3		
	2022	6.4	16.7	YES	YES
	2020 Budget	7.4	23.3		
	2029	6.2	9.3	YES	YES
	Adjusted 2020 Budget	7.9	22.6		
	2037	7.9	8.2	YES	YES
	2020 Budget	7.4	23.3		
	2046	6.7	7.9	YES	YES

Standard	Analysis Year	Emissions Total		DID YOU PASS?	
		PM2.5 (tons/day)	NOx (tons/day)	PM2.5	NOx
1997 24-Hour PM2.5 Standard	2020 Budget	0.8	23.3		
	2023	0.6	11.3	YES	YES
	2020 Budget	0.8	23.3		
	2029	0.6	9.3	YES	YES
	2020 Budget	0.8	23.3		
	2037	0.6	8.2	YES	YES
	2020 Budget	0.8	23.3		
	2046	0.6	7.9	YES	YES

Standard	Analysis Year	Emissions Total		DID YOU PASS?	
		PM2.5 (tons/day)	NOx (tons/day)	PM2.5	NOx
1997 Annual PM2.5 Standard	2023 Budget	0.7	13.3		
	2023	0.6	11.4	YES	YES
	2023 Budget	0.7	13.3		
	2029	0.6	9.4	YES	YES
	2023 Budget	0.7	13.3		
	2037	0.6	8.2	YES	YES
	2023 Budget	0.7	13.3		
	2046	0.7	8.0	YES	YES

Standard	Analysis Year	Emissions Total		DID YOU PASS?	
		PM2.5 (tons/day)	NOx (tons/day)	PM2.5	NOx
2006 PM2.5 Winter 24-Hour Standard	2023 Budget	0.7	13.6		
	2023	0.6	11.7	YES	YES
	2024 Budget	0.7	13.4		
	2024	0.6	11.3	YES	YES
	2024 Budget	0.7	13.4		
	2031	0.6	9.1	YES	YES
	2024 Budget	0.7	13.4		
	2037	0.6	8.4	YES	YES
	2024 Budget	0.7	13.4		
	2046	0.7	8.1	YES	YES

Standard	Analysis Year	Emissions Total		DID YOU PASS?	
		PM2.5 (tons/day)	NOx (tons/day)	PM2.5	NOx
2012 Annual PM2.5 Standard (Moderate)	2022 Budget	0.8	19.4		
	2022	0.7	16.8	YES	YES
	2022 Budget	0.8	19.4		
	2025	0.6	10.6	YES	YES
	2022 Budget	0.8	19.4		
	2029	0.6	9.4	YES	YES
	2022 Budget	0.8	19.4		
	2037	0.6	8.2	YES	YES
	2022 Budget	0.8	19.4		
	2046	0.7	8.0	YES	YES

UPCOMING BUDGET TEST

(Note: EPA Action is Pending as of This Analysis; The 2012 PM2.5 Moderate Budget Test Above Will be Used if EPA Doesn't Determine Adequacy or Approval of the New Serious Area Budgets before Federal Approval of the 2022 RTP Conformity Analysis)

Standard	Analysis Year	Emissions Total		DID YOU PASS?	
		PM2.5 (tons/day)	NOx (tons/day)	PM2.5	NOx
2012 Annual PM2.5 Standard (Serious)	2022 Budget	0.8	19.4		
	2022	0.7	16.8	YES	YES
	2025 Budget	0.8	12.8		
	2025	0.6	10.6	YES	YES
	2025 Budget	0.8	12.8		
	2029	0.6	9.4	YES	YES
	2025 Budget	0.8	12.8		
	2037	0.6	8.2	YES	YES
	2025 Budget	0.8	12.8		
	2046	0.7	8.0	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
2022	1.409	16.733	3.862		0.343		0.805		**6.4**	**16.7**
2029	1.420	9.328	4.124		0.343		0.341		**6.2**	**9.3**
2037	1.472	8.174	4.376		0.343		1.752		**7.9**	**8.2**
2046	1.538	7.938	4.634		0.343		0.158		**6.7**	**7.9**

2022 RTP Conformity Results Summary -- Kern (Mojave Desert)

Standard	Analysis Year	Emissions Total		DID YOU PASS?	
		ROG (tons/day)	NOx (tons/day)	ROG	NOx
2008 and 2015 Ozone	2020 Budget	1.3	3.6		
	2023	0.8	1.8	YES	YES
	2026	0.7	1.6	YES	YES
	2029	0.6	1.4	YES	YES
	2037	0.5	1.2	YES	YES
	2046	0.4	1.1	YES	YES

2022 RTP Conformity Results Summary -- Kern (Indian Wells Valley)

Standard	Analysis Year	Emissions Total	DID YOU PASS?
		PM-10 (tons/day)	PM-10
PM-10 (First Maintenance Plan)	2013 Budget	1.7	
	2022	0.2	YES
	2013 Budget	1.7	
	2029	0.2	YES
	2013 Budget	1.7	
	2037	0.3	YES
	2013 Budget	1.7	
	2046	0.2	YES

PM-10	Exhaust	Paved Road Dust	Unpaved Road Dust	Road Construction Dust	Total
		PM-10	PM-10	PM-10	PM-10
2022	NA	0.078	0.131	0.014	**0.2**
2029	NA	0.078	0.131	0.000	**0.2**
2037	NA	0.080	0.131	0.087	**0.3**
2046	NA	0.079	0.131	0.035	**0.2**

UPCOMING BUDGET TEST

(Note: EPA Action is Pending as of This Analysis; The PM10 Budget Test Above Will be Used if EPA Doesn't Determine Adequacy or Approval of the New PM10 Budgets before Federal Approval of the 2022 RTP Conformity Analysis)

Standard	Analysis Year	Emissions Total	DID YOU PASS?
		PM-10 (tons/day)	PM-10
PM-10 (Second Maintenance Plan)	2020 Budget	0.4	
	2022	0.3	YES
	2025 Budget	0.5	
	2025	0.3	YES
	2025 Budget	0.5	
	2029	0.3	YES
	2025 Budget	0.5	
	2037	0.4	YES
	2025 Budget	0.5	
	2046	0.3	YES

PM-10	Exhaust	Paved Road Dust	Unpaved Road Dust	Road Construction Dust	Total
		PM-10	PM-10	PM-10	PM-10
2022	0.031	0.078	0.131	0.014	**0.3**
2025	0.031	0.078	0.131	0.007	**0.3**
2029	0.030	0.078	0.131	0.000	**0.3**
2037	0.030	0.080	0.131	0.087	**0.4**
2046	0.030	0.079	0.131	0.035	**0.3**

PM10 Emission Trading Worksheet

Kern (SJV) CONFORMITY ESTIMATES (tons/day)

	2022		2029		2037		2046	
	PM10	**NOx**	**PM10**	**NOx**	**PM10**	**NOx**	**PM10**	**NOx**
Total On-Road Exhaust	1.409	16.733	1.420	9.328	1.472	8.174	1.538	7.938
Paved Road Dust	3.862		4.124		4.376		4.634	
Unpaved Road Dust	0.343		0.343		0.343		0.343	
Road Construction Dust	0.805		0.341		1.752		0.158	
Total	**6.419**	**16.733**	**6.229**	**9.328**	**7.943**	**8.174**	**6.673**	**7.938**

Difference (2020 Budget - 2022)

	PM10	**NOx**
2020 Budgets	7.4	23.3
2022	6.4	16.7
Difference	**1.0**	**6.6**
* 1.5 (Adjustment to NOx Budget)	-1.5	

Difference (2020 Budget - 2029)

	PM10	**NOx**
2020 Budgets	7.4	23.3
2029	6.2	9.3
Difference	**1.2**	**14.0**
* 1.5 (Adjustment to NOx Budget)	-1.8	

Difference (2020 Budget - 2037)

	PM10	**NOx**
2020 Budgets	7.4	23.3
2037	7.9	8.2
Difference	**-0.5**	**15.1**
* 1.5 (Adjustment to NOx Budget)	0.8	

Difference (2020 Budget - 2046)

	PM10	**NOx**
2020 Budgets	7.4	23.3
2046	6.7	7.9
Difference	**0.7**	**15.4**
* 1.5 (Adjustment to NOx Budget)	-1.1	

1:1.5 PM10 to NOx Trading

Adjusted 2020 Budget	**6.4**	**24.8**	
2022 Conformity Total	**6.4**	**16.7**	
Difference	**0.0**	**8.1**	NOTE: FINAL DIFFERENCE MUST BE POSITIVE
Adjusted 2020 Budget	**6.2**	**25.1**	
2029 Conformity Total	**6.2**	**9.3**	
Difference	**0.0**	**15.8**	NOTE: FINAL DIFFERENCE MUST BE POSITIVE
Adjusted 2020 Budget	**7.9**	**22.6**	TRADING WAS IMPLEMENTED
2037 Conformity Total	**7.9**	**8.2**	
Difference	**0.0**	**14.4**	NOTE: FINAL DIFFERENCE MUST BE POSITIVE
Adjusted 2020 Budget	**6.7**	**24.4**	
2046 Conformity Total	**6.7**	**7.9**	
Difference	**0.0**	**16.5**	NOTE: FINAL DIFFERENCE MUST BE POSITIVE

APPENDIX D

TIMELY IMPLEMENTATION DOCUMENTATION FOR TRANSPORTATION CONTROL MEASURES

Kern Council of Governments
2002 RACM Timely Implementation Documentation

RACM Commitment	Agency	Commitment Description	Commitment Schedule	Commitment Funding	TIP	TIP Project ID	Project Description	2021 Conformity Update	2022 RTP/2023 FTIP Conformity Update
								(as of 6/21)	(as of 4/22)
KE 14.10	KCOG	Public Education Program	02/03 - 04/05	$40,000 per year	2002	KER020122	IN KERN COUNTY: COUNTYWIDE WITH SPECIAL EMPHASIS ON SAN JOAQUIN PORTION OF KERN COUNTY, PUBLIC OUTREACH PROGRAM, AND SOME CAPITAL	Complete	Complete
KE 1.1	Arvin	New bus service to Ikea plant and business park	2002	Not specified				Complete	Complete
KE 1.5	Arvin	Construct transfer station	2005	$650,000 CMAQ (includes local)	2002	KER000503	CONSTRUCT NEW TRANSIT TRANSFER STATION	Complete	Complete
KE 9.3	Arvin	Drive Approach Modification Project; Traffic Signal Project	2003; 2003	$395,000 Total				Complete	Complete
KE 10.2	Arvin	Bike Racks on Buses	2002	Not specified				Complete	Complete
KE 5.2 and 5.16	Bakersfield	Traffic signal interconnect projects	2003	$1 M CMAQ (includes local)					

Kern Council of Governments
2002 RACM Timely Implementation Documentation

RACM Commitment	Agency	Commitment Description	Commitment Schedule	Commitment Funding	TIP	TIP Project ID	Project Description	2021 Conformity Update	2022 RTP/2023 FTIP Conformity Update
								(as of 6/21)	(as of 4/22)
					1998	KER960506	TRAFFIC OPERATIONS CENTER: MANAGEMENT CENTER TO LINK ALL TRAFFIC SIGNALS TO CITY HALL- PURCHASE HARDWARE AND SOFTWARE - CONSTRUCTION OF CENTER (PHASE 2)	Complete	Complete
					2002	KER000504	SIGNALIZATION, COMMUNICATION / SYNCHRONIZATION OF SOUTH H STREET FROM WHITE LANE TO PANAMA LANE	Complete	Complete
					2002	KER000505	SIGNALIZATION, COMMUNICATION / SYNCHRONIZATION OF STINE ROAD FROM WHITE LANE TO HARRIS ROAD	Complete	Complete
					2002	KER000506	SIGNALIZATION, COMMUNICATION / SYNCHRONIZATION OF ASHE ROAD FROM CLUB VIEW DRIVE TO NORTH HALF MOON BLVD.	Complete	Complete
					2002	KER000507	SIGNALIZATION, COMMUNICATION / SYNCHRONIZATION OF MISC. BRANCH COMMUNICATIONS AT VARIOUS LOCATIONS	Complete	Complete
					2002	KER010502	SIGNALIZATION: COMMUNICATION / SYNCHRONIZATION OF THREE IDENTIFIED SIGNAL LOCATIONS	Complete	Complete

Kern Council of Governments
2002 RACM Timely Implementation Documentation

RACM Commitment	Agency	Commitment Description	Commitment Schedule	Commitment Funding	TIP	TIP Project ID	Project Description	2021 Conformity Update	2022 RTP/2023 FTIP Conformity Update
								(as of 6/21)	(as of 4/22)
					2002	KER990512	IN BAKERSFIELD -TRAFFIC SIGNAL WIRED INTERCONNECT ON NILES ST. FROM ALTA VISTA DR. TO HALEY ST.	Complete	Complete
					2002	KER990520	IN BAKERSFIELD -(TRUNK LINE) TRAFFIC SIGNAL WIRED INTERCONNECT ON CHESTER AVENUE FROM 23RD ST. TO W. COLUMBUS ST.	Complete	Complete
					2002	KER010503	SIGNALIZATION: COMMUNICATION / SYNCHRONIZATION OF MISC. BRANCH COMMUNICATIONS AT VARIOUS LOCATIONS	Complete	Complete
KE 5.3	Bakersfield	Intersection improvements at White and Wible Road; Westside Parkway	2003; 2007 +	Not specified					
								Complete	Complete
					2000	KER970508	SIGNALIZATION: TRUNK LINE COMMUNICATIONS/SYNCHRO. - WHITE LANE FROM WIBLE ROAD TO HUGHES LANE	Complete	Complete

Kern Council of Governments
2002 RACM Timely Implementation Documentation

RACM Commitment	Agency	Commitment Description	Commitment Schedule	Commitment Funding	TIP	TIP Project ID	Project Description	2021 Conformity Update	2022 RTP/2023 FTIP Conformity Update
								(as of 6/21)	(as of 4/22)
					2002	KER010501	SIGNALIZATION: COMMUNICATION / SYNCHRONIZATION OF GOSFORD ROAD FROM WHITE LANE TO STOCKDALE HWY.	Complete	Complete
					2002	KER020102	IN BAKERSFIELD: FROM STOCKDALE HWY TO TRUXTUN AVE AT ROUTE 99; CONSTRUCT 4-LANE AND 6-LANE NEW FACILITY - Note: In 2009 FTIP, this project has six phases due to funding.	Complete	Complete
KE 9.5	California City	Expand bike lanes by about 75%	2003	Not specified				Complete	Complete
KE 1.5	Kern County	Service to Shafter, Wasco, McFarland, Delano, Lost Hills, Lamont, Weedpatch, Ridgecrest, California City and Mojave	2003	$400,000 per year				Complete	Complete
KE 5.2	County	Six signal projects	2005	$4,515,000 Total					

Kern Council of Governments
2002 RACM Timely Implementation Documentation

RACM Commitment	Agency	Commitment Description	Commitment Schedule	Commitment Funding	TIP	TIP Project ID	Project Description	2021 Conformity Update	2022 RTP/2023 FTIP Conformity Update
								(as of 6/21)	(as of 4/22)
					2000	KER000521	SIGNALIZATION, SYNCHRONIZATION, CHANNELIZATION AND RELATED SAFETY MODIFICATIONS ON OLIVE DRIVE FROM FRUITVALE AVENUE TO COFFEE ROAD	Complete	Complete
					2000	KER990519	SIGNALIZATION, SIGNAL SYNCHRONIZATION, CHANNELIZATION AND RELATED SAFETY MODIFICATIONS - NILES ST. FROM VIRGINIA ST. TO MORNING DR.	Complete	Complete
					2000	KER990518	SIGNAL SYNCHRONIZATION, CHANNELIZATION AND RELATED SAFETY MODIFICATIONS - FAIRFAX RD. FROM BRUNDAGE LANE TO COLLEGE AVE.	Complete	Complete
					2000	KER990523	SIGNALIZATION, SIGNAL SYNCHRONIZATION, CHANNELIZATION AND RELATED SAFETY MODIFICATIONS - OSWELL ST. FROM BRUNDAGE LANE TO BERNARD ST.	Complete	Complete

Kern Council of Governments
2002 RACM Timely Implementation Documentation

RACM Commitment	Agency	Commitment Description	Commitment Schedule	Commitment Funding	TIP	TIP Project ID	Project Description	2021 Conformity Update	2022 RTP/2023 FTIP Conformity Update
								(as of 6/21)	(as of 4/22)
					2000	KER000533	SYNCHRONIZATION CHANNELIZATION AND RELATED SAFETY MODIFICATIONS ON CALIFORNIA AVENUE FROM WASHINGTON STREET TO EDISON HIGHWAY	Complete	Complete
								Complete	Complete
KE 10.2	County	Retrofit buses with bike racks	2005	$80,000 CMAQ (includes local)	2002	KER000528	INSTALL BIKE CYCLE RACKS ON BUS FLEET	Complete	Complete
KE 10.2	Delano	Bike racks on four full size transit buses	2003	Not specified				Complete	Complete
J 34	GET	Develop and implement an area vehicle locator		$2.2 million	2002	KER990526	Area Vehicle Locator (Phase 1)	Complete	Complete
						KER990527	Area Vehicle Locator (Phase 2)		
KE 9.3	Ridgecrest	Construct 1.5 miles of bicycle lane on existing streets and 2.67 miles of new bike lanes	2003	$165,000 TEA	2002	KER990902	IN RIDGECREST - CHELSEA STREET BICYCLE PATH EXTENSION PROJECT	Complete	Complete

Kern Council of Governments
2002 RACM Timely Implementation Documentation

RACM Commitment	Agency	Commitment Description	Commitment Schedule	Commitment Funding	TIP	TIP Project ID	Project Description	2021 Conformity Update	2022 RTP/2023 FTIP Conformity Update
								(as of 6/21)	(as of 4/22)
KE 1.5	Shafter	Analyze transit system for route expansion; construct a CNG facility; two CNG mini-vans for enhanced service	2000; 2003	Not specified				Complete	Complete
KE 1.5	Taft	Construct transit transfer station	2002	$375,000 CMAQ	2002	KER990550	IN THE CITY OF TAFT - CONSTRUCT TRANSIT TRANSFER STATION	Complete	Complete
KE 9.5 and 9.2	Tehachapi	1.3 miles of Class I bike trails adjacent to several roadways in community	2003	Not specified				Complete	Complete
SJ 5.3	Wasco	Traffic signal at Highway 46 and Griffith Avenue	Not specified	$221,000				Complete	Complete
KE 7.17	Wasco	Construct new transit transfer station	design in 2002	$619,710 CMAQ	2002	KER000520	CONSTRUCT NEW TRANSIT TRANSFER STATION	Complete	Complete
KE 9.1	Wasco	Convert two mid-block alleys to pedestrian walkways	2002	TEA	2002	KER001001	DOWNTOWN STREETSCAPE IMPROVEMENT PROJECT	Complete	Complete

Kern Council of Governments
2002 RACM Timely Implementation Documentation

RACM Commitment	Agency	Measure Title	Measure Description (not verbatim)	2021 Conformity Analysis (as of 6/21)	2022 RTP/2023 FTIP Conformity Analysis (as of 4/22)
14.9	KCOG	Business, Industry and Governmental Outreach Program	Implement multi-agency outreach program and promote incentives for 2002-03 through 2004-06	Commitment Complete.	Commitment Complete.
KE5.4	Bakersfield	Site-Specific Transportation Control Measures	Encourage implementation...include various channelization and signal modification projects identified by special traffic studies or development for the next 5 years (2007)	Commitment Complete.	Commitment Complete.
KE1.1	County of Kern	Regional Express Bus Program	Purchase buses to operate regional express bus service	The County of Kern continues to offer regional express bus service.	The County of Kern continues to offer regional express bus service.
KE1.7	County of Kern	Free transit during special events	Offer one day of free travel from Bakersfield to Kernville Whisky Flat Days and Frazier Park Lilac Festival	The County of Kern has offered free transit for these events and will continue to do so.	The County of Kern has offered free transit for these events and will continue to do so.
KE9.2	County of Kern	Encouragement of Pedestrian Travel	Implement Bikeway Master Plan	Implementation of the Bikeway Master Plan continues to occur along with updates to the Kern County General Plan. The Bikeway Master Plan was approved regionally by the Kern Council of Governments October 2012.	Implementation of the Bikeway Master Plan continues to occur along with updates to the Kern County General Plan. The Bikeway Master Plan was approved regionally by the Kern Council of Governments October 2012.
KE14.4	County of Kern	Voluntary No Drive Day Programs	Conduct voluntary employee no-drive day programs during the ozone season through media and employer based public awareness activities in 2002	Commitment Complete.	Commitment Complete.
KE5.1	Taft	Develop Intelligent Transportation Systems	Provide areas for pedestrian and bicyclist in vicinity of commercial development and promote use of such areas.	Commitment Complete.	Commitment Complete.

Kern Council of Governments
2002 RACM Timely Implementation Documentation

RACM Commitment	Agency	Measure Title	Measure Description (not verbatim)	2021 Conformity Analysis	2022 RTP/2023 FTIP Conformity Analysis
KE9.3	Taft	Bicycle/Pedestrian Program	Provide facilities for only pedestrian and bicycle use.	Commitment Complete.	Commitment Complete.
KE9.5	Taft	Encouragement of Bicycle Travel	Provide funding for bikeway system. Provide education materials	Commitment Complete.	Commitment Complete.
KE1.7	Wasco	Free transit during special events	Provide free transit between Saturday's events during the Wasco Rose Festival beginning in 2002 through 2005	Commitment Complete.	Commitment Complete.
KE3.9	Wasco	Encourage merchants and employers to subsidize the cost of transit for employees	Offer free transportation to full time, permanent City of Wasco, School District and High School District employees beginning in 2002 through 2005	Commitment Complete.	Commitment Complete.
KE9.8	Wasco	Close streets for special events for use by bikes and pedestrians	Close streets to vehicles for the annual Wasco Festival of Roses	Yes, the parade route was closed for vehicle traffic and open to foot traffic. Closure will continue for annual event.	Yes, the parade route was closed for vehicle traffic and open to foot traffic. Closure will continue for annual event.

APPENDIX E

PUBLIC MEETING PROCESS DOCUMENTATION

NOTICE OF PUBLIC HEARING ON THE DRAFT 2023 FEDERAL TRANSPORTATION IMPROVEMENT PROGRAM, THE DRAFT 2022 REGIONAL TRANSPORTATION PLAN/SUSTAINABLE COMMUNITY STRATEGY, CORRESPONDING DRAFT CONFORMITY ANALYSIS, AND DRAFT ENVIRONMENTAL IMPACT REPORT SCH#: 2021050012

NOTICE IS HEREBY GIVEN that the Kern Council of Governments will hold a public hearing at 6:00 p.m. May 17, 2022 at the City of Shafter Council meeting, 336 Pacific Ave, Shafter, CA 93263 and at 6:30 p.m. May 19, 2022 at the Kern Council of Governments office building at 1401 19th Street, Suite 300, Bakersfield, CA 93301 regarding the Draft 2023 Federal Transportation Improvement Program (2023 FTIP), the Draft 2022 Regional Transportation Plan/Sustainable Community Strategy (2022 RTP/SCS), the corresponding Draft Air Quality Conformity Analysis for the 2023 FTIP and 2022 RTP/SCS and the Draft Environmental Impact Report (EIR). The purpose of the public hearing is to receive public comments on these documents.

- The 2023 FTIP is a near-term listing of capital improvement and operational expenditures utilizing federal and state monies for transportation projects in Kern County during the next four years.
- The 2022 RTP/SCS is a long-term coordinated transportation/land use strategy to meet Kern County transportation needs out to the year 2046.
- The EIR document provides an analysis of potential environmental impacts related to the implementation of the RTP/SCS as required by the California Environmental Quality Act.
- The corresponding Conformity Analysis contains the documentation to support a finding that the 2023 FTIP and 2022 RTP/SCS meet the air quality conformity requirements for ozone and particulate matter.

The public participation efforts for the 2023 FTIP satisfies the program of projects (POP) requirements of the Federal Transit Administration (FTA) Urbanized Area Formula Program Section 5307 and FTA Bus and Bus Facilities Program Section 5339. If no comments are received on the proposed POP, the proposed transit program (funded with FTA 5307 and FTA 5339 dollars) will be the final program.

Individuals with disabilities may call Kern Council of Governments at 661/635-2910 (within three-working-days advance notice) to request auxiliary aids necessary to participate in the public hearing. Translation services are available (with three-working-days advance notice) to participants speaking any language, by available professional translation services.

A concurrent 55-day public review and comment period for the Draft 2023 Federal Transportation Improvement Program (2023 FTIP), the Draft 2022 Regional Transportation Plan/Sustainable Community Strategy (2022 RTP/SCS), the corresponding Draft Air Quality Conformity Analysis for the 2023 FTIP and 2022 RTP/SCS will commence on April 22, 2022, and conclude on June 16, 2022. A 45-day public review and comment period for the Draft Environmental Impact Report (EIR) will commence on May 2, 2022 and conclude June 16, 2022. The draft documents are available for review at the Kern Council of Governments office, located at 1401 19th Street, Suite 300, Bakersfield, CA 93301 and on the Kern COG site at www.kerncog.org.

Public comments are welcomed at the hearing, or may be submitted in writing by 5:00 p.m. June 16, 2022, Ahron Hakimi, Executive Director at the address below:

After considering the comments, the documents will be considered for adoption, by resolution, by the Kern Council of Governments at a regularly scheduled meeting to be held on July 21, 2022. The documents will then be submitted to state and federal agencies for approval.

Contact Person: Mr. Ahron Hakimi, Executive Director
Kern Council of Governments
1401 19th Street, Suite 300
Bakersfield, CA 93301
Phone: 661-635-2900
E-mail: ahakimi@kerncog.org

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

RESOLUTION NO. 22-31

In the Matter of:

Resolution Adopting the 2023 Federal Transportation Improvement Program, 2022 Regional Transportation Plan/Sustainable Communities Strategy, and Corresponding Air Quality Conformity Analysis

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

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

WHEREAS, Senate Bill (SB) 375 (Steinberg, 2008) requires that Metropolitan Planning Organizations prepare a Sustainable Communities Strategy (SCS) as part of the 2022 RTP that demonstrates how the region will reduce the greenhouse gas emissions (GHG) from automobiles and light trucks to achieve, if there is a feasible way to do so, the applicable greenhouse gas emission reduction targets approved by the California Air Resources Board (ARB); and

WHEREAS, pursuant to SB 375, the applicable ARB per capita GHG emission reduction targets for the Kern Council of Governments are 9% below 2005 per capita emissions levels by 2020 and 15% below 2005 per capita emissions levels by 2035; and

WHEREAS, pursuant to SB 375, the SCS must: (1) identify the general location of uses, residential densities, and building intensities within the region; (2) identify areas within the region sufficient to house all the population of the region, including all economic segments of the population, over the course of the planning period of the regional transportation plan taking into account net migration into the region, population growth, household formation and employment growth; (3) identify areas within the region sufficient to house an eight-year projection of the regional housing need for the region pursuant to Government Code Section 65584; (4) identify a transportation network to service the transportation needs of the region; (5) gather and consider the best practically available scientific information regarding resource areas and farmland in the region as defined in subdivisions (1) and (b) of the Government Code Sections 65080 and 65581; and (6) consider the statutory housing goals specified in Sections 65580 and 65581, (7) set forth a forecasted development pattern for the region which when integrated with the transportation network, and other transportation measures and policies, will reduce the GHG emissions from automobiles and light trucks to achieve the GHG reduction targets, and (8) allow the RTP to comply with air quality conformity requirements under the federal Clean Air Act; and

WHEREAS, the 2022 RTP/SCS has been prepared in accordance with state guidelines adopted by the California Transportation Commission; and

WHEREAS, a 2022 RTP/SCS has been prepared in full compliance with federal guidance; and

WHEREAS, the 2022 RTP/SCS includes the Congestion Management Program which is consistent with the final rules for the Federal Management and Monitoring System effective Congestion Management Process; and

WHEREAS, the 2022 RTP/SCS reconfirms the use of the socio-economic assumptions and data forecasted adopted by the Kern COG Board in March 2020 and was developed consistent with the adopted Kern COG oversight procedure; 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, projects submitted in the 2022 RTP/SCS and 2023 FTIP must be financially constrained and the financial plan affirms that funding is available; and

WHEREAS, the 2023 Federal Transportation Improvement Program (2023 FTIP) has been prepared to comply with Federal and State requirements for local projects and through a cooperative process between the Federal Highway Administration (FHWA), the Federal Transit Administration (FTA), the State Department of Transportation (Caltrans), principal elected officials of general purpose local governments and their staffs, and public owner operators of mass transportation services acting through Kern COG forum and general public involvement; and

WHEREAS, the 2023 FTIP program listing is consistent with: 1) the 2022 RTP/SCS; 2) the 2022 State Transportation Improvement Program; and 3) the corresponding Conformity Analysis; and

WHEREAS, the 2023 FTIP contains the MPO's certification of the transportation planning process assuring that all federal requirements have been fulfilled; and

WHEREAS, the 2023 FTIP meets all applicable transportation planning requirements per 23 CFR Part 450; and

WHEREAS, Kern COG has established performance targets that address the performance standards per 23 CFR Part 490, 49 United States Code (U.S.C.) 5326(c), and 49 U.S.C. 5329(d) to use in tracking progress toward attainment of critical outcomes for the region of the MPO; and

WHEREAS, Kern COG 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, the MPO must demonstrate conformity per 40 CFR Part 93 for the 2022 RTP/SCS and 2023 FTIP; and

WHEREAS, the 2022 RTP/SCS and 2023 FTIP includes a new Conformity Analysis; and

RESOLUTION NO. 22-31
2023 FTIP/2022 RTP/SCS/Conformity Analysis
Page 3

WHEREAS, the 2022 RTP/SCS and 2023 FTIP conform to the applicable SIPs; and

WHEREAS, the 2022 RTP/SCS and 2023 FTIP do not interfere with the timely implementation of the Transportation Control Measures; and

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

WHEREAS, advertised public hearings was conducted on May 17 and May 19, 2022 to hear and consider comments on the 2023 FTIP, 2022 RTP/SCS, and corresponding Conformity Analysis;

NOW, THEREFORE, BE IT RESOLVED, that Kern COG adopts the 2022 RTP/SCS, 2023 FTIP, and corresponding Conformity Analysis.

BE IT FURTHER RESOLVED, that Kern COG finds that the 2022 RTP/SCS and 2023 FTIP are in conformity with the requirements of the Federal Clean Air Act Amendments and applicable State Implementation Plans for air quality.

BE IT FURTHER RESOLVED, that Kern COG also finds that the 2022 RTP/SCS meets the SB 375 GHG reduction targets of 9% below 2005 per capita emissions levels by 2020 and 15% below 2005 per capita emissions levels by 2035.

AUTHORIZED AND SIGNED THIS 21ST DAY OF JULY 2022.

AYES: Couch, Blades, Crump, Flores, Krier, Navarro, Lessenevitch, Prout, Reyna, Scrivner, Vasquez

NOES: None

ABSTAIN: None

ABSENT: Tafoya, Parra, B. Smith, P. Smith, Trujillo

Zack Scrivner, Vice Chairman
Kern Council of Governments

ATTEST:
I hereby certify that the foregoing is a true copy of a resolution of the Kern Council of Governments duly adopted at a regular meeting thereof held on the 21st day of July 2022.

Ahron Hakimi, Executive Director
Kern Council of Governments

7-21-2022
Date

APPENDIX F

RESPONSE TO PUBLIC COMMENTS

Summary of Comments and Responses

As part of the development of the Conformity Analysis, stakeholders, technical staff, and the public were given the opportunity to comment. The public review period was held April 22, 2022 to June 16, 2022.

U.S. Environmental Protection Agency (EPA)

Comments From: Karina O'Connor, Environmental Protection Agency (EPA)
Date Received: June 9, 2022
Submitted via: Email
To: Raquel Pacheco; Alex Marcucci
Subject: RE: Kern - Draft 2023 FTIP, Draft 2022 RTP/SCS, Draft EIR, and Draft Conformity Analysis

Email dated 6/9/22

Raquel - – there have been some changes in the EPA timeline regarding finalizing approval of a few of the air quality plans included in the conformity analysis. I've tried to go through the conformity analysis and identify where the updates are needed. My comments are listed below.

1. Page 5 – This page contains several references to "the approved PM2.5 and NOx trading mechanism for transportation conformity purposes from the 2018 plan for the 1997, 2006 and 2012 PM2.5 standards (2018 PM2.5 Plan" Note that the trading mechanism has currently only been approved for use for the 2006 standard and the 1997 24-hour standards for all budgets. We do not anticipate that the trading mechanism will be available for use for the 1997 annual standard before you adopt the conformity analysis. We have approved the trading mechanism for the moderate post-attainment year budget for the 2012 standard, but trading for budgets for years beyond the 2022 year for the 2012 standard have not yet been approved.
Response: *Revised language has added on pages 1, 6 and 22 to address this comment.*

2. Pages 6, 22, 23, and 55 – The document indicates that the emission budgets in the Indian Wells second 10-year maintenance plan are approved. There have been data issues that are delaying our final action on the Indian Wells second 10-year maintenance plan. Please revised to reflect that the only budgets are from the first 10-year maintenance plan.
Response: *Revised language has added on pages 7, 24, 25. 26 to address this comment.*

3. Pages 12, 16, 36 and page 47 – The document indicates that final action on the 2012 annual PM2.5 standard is expected by April 2022 and that it is expected that EPA will act on the remaining SIP elements related to the annual 1997 PM2.5 nonattainment by Spring 2022. EPA has not yet completed action on the portions of the 2018 PM2.5 plan related to the serious area components of the 2012 or 1997 annual standard at this time. We do not anticipate finalizing action on either plan before the conformity determination is adopted.
Response: *Revised language has been incorporated into pages 12, 13, 17, 18, 19-23, and 39 to address this comment.*

4. Page 19 and Table 6-1 – The 2025 budgets listed in Table 1-5 are not yet adequate or approved for use in conformity.

Response: *Language changes have been made on pages 17-21. Staff has included a new Table 1-4 on page 19 that accounts for the inclusion of a new "upcoming budget test". Subsequent changes to Table 6-1 reflect similar additions.*

5. Page 23 – The East Kern ozone precursor emission budgets for 2020 were approved in a Federal Register notice published on June 25, 2021, therefore are no longer an Upcoming Budget Test.
Response: *Revised language has been incorporated into pages 24 to address this comment.*

6. Page 23 & 24 – The 2020 and 2025 budgets listed in Table 1-8 for Indian Wells Valley are not approved. Please replace them with the previously approved initial maintenance plan budgets for 2013. There is no Indian Wells budget for 2020. (Table 1-9).
Response: *Revised language has been incorporated into pages 25-27 to address this comment.*

7. Page 41 – The document references use of the trading mechanism for the serious 2012 PM2.5 and annual 1997 PM2.5 standards. These trading mechanisms have not been approved for all years.
Response: *Revised language has been incorporated into pages 44 to address this comment.*