TRANSPORTATION CONFORMITY WORKING GROUP

REMOTE PARTICIPATION ONLY
Tuesday, August 24, 2021
10:00 a.m. – 12:00 p.m.

To Participate on Your Computer:
https://scag.zoom.us/j/153963916

To Participate by Phone:
Call-in Number: (646) 558-8656 or (669) 900-6833
Meeting ID: 153 963 916

PUBLIC ADVISORY
Given recent public health directives limiting public gatherings due to the threat of COVID-19 and in compliance with the Governor’s recent Executive Order N-29-20, the meeting will be held telephonically and electronically.

If members of the public wish to review the attachments or have any questions on any of the agenda items, please contact Karen Calderon at (213) 236-1983 or via email at calderon@scag.ca.gov. Agendas & Minutes for the Transportation Conformity Working Group are also available at: https://scag.ca.gov/transportation-conformity-working-group

SCAG, in accordance with the Americans with Disabilities Act (ADA), will accommodate persons who require a modification of accommodation in order to participate in this meeting. SCAG is also committed to helping people with limited proficiency in the English language access the agency’s essential public information and services. You can request such assistance by calling (213) 630-1402. We request at least 72 hours (three days) notice to provide reasonable accommodations and will make every effort to arrange for assistance as soon as possible.
AGENDA

1. CALL TO ORDER AND SELF-INTRODUCTIONS  
   Paul Phan, TCWG Chair

2. PUBLIC COMMENT PERIOD  
   Members of the public desiring to speak on an agenda item or items not on the agenda, but within the purview of the TCWG, must use the “raise hand” function on your computer or dial *9 by phone and wait for the Chair to announce your name/phone number. Limit oral comments to 3 minutes, or as otherwise directed by the Chair. The Chair may limit the total time for comments to twenty (20) minutes.

3. CONSENT CALENDAR  
   3.1. June 22, 2021 TCWG Meeting Minutes – Deferred to September TCWG Meeting  
   3.2. July 27, 2021 TCWG Meeting Minutes – Deferred to September TCWG Meeting

4. INFORMATION ITEMS  
   4.1. Review of PM Hot Spot Interagency Review Forms (10 minutes)  
        Attachment 4.1 RIV071267B
   4.2. Review of Conformity Exemption Request (10 minutes)  
        Attachment 4.2 Revised ORA001103 Exemption
   4.3. Proposed OCTA TCA TCM Substitution (15 minutes)  
        Anup Kulkarni, OCTA  
        Attachment 4.3
   4.4. RTP Update (15 minutes)  
        John Asuncion, SCAG
        4.4.1. Connect SoCal 2020 RTP/SCS, Amendment #1 Update  
                Agustin Barajas, SCAG
        4.4.2. Concurrent 2021 FTIP Modeling Amendment/2023 FTIP/Connect SoCal Consistency Amendment #2 Modeling Status Update  
                Mana Sangkapichai, SCAG
   4.5. FTIP Update (20 minutes)  
        John Asuncion, SCAG
        4.5.1. Draft 2023 FTIP Guidelines  
                Pablo Gutierrez, SCAG
   4.6. EPA Update (10 minutes)  
        Karina O’Connor, EPA
   4.7. ARB Update (10 minutes)  
        Nesamani Kalandiyur, ARB
   4.8. Air Districts Update (10 minutes)  
        District Representatives

5. INFORMATION SHARING

6. ADJOURNMENT  
   The next meeting of the TCWG will be held on Tuesday, September 28, 2021 via teleconference and Zoom meeting only.
PM Conformity Hot Spot Analysis
Project Summary Form for Interagency Consultation

The purpose of this form is to provide sufficient information to allow the Transportation Conformity Working Group (TCWG) to determine if a project requires a project-level PM hot spot analysis pursuant to Federal Conformity Regulations.

The form is not required under the following circumstances:

1. The project sponsor determines that a project-level PM hot spot analysis is required or otherwise elects to perform the analysis; or
2. The project does not require a project-level PM hot spot analysis since it:
   a. Is exempt pursuant to 40 CFR 93.126; or
   b. Is a traffic signal synchronization project under 40 CFR 93.128; or
   c. Uses no Federal funds AND requires no Federal approval; or
   d. Is located in a Federal PM attainment area (note: PM10 and PM2.5 areas differ).

Projects other than those listed above may or may not need a project-level PM hot spot analysis depending on whether it is considered a "Project of Air Quality Concern" (POAQC), and should be brought before the TCWG for a determination.

It is the responsibility of the project sponsor to ensure that the form is filled out completely and provides a sufficient level of detail for the TCWG to make an informed decision on whether or not a project requires a project-level PM hot spot analysis. For example, the TCWG will be reviewing the effects of the project, and thus part of the required information includes build/no build traffic data. It is also the responsibility of the project sponsor to ensure a representative is available to discuss the project at the TCWG meeting if necessary.

Instructions:

1) Fill out form in its entirety. Enter information in gray input fields.
2) Be sure to include FTIP ID#. See http://www.scag.ca.gov/ftip/index.htm if necessary.
3) Submit completed form to your local Transportation Commission who will submit it to the MPO. Caltrans projects can be submitted by Caltrans District representatives.

The TCWG meets the fourth Tuesday of each month at SCAG Headquarters, 818 W. 7th Street, 12th Floor, Los Angeles, CA 90017. Participation is also available via teleconference. Call (213) 236-1800 prior to meeting to get the call-in number and pass-code.

Forms must be submitted by the second Tuesday of the month to be considered at that month’s TCWG meeting.
REFERENCE
Criteria for Projects of Air Quality Concern (40 CFR 93.123(b)) – PM_{10} and PM_{2.5} Hot Spots

(i) New highway projects that have a significant number of diesel vehicles, and expanded highway projects that have a significant increase in the number of diesel vehicles;
(ii) Projects affecting intersections that are at Level-of-Service D, E, or F with a significant number of diesel vehicles, or those that will change to Level-of-Service D, E, or F because of increased traffic volumes from a significant number of diesel vehicles related to the project;
(iii) New bus and rail terminals and transfer points that have a significant number of diesel vehicles congregating at a single location;
(iv) Expanded bus and rail terminals and transfer points that significantly increase the number of diesel vehicles congregating at a single location; and
(v) Projects in or affecting locations, areas, or categories of sites which are identified in the PM10 or PM2.5 applicable implementation plan or implementation plan submission, as appropriate, as sites of violation or possible violation.

Links to more information:
http://www fhwa dot gov/environment/conform htm
http://www epa gov/otaq/stateresources/transconf/index htm

<table>
<thead>
<tr>
<th>TABLE 1</th>
</tr>
</thead>
<tbody>
<tr>
<td>Type of Project</td>
</tr>
<tr>
<td>---</td>
</tr>
<tr>
<td>New state highway</td>
</tr>
<tr>
<td>Change to existing state highway</td>
</tr>
<tr>
<td>New regionally significant street</td>
</tr>
<tr>
<td>Change to existing regionally significant street</td>
</tr>
<tr>
<td>New interchange</td>
</tr>
<tr>
<td>Reconfigure existing interchange</td>
</tr>
<tr>
<td>Intersection channelization</td>
</tr>
<tr>
<td>Intersection signalization</td>
</tr>
<tr>
<td>Roadway realignment</td>
</tr>
<tr>
<td>Bus, rail, or inter-modal facility/terminal/transfer point</td>
</tr>
<tr>
<td>Truck weight/inspection station</td>
</tr>
<tr>
<td>At or affects location identified in the SIP as a site of actual or possible violation of NAAQS</td>
</tr>
</tbody>
</table>
**RTIP ID# (required)** RIV071267B

**TCWG Consideration Date** 8/24/21

**Project Description** *(clearly describe project)*
15 ELP Shoulder Lane Project- Add Lane by restriping I-15 in the southbound direction from Cajalco Road interchange to the exit at Weirick Road.

**Type of Project** *(use Table 1 on instruction sheet)*
Change to existing state highway

**County**
RIV

**Narrative Location/Route & Postmiles**
In Riverside County on southbound Interstate 15 from Cajalco Road Interchange to Weirick Road off-ramp/RIV-15 PM 35.8 to 37.2

**Caltrans Projects – EA#** TBD

**Lead Agency:** RCTC

**Contact Person**
Stephanie Blanco

**Phone#**
909-354-6305

**Fax#**

**Email**
sblanco@rctc.org

**Hot Spot Pollutant of Concern** *(check one or both)*
PM2.5 X PM10 X

**Federal Action for which Project-Level PM Conformity is Needed** *(check appropriate box)*

<table>
<thead>
<tr>
<th>X</th>
<th>Categorical Exclusion (NEPA)</th>
<th>EA or Draft EIS</th>
<th>FONSI or Final EIS</th>
<th>PS&amp;E or Construction</th>
<th>Other</th>
</tr>
</thead>
</table>

**Scheduled Date of Federal Action:** 12/2021

**NEPA Assignment – Project Type** *(check appropriate box)*

<table>
<thead>
<tr>
<th>Exempt</th>
<th>Section 326 – Categorical Exemption</th>
<th>Section 327 – Non-Categorical Exemption</th>
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<tbody>
<tr>
<td>X</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Current Programming Dates** *(as appropriate)*

<table>
<thead>
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<th>PE/Environmental</th>
<th>ENG</th>
<th>ROW</th>
<th>CON</th>
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<td><strong>Start</strong></td>
<td>8/2021</td>
<td>9/2021</td>
<td>n/a</td>
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<tr>
<td><strong>End</strong></td>
<td>12/2021</td>
<td>12/2021</td>
<td>n/a</td>
</tr>
</tbody>
</table>
Project Purpose and Need (Summary): (attach additional sheets as necessary)
Construction of the I-15 Express Lanes Project (ELP) (EA 0J0800) was completed in early 2021, with the new express lanes along I-15 from the SR-60 interchange to Cajalco Road opening to traffic in April 2021. In the existing configuration, one auxiliary lane, three General Purpose (GP) lanes and one Express Lane (EL) approach the I-15 southbound off-ramp to Cajalco Road. The auxiliary lane traps at the I-15 southbound off ramp to Cajalco Road and prior to the Cajalco Road Overcrossing, GP lane #3 is dropped while the southbound EL ends and transitions into the GP #1 lane. Three GP lanes continue southbound on I-15 just south of Cajalco Road. The current configuration in conjunction with heavy traffic volumes contributes to a bottleneck in this area resulting in substantial traffic congestion and delays during the PM peak hours (3:00 – 6:00 PM) including weekends.

In response to this existing condition associated with the I-15 ELP terminus, the Riverside County Transportation Commission, proposes an interim operational improvement. To help improve traffic flow, the existing I-15 southbound GP lane #3 drop would convert to a continuous lane and exit at the I-15 Weirick Road (PM 35.6) southbound off-ramp by restriping the lanes and using the existing shoulders. The inside and outside shoulders would be upgraded to accommodate through traffic. Upgrades to the shoulders would include removal of rumble strips, cold planning, and asphalt overlays to strengthen the shoulder pavement. The gore taper of the southbound Cajalco Road on-ramp would be adjusted to accommodate the lane adjustments. Other roadway modifications would include the upgrade of median guardrails and new overhead signs to provide motorists notice of the Weirick Road exit only lane. There would be three 11-foot wide GP lanes, one 12-foot wide GP lane to accommodate trucks with a varying 2-5 foot wide median shoulder and a varying 3 – 8 foot wide outside shoulder between Cajalco Road and Weirick Road. No roadway widening is proposed and all work is within the existing right of way.

This interim shoulder lane project will be operational for approximately 3 years. Two follow-on projects, the 15 Corridor Operations Project and the 15 Express Lanes Project – Southern Extension, are currently in project development and will be constructed in this area within 3-6 years to permanently address traffic operations issues.

Surrounding Land Use/Traffic Generators (especially effect on diesel traffic)
Majority residential with mixed use and commercial along freeway frontage.
Opening Year: Build and No Build LOS, AADT, % and # trucks, truck AADT of proposed facility
See next page
Opening Year (2022):

Southbound I-15 is uncongested during the morning (AM) peak period but experiences congestion along the corridor within the study area during the afternoon (PM) peak period including weekends. Level of service results are provided for the PM peak hour (3:00 – 4:00 PM).

**Opening Year (2022) PM Peak Hour Level of Service**

<table>
<thead>
<tr>
<th>SB I-15 Mainline Segment</th>
<th>No-Build Alternative</th>
<th>Build Alternative</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cajalco Road Interchange to Weirick Road Off-Ramp</td>
<td>F</td>
<td>F</td>
</tr>
</tbody>
</table>

Source: Fehr & Peers, 2021

The Build Alternative improves operations between the Cajalco Road On-Ramp and the Weirick Road/Dos Lagos Drive Off-Ramp by reducing the queue length and the duration of congestion during the PM peak period (see contour plots).

**Opening Year (2022) PM Peak Period (1:00 – 8:00 PM) Speed Contour Plot: No-Build Alternative**

Extents: Hidden Valley Pkwy On-Ramp to Weirick Road Off-Ramp

Legend

- 60 - 75 mph
- 50 - 60 mph
- 40 - 50 mph
- 30 - 40 mph
- 20 - 30 mph
- 10 - 20 mph
- 0 - 10 mph
Traffic volumes on the corridor would not vary between the No-Build and Build Alternatives, as the project serves an operational improvement and does not add downstream lane capacity south of the Weirick Road/Dos Lagos Drive interchange.

**Opening Year (2022) Average Annual Daily Traffic (AADT)**

<table>
<thead>
<tr>
<th>Location</th>
<th>Total</th>
<th>Autos</th>
<th>Trucks</th>
<th>Truck %</th>
</tr>
</thead>
<tbody>
<tr>
<td>SB I-15: On-Ramp from El Cerrito</td>
<td>9,170</td>
<td>8,460</td>
<td>710</td>
<td>7.7%</td>
</tr>
<tr>
<td>SB I-15: El Cerrito Rd On-ramp to Cajalco Rd Off-ramp</td>
<td>97,640</td>
<td>90,180</td>
<td>7,460</td>
<td>7.7%</td>
</tr>
<tr>
<td>SB I-15: Off-Ramp to Cajalco</td>
<td>8,120</td>
<td>7,500</td>
<td>620</td>
<td>7.6%</td>
</tr>
<tr>
<td>SB I-15: Cajalco Rd Off-ramp to On-ramp</td>
<td>89,520</td>
<td>82,680</td>
<td>6,840</td>
<td>7.6%</td>
</tr>
<tr>
<td>SB I-15: On-Ramp from Cajalco</td>
<td>7,070</td>
<td>6,530</td>
<td>540</td>
<td>7.6%</td>
</tr>
<tr>
<td>SB I-15: Cajalco Rd On-ramp to Weirick Rd Dr Off-ramp</td>
<td>96,590</td>
<td>89,210</td>
<td>7,380</td>
<td>7.6%</td>
</tr>
<tr>
<td>SB I-15: Off-Ramp to Weirick</td>
<td>11,850</td>
<td>10,940</td>
<td>910</td>
<td>7.7%</td>
</tr>
</tbody>
</table>
Opening Year: If facility is an interchange(s) or intersection(s), Build and No Build cross-street AADT, % and # trucks, truck AADT
n/a- Mainline Project

RTP Horizon Year / Design Year: If facility is an interchange(s) or intersection(s), Build and No Build cross-street AADT, % and # trucks, truck AADT
n/a- Mainline Project

Describe potential traffic redistribution effects of congestion relief (impact on other facilities)
The project will help alleviate the bottleneck at this location and reduce cut-through traffic on local streets through the city of Corona. The graphic below shows how local traffic entering southbound 15 has adjusted after opening of the express lanes. Vehicles that would typically use the Magnolia and Ontario to enter the southbound 15 are now entering the 15 at more southerly onramps at El Cerrito, Cajalco and Weirick to avoid the southbound 15 congestion associated with weaving at the 15 express lanes terminus at Cajalco.

Trend Graph showing I-15 Southbound ramp volumes,
(5-day moving average, hourly traffic, 2-7 PM, ramps south of 91)
Comments/Explanation/Details *(attach additional sheets as necessary)*
CONFORMITY EXEMPTION FORM
PROJECT SUMMARY FOR INTERAGENCY CONSULTATION
For projects that correct, improve, or eliminate a hazardous location or feature

Project Information

DIST-CO-RTE-PM: 12-ORA-91-0.0/4.8
EA/EFIS ID (Caltrans Projects): 1220000021
Fed. Aid. No. (Local Projects):
FTIP ID No. (required): ORA 001103
TCWG Consideration Date: 07/27/2021 - 8/24/2021
Pollutant of Concern: PM2.5 and PM10

Contact Information

Lead Agency: Caltrans
Contact Person: Rabindra Bade
Phone: 657 328 6573 Fax:
Email: rabindra.bade@dot.ca.gov

Environmental Approval Information

Anticipated Federal Environmental Approval (check appropriate box):
☐ 23 USC 326 CE ☒ 23 USC 327 CE ☐ EA ☐ EIS
Anticipated Date of Federal Environmental Approval: 2021
Current Programming Dates (as appropriate):

<table>
<thead>
<tr>
<th></th>
<th>PA&amp;ED</th>
<th>PS&amp;E</th>
<th>ROW</th>
<th>CON</th>
</tr>
</thead>
<tbody>
<tr>
<td>Start</td>
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<td>2022</td>
<td>2023</td>
<td>2027</td>
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<tr>
<td>End</td>
<td>2021</td>
<td>2023</td>
<td>2024</td>
<td>2028</td>
</tr>
</tbody>
</table>
Project Details

Project Description

This SR-91 project was initiated by the Caltrans District 12 Team as a multi-asset management project. The proposal aims to address both Roadway Improvement and TMS improvement along a portion of SR-91. Roadway Improvement provides various upgrades and improvement to the existing facilities and TMS Improvement transitions our existing facilities into a modernized system with a multimodal technological infrastructure. Roadway improvement includes pavement improvement as the anchor asset; and drainage, lightings and conduits, operation improvement/widening, overhead sign panels and overhead sign structures, Weight-In-Motion system, and landscape as satellite assets. TMS improvement is a satellite asset which consists of various TMS elements, including CMS, HD CCTV, video detection cameras, smart street lightings, non-PTZ cameras, switches at controller cabinets, cabinet locking systems, loops, and pull boxes.

The project limits of Segment 1 encompass the segment of SR-91 from approximately 0.1 mile west of the Los Angeles County line in Los Angeles County to the Acacia Street Undercrossing in Orange County, including the Cities of Cerritos, La Palma, Buena Park, Fullerton, and Anaheim, from 07-LA-91 PM R20.6/R20.7 to 12-ORA-91 PM R0.0/4.8.

Layout plan of the widening at the Orangethorpe Avenue off ramp is attached.

Project Purpose and Need (Summary) (attach additional sheets as necessary):

Purpose

This project addresses inadequate roadway conditions and transportation management system elements. Work activities include pavement rehabilitation, drainage improvements, work on/at several bridges, loop detector replacement, new lighting, lighting replacement, conduit replacement, installation of a weigh in motion system (WIMS), landscape improvements, overhead sign panel and one bridge mounted sign structure, retaining walls, upgrade existing closed circuit television (CCTV) cameras to high definition cameras (HD CCTV), upgrade existing switches in electrical cabinets, upgrade fiber optic communication systems, install video detection cameras, install Smart Street Lighting, install non-pan-tilt-zoom (PTZ) cameras, install central locking cabinet systems, upgrade pull boxes with locking systems.

Additionally, and operational improvement which includes widening at the Orangethorpe Avenue off ramp is also proposed. The off ramp needs to be widened due to occasional ramp-queue overflows on EB SR-91 mainline at this location. The operational improvement is limited to increasing storage capacity of the ramp by widening the terminus section from two to three lanes.

Potholing to identify underground utilities is anticipated. Work activities occur in both directions (EB and WB) on SR-91.

0R311K specifically entails:
Roadway slabs, Bridge Approach/Departure slabs, Cold Plane & Overlay, Grind & Groove, Drainage Improvements, Replace Loop Detectors, Lighting/Conduit Improvement: Add lights, replace lights, replace conduit, Landscape Improvement, Weigh in Motion Scale System, Upgrade Overhead Signs, Operational
Widening, Retaining Walls, Upgrade HD CCTVs, Switch Cabinet Locking, Upgrade Fiber Optics, Install Video Detection, Upgrade CMS, Install CMS, Install Smart Lighting, Install Non-PTZ Cameras, Install Central Locking, Upgrade Pull Boxes.

Need

SR-91 has experienced inadequate roadway conditions and been operating with incomplete and disconnected technological infrastructure systems.

A. Inadequate roadway conditions, including:
- Deteriorated pavement, cracked and settled approach and departure slabs
- Inadequate drainage systems
- Inadequate lightings and conduits
- Outdated irrigation systems
- Unsafe maintenance accesses for highway workers
- The need to effectively monitor truck volume along the corridor
- Deterioration of visibility of existing overhead sign panels
- Travelers experiencing lengthy and extended commute times during peak hours at some freeway segments

B. Incomplete and disconnected technological infrastructure systems, including:
- Lack of real-time management of the corridor to detect traffic congestion, vehicle collision and incident
- Lack of Internet Protocol (IP) base Ethernet communications with field elements to allow for remote monitoring and management of ITS elements
- The need to upgrade the existing CMS to improve visibility and meet standard requirements
- The need to save energy and improve visibilities to enhance road safety with remote management to lower maintenance cost and reduce operating expenses
- Lack of real-time management at the ramps/merging areas to detect traffic congestion, vehicle collision and incident
- Lack of Intelligent Traffic System (ITS) to protect our critical infrastructure systems

Please provide collision data or justification on the need for the correction, improvement, or elimination of a hazardous location or feature:

Traffic Accident Surveillance and Analysis System (TASAS) - Transportation Systems Network (TSN) Reports were used to get the collision data for the three-year period from 03/01/2017 to 02/29/2020 within the project limits, above the statewide average values are highlighted.

For eastbound SR-91 mainline within project limit, R0.0 to 4.8.

<table>
<thead>
<tr>
<th>County-Route (Post mile range)</th>
<th>Number of accidents</th>
<th>Accident rate (Number of collisions/Million Vehicles -Miles)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>F¹</td>
<td>F+I²</td>
</tr>
<tr>
<td>ORA-91-PM R0.0/4.8</td>
<td>5</td>
<td>342</td>
</tr>
</tbody>
</table>

Average Rate¹

ORA-91-PM R0.0/4.8 0.003 0.32 1.02
Notes: 1. Fatal Collisions 2. Fatal collisions + injury collisions 3. All reported collisions

Collision rates = Number of collision/Million vehicle miles

This proposed project reduces the occasional ramp-queue on EB SR-91 location i.e. it increases the storage capacity of the ramp by widening the terminus section from two to three lanes.

**Comments/Explanation/Details** (attach additional sheets as necessary):

By adding a right turn lane on Orangethorpe Avenue Off ramp will mitigate the safety issues without increasing the capacity of the SR 91. Thus, the proposed project meets the criteria of 40 CFR 93.126 and exempt from conformity analysis requirement.

i. It reduces the occasional ramp-queue overflows on EB SR-91 mainline location.

ii. The operational improvement is limited to increasing storage capacity of the ramp by widening the terminus section from two to three lanes.

iii. The operational improvement will be at only one location not at multiple locations.
NOTES:
1. FOR ACCURATE RIGHT OF WAY DATA, CONTACT RIGHT OF WAY ENGINEERING AT THE DISTRICT OFFICE.

CURVE DATA

<table>
<thead>
<tr>
<th>No.</th>
<th>R</th>
<th>Δ</th>
<th>T</th>
<th>L</th>
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<td>60°30'03&quot;</td>
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</table>

SCALE: 1"=50'
CONFORMITY STREAMLINING EXEMPTION FORM AND GUIDANCE FOR
“PROJECTS THAT CORRECT, IMPROVE, OR ELIMINATE A HAZARDOUS
LOCATION OR FEATURE” EXEMPTION

Guidance

The purpose of this form is to provide sufficient information to allow the Transportation Conformity Working Group (TCWG) to determine if a project could be exempt under the “Projects that correct, improve, or eliminate a hazardous location or feature” from 40 CFR 93.126 Table 2, pursuant to federal conformity regulations. This form is only for projects located in nonattainment and maintenance areas for ozone, CO, PM2.5, PM10 and NO2.

The form is not needed under the following circumstances (since transportation conformity already does not apply):

a. Clearly fits within one of the other exempt categories pursuant to 40 CFR 93.126; or
b. Is part of the Highway Safety Improvement Program (HSIP) (i.e., exempt under “Highway Safety Improvement Program implementation” in 40 CFR 93.126); or
c. Is a traffic signal synchronization project under 40 CFR 93.128; or
d. Uses no federal funds AND requires no federal approval (i.e., a project-level conformity determination does not apply); or
e. Road diets: A road diet is a project where one or more vehicle travel lanes are removed to accommodate a variety of transportation modes. Road diets are done for safety purposes. If a road diet is part of a state’s Highway Safety Improvement Program, the road diet is exempt under the Table 2 item, “Highway Safety Improvement Program implementation.” If not, a road diet can still be considered exempt under the Table 2 item, “Projects that correct, improve, or eliminate a hazardous location or feature.” For more information about road diets, including the “Road Diet Informational Guide,” please refer to FHWA’s webpage at https://safety.fhwa.dot.gov/road_diets/

Note: A typical road diet involves converting an existing four-lane undivided roadway segment to a three-lane segment consisting of two through lanes and a center, two-way left-turn lane. The reclaimed space can be allocated for other uses, such as turn lanes, bus lanes, pedestrian refuge islands, bike lanes, sidewalks, etc.

f. Auxiliary lanes less than 1 mile in length: An auxiliary lane is defined as the portion of the roadway adjoining the traveled way for speed change, turning, weaving, truck climbing, maneuvering of entering and leaving traffic, and other purposes supplementary to through traffic movement. If an auxiliary lane is less than 1 mile in length, it can be considered exempt under the Table 2 item, “Projects that correct, improve, or eliminate a hazardous location or feature.” For more information about auxiliary lanes, please refer to FHWA’s webpage at...
g. Ramp metering: Ramp metering projects involve installing traffic signals on highway on-ramps to control the frequency at which vehicles enter the flow of traffic, and they are also exempt under the Table 2 item, “Projects that correct, improve, or eliminate a hazardous location or feature.” For more information about ramp metering projects, please refer to FHWA’s webpage at https://ops.fhwa.dot.gov/publications/fhwahop14020/sec1.htm

h. Is a road diet project, a ramp metering project, or an auxiliary lane project that is less than one mile in length (these projects have already been determined to be exempt as “projects that correct, improve, or eliminate a hazardous location or feature.”)

A project sponsor that would like to exempt a project under the exemption titled “Projects that correct, improve, or eliminate a hazardous location or feature” from 40 CFR 93.126 Table 2 will need to present data to the TCWG to demonstrate that the project would resolve a safety issue before this exemption can be used.

It is the responsibility of the project sponsor to ensure that the form is filled out completely and provides a sufficient level of detail for the TCWG to make an informed decision on whether or not a project can be exempt under the “Projects that correct, improve, or eliminate a hazardous location or feature.” For example, if a transportation agency has collision data to show both a need for the project as well as how the project will correct, improve, or eliminate the hazardous location or feature, that data can be presented to the TCWG, and if the TCWG concurs, the project could move forward as exempt. It is also the responsibility of the project sponsor to ensure a representative is available to discuss the project at the TCWG meeting if necessary.

**Instructions**

1) Fill out form, beginning on page 1, in its entirety.
2) Be sure to include FTIP ID#.
3) Submit completed form to your local Transportation Commission who will submit it to the Metropolitan Planning Organization (MPO). Caltrans projects can be submitted by Caltrans District representatives.
Reference

Exempt Projects 40 CFR 93.126
Notwithstanding the other requirements of this subpart, highway and transit projects of the types listed in Table 2 of this section are exempt from the requirement to determine conformity. Such projects may proceed toward implementation even in the absence of a conforming transportation plan and TIP. A particular action of the type listed in table 2 of this section is not exempt if the MPO in consultation with other agencies (see §93.105(c)(1)(iii)), the EPA, and the FHWA (in the case of a highway project) or the FTA (in the case of a transit project) concur that it has potentially adverse emissions impacts for any reason. States and MPOs must ensure that exempt projects do not interfere with transportation control measure (TCM) implementation. Table 2 follows:

Links to More Information:
https://www.fhwa.dot.gov/environment/air_quality/conformity/index.cfm
http://www.epa.gov/otaq/stateresources/transconf/index.htm

TABLE 2-Exempt Projects

Safety
- Railroad/highway crossing.
- Projects that correct, improve, or eliminate a hazardous location or feature.
- Safer non-Federal-aid system roads.
- Shoulder improvements.
- Increasing sight distance.
- Highway Safety Improvement Program implementation.
- Traffic control devices and operating assistance other than signalization projects.
- Railroad/highway crossing warning devices.
- Guardrails, median barriers, crash cushions.
- Pavement resurfacing and/or rehabilitation.
- Pavement marking.
- Fencing.
- Skid treatments.
- Safety roadside rest areas.
- Adding medians.
- Truck climbing lanes outside the urbanized area.
- Lighting improvements.
- Widening narrow pavements or reconstructing bridges (no additional travel lanes).
- Emergency truck pullovers.

Note: This is an excerpt from Table 2, not the complete list of exempt projects from the table.
Proposed Transportation Control Measure Substitution of Three Transportation Corridor Agency Capital Improvement Projects (10254, ORA050, & ORA051) with 33 miles of New Signal Synchronization Projects (Portola Parkway, 1st Street/Bolsa Chica, and Alton Parkway)

Introduction

The Transportation Corridor Agency (TCA) previously committed to three capital improvement projects along portions of Transportation Corridor Agency facilities within Orange County: the San Joaquin Hills Transportation Corridor (Project ID: 10254); the Eastern Transportation Corridor (Project ID: ORA050); and the Foothill Transportation Corridor-North (Project ID: ORA051). These three projects are included as committed TCM’s in SCAG’s 2020 RTP/SCS (Connect SoCal) and 2016 South Coast AQMP/ Ozone SIPs. The 2020 RTP/SCS project descriptions of these three committed TCM’s are below:

- The San Joaquin Hills Transportation Corridor (SJHTC, SR-73) is a 15-mile managed toll facility between Interstate 5 (I-5) in San Juan Capistrano and the non-tolled portion of the SR-73 in Irvine. Planned improvements include one (1) additional tolled lane for mixed flow traffic in each direction, plus climbing and auxiliary lanes by 2022.

- The Foothill Transportation Corridor-North (FTC-N, SR-241) is a 12.7-mile managed toll road between Oso Parkway and the Eastern Transportation Corridor. Planned improvements include two (2) additional tolled lanes for mixed flow traffic in each direction, plus climbing and auxiliary lanes by 2022.

- The Eastern Transportation Corridor (ETC, SR-241/261/133) is a 26.4-mile managed toll road that connects SR-91 to I-5 via SR-261 and SR-133. Planned improvements include two (2) additional tolled lanes for mixed flow traffic in each direction, plus climbing and auxiliary lanes by 2022.

Based upon TCA’s 2018 Capital Improvement Program, adopted on June 14, 2018, these committed transportation conformity measures (TCM’s) will be delayed beyond the scheduled completion dates. Three substitute TCM projects (33 miles of new signal synchronization projects) are now proposed as a replacement TCM to the previously committed projects. The proposed substitute project description, evaluation assumptions, and methodology are discussed below.
**Replacement Project Descriptions**

OCTA is proposing a substitute program of projects as a replacement to these previously planned TCMs. The recommended substitute projects consist of three signal synchronization projects spanning approximately 33 miles of roadway. The substitute program of projects will be implemented by December 2022. Current funding, as part of Measure M2, will be used for these three signal synchronization projects. Project descriptions and air quality modeling results are discussed below.

**Portola Parkway Signal Synchronization Project (SSP)**

The Portola Parkway SSP implements optimized signal timing between Paloma Parkway to Plano Trabuco Road (7.1 miles). The project includes select upgrades to key equipment including Advanced Traffic Controllers (ATC), communications, and detection.

**1st Street/Bolsa Chica Street SSP**

The 1st Street/Bolsa Chica Street SSP implements optimized signal timing between Bolsa Chica Street to Newport Avenue (13.1 miles). The project includes select upgrades to key equipment including ATC, communications, and detection.

**Alton Parkway SSP**

The Alton Parkway SSP implements optimized signal timing between Red Hill Street to Portola Parkway (12.8 miles). The project includes select upgrades to key equipment including ATC, communications, and detection.

The proposed substitute program of projects implements regional signal coordination that crosses local agencies’ boundaries and maintains coordination through freeway interchanges, where possible.

**Compliance with Substitution Requirements**

- **Equivalent Emissions Reduction:** OCTA will analyze the countywide emissions impacts of the substitute TCM projects relative to those of previously committed TCM projects. The replacement TCM projects will provide equivalent emission reductions.

- **Similar Geographic Area:** The substitute TCM projects and the previously committed TCM projects are in the Orange County portion of the South Coast Air Basin.

- **Full Funding:** Current funding is available for the replacement TCM projects.
• Similar Time Frame: The proposed substitute TCM projects will be operational by December 2022, equivalent to the schedule of the previously committed TCM projects.

• Timely Implementation: The proposed substitution is the means by which the obstacles to implementation of previously committed TCM projects is being overcome.

• Legal Authority: TCA has legal authority and personnel to implement and operate the substitute TCM projects.

Air Quality Analysis Methodology

The air quality impacts were calculated for the previously committed TCM projects and the proposed substitute TCM projects using a multi-step method based on the SCAG emission methodology focused on Orange County. The following process was used:

Step 1: Obtain daily vehicle miles traveled (VMT) and speed data for freeways and arterials from the Orange County Transportation Analysis Model 5.0 (OCTAM). OCTAM is a conventional four step transportation model used to forecast travel demand with a base year of 2016 (sometimes referred to as the existing year) and a forecast year of 2045. It is consistent with SCAG’s regional travel demand model as it incorporates the most recent approved socio-economic data for Orange County and the surrounding region at the time it was developed.

Two alternatives for forecast year 2045 were run using OCTAM as part of this study. The coding of all alternatives was consistent with previous OCTAM modeling practices. The 2020 RTP/SCS network was used for all future year modeling.

The previously committed TCM projects generally add an additional managed toll lane across the TCA system (SR-241, SR-261, and SR-73). The additional toll lanes are part of the existing toll road management and are assumed to be only available to drivers willing to pay a toll. The project is programmed and budgeted in the 2019 FTIP Consistency Amendment #19-12. This alternative was used for the modeling of previously committed TCM projects, referred to as the “no project” analysis.

The “with project” analysis includes the addition of the substitute TCM projects and the removal of the previously committed TCM projects. The substitute TCM projects are expected to improve traffic operations, reduce vehicular stops, and fix traffic bottlenecks.

Both alternatives were modeled separately using OCTAM and post-processed using the National Cooperative Highway Research Program (NCHRP) 255 process. This process provides a standard methodology to refine forecasted volumes on links based on a combination of base year traffic counts, base year model estimates, and forecasted model estimates using incremental adjustments. The output of the travel
demand model and post-processing includes travel information for both the "with project" and "no project" alternatives. Loaded link information, intrazonal travel speeds, and intrazonal travel volumes were extracted for all time periods for both alternatives.

Step 2: The Emission Factors (EMFAC2017) model was developed by the California Air Resources Board and is used throughout California to calculate emission rates from motor vehicles, such as passenger cars and heavy-duty trucks, operating on freeways and local roads for typical summer, winter, and annual conditions. EMFAC model outputs include total emissions for all criteria pollutants for all Orange County.

A spreadsheet tool has been created to modify EMFAC input data to reflect the results of OCTAM runs. The tool was run for the base year and forecast year 2045 using the extracted information from Step 1 as input to update the VMT and vehicle speed data needed by EMFAC. This process was performed multiple times for each modeled alternative in order to analyze conditions for summer, winter, and averaged annual timeframes.

Note that interpolation of travel activity data between base year 2016 and forecast year 2045 (horizon year) results were used to estimate the emissions changes for interim year 2022 (completion year) and 2037 (2015 8-hour ozone standard attainment year).

Step 3: Determine the emissions output from Step 2 (see Attachments B-D) to identify the potential emissions-related impacts of the previously committed TCM projects and substitute TCM projects.

Findings
The air quality forecasts for the previously committed TCM projects were compared with those of the substitute TCM projects using the methodology described in the previous section. Criteria pollutants (Ozone – ROG & NOx, CO, PM2.5, and PM10) were compared for the three forecast years (2022, 2037, and 2045) as well as three seasons (summer, winter, and annual) and their results are summarized in the tables below.
Year 2022

Summer Emissions - Ozone (Tons/Day)

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Carbon Monoxide, Nitrogen Dioxide - Winter Emissions (Tons/Day)

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PM$_{10}$, PM$_{2.5}$ - Annual Emissions (Tons/Day)

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Year 2037

Summer Emissions - Ozone (Tons/Day)

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Carbon Monoxide, Nitrogen Dioxide - Winter Emissions (Tons/Day)

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PM$_{10}$, PM$_{2.5}$ - Annual Emissions (Tons/Day)

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Year 2045

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Carbon Monoxide, Nitrogen Dioxide - Winter Emissions (Tons/Day)

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PM$_{10}$, PM$_{2.5}$ - Annual Emissions (Tons/Day)

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Summary

In summary, the modeling results demonstrate that the proposed substitute TCM will yield equivalent amount of emissions compared with the previously committed TCM for all criteria pollutants for all milestone years.

Attachments

A. Transportation Control Measure Substitute Program of Projects Map