

## Project Assessment Form for PM<sub>2.5</sub> Interagency Consultation

### Project Title: I-680 North Segment Express Lanes

### Project Summary for Air Quality Conformity Task Force Meeting:

#### Description

The Contra Costa Transportation Authority (CCTA), in cooperation with the Metropolitan Transportation Commission (MTC), California Department of Transportation (Caltrans), and the Federal Highway Administration (FHWA), proposes to convert the existing high-occupancy vehicle (HOV) lane on segments of I-680 into express lanes. The existing HOV lanes in the southbound (SB) direction of I-680 would be converted from just south of Marina Vista Avenue in Martinez to just south of Treat Boulevard in Walnut Creek, and the northbound (NB) I-680 HOV lane would be converted from the I-680/SR 242 Interchange to approximately Marina Vista Avenue. Separate from this Project, CCTA is completing preliminary engineering and environmental approval for the extension of the SB I-680 HOV lane from Treat Boulevard to Rudgear Road (EA 3A5800). As part of this Project, the agencies plan to convert the HOV lane extension into an express lane as well. Collectively, these I-680 express lane conversions constitute the Project. See attached figure.

#### Background

- National Environmental Policy Act (NEPA) and California Environmental Quality Act (CEQA) process for Environmental Categorical Exclusion/Categorical Exemption (CE/CE) is scheduled to be completed in February 2016.
- Seeking PM<sub>2.5</sub> air quality conformity determination on March 26, 2015.

#### Not a Project of Air Quality Concern (40 CFR 93.123(b)(1))

*(i) New or expanded highway projects with significant number/increase in diesel vehicles?*

- No increase in traffic and no change in truck percentage between the Build and No-Build Alternatives.

*(ii) Affects intersections at LOS D, E, or F with a significant number of diesel vehicles?*

- Diesel vehicles represent only a small percentage of intersection traffic volume at the ramps.
- No project changes to land use that would affect diesel traffic percentage.

*(iii) New bus and rail terminals and transfer points?—Not Applicable.*

*(iv) Expanded bus and rail terminals and transfer points?—Not Applicable.*

*(v) Affects areas identified in PM<sub>10</sub> or PM<sub>2.5</sub> implementation plan as site of violation?*

- The Bay Area Express Lane Network is listed in the Bay Area 2010 Clean Air Plan as a Transportation Control Measure (TCM B-3).

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<b>RTIP ID#:</b> CC-070022;					
<b>TIP ID#:</b> 22351;					
<b>Air Quality Conformity Task Force Consideration Date:</b> March 26, 2015					
<b>Project Description</b>					
<p>The CCTA, in cooperation with the MTC, Caltrans, and the FHWA, proposes to convert the existing HOV lane on segments of I-680 into express lanes. The existing HOV lanes in the SB direction of I-680 would be converted from just south of Marina Vista Avenue in Martinez to just south of Treat Boulevard in Walnut Creek, and the NB I-680 HOV lane would be converted from the I-680/SR 242 Interchange to approximately Marina Vista Avenue. Separate from this Project, CCTA is completing preliminary engineering and environmental approval for the extension of the SB I-680 HOV lane from Treat Boulevard to Rudgear Road (EA 3A5800). As part of this Project, the agencies plan to convert the HOV lane extension into an express lane as well. Collectively, these I-680 express lane conversions constitute the Project.</p> <p>The Project would construct approximately 15 directional miles of express lanes on the I-680 corridor through conversion of existing HOV lanes. Table 1 identifies the locations and lengths of existing HOV lanes that would be converted to express lanes.</p>					
<b>Table 1: I-680 Existing HOV Lanes to be converted to Express Lanes</b>					
<b>Limits of HOV Conversion (PM)</b>		<b>HOV Conversion Length (Directional Miles)</b>		<b>Conversion Description</b>	
SB: CC – 680 – R16.6/ 23.7		7.31		South of Marina Vista Road to Treat Boulevard	
SB: CC – 680 – R12.6/ 16.6		4.11		Treat Boulevard to Rudgear Road – HOV Project (EA 3A5800)	
NB: CC – 680 –R18.8/ 23.2		4.25		State Route 242 to north of Arthur Road	
<b>Type of Project:</b> Change to existing State highway.					
<b>County:</b> Contra Costa County		<b>Narrative Location/Route &amp; Postmiles:</b> CC I-680 PM R11.5 – 25.0 Caltrans Projects – EA# 4H610 EFIS ID # 0413000216			
<b>Lead Agency:</b> Caltrans		<b>Project Sponsor:</b> Contra Costa County Transportation Authority			
<b>Contact Person:</b> Dina El-Nakhal		<b>Phone#:</b> (510) 286-6247		<b>Fax#:</b>  <b>Email:</b> Dina.el.nakhal@dot.ca.gov	
<b>Federal Action for which Project-Level PM Conformity is Needed:</b> <i>(check appropriate box)</i>					
<input checked="" type="checkbox"/>	<b>Categorical Exclusion (NEPA)</b>	<input type="checkbox"/>	<b>EA or Draft EIS</b>	<input type="checkbox"/>	<b>FONSI or Final EIS</b>
				<input type="checkbox"/>	<b>PS&amp;E or Construction</b>
				<input type="checkbox"/>	
<b>Scheduled Date of Federal Action:</b> 2016					

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<b>NEPA Delegation – Project Type:</b> <i>(check appropriate box)</i>				
Exempt	X	<b>Section 6004 –Categorical Exemption</b>	<b>Section 6005 – Non-Categorical Exemption</b>	
<b>Current Programming Dates:</b> <i>(as appropriate)</i>				
	<b>PE/Environmental</b>	<b>ENG</b>	<b>ROW</b>	<b>CON</b>
<b>Start</b>	6/2014	7/2015	N/A	3/2017
<b>End</b>	02/2016	11/2016	N/A	12/2018
<b>Project Purpose and Need (Summary):</b>				
<i>Purpose</i>				
The purpose of the Project is to:				
<ul style="list-style-type: none"> <li>• Optimize use of the existing HOV lane capacity in the I-680 corridor to better meet current and future traffic demands.</li> <li>• Offer non-carpool eligible drivers a reliable travel time option.</li> </ul>				
<i>Need</i>				
Significant daily congestion currently exists in the general purpose lanes during peak hours on the I-680 corridor between Marina Vista Avenue and Rudgear Road and is forecasted to increase future traffic growth. This recurrent congestion increases travel times, reduces speed and reliability through the corridor.				
Additionally, the existing I-680 HOV lane has available unused capacity. Current peak hour HOV lane utilization ranges between 30 and 80 percent in the SB direction and between 40 to 50 percent in the NB direction. Based on the existing HOV lane utilization a rate, underutilized capacity exists that could be more efficiently managed by allowing general purpose traffic to shift into the HOV Lane.				
As indicated above, the recurrent congestion in the I-680 corridor combined with the underutilized capacity in the existing HOV lane results in less than optimal vehicle operations on the existing freeway, particularly during peak commute periods.				
<b>Surrounding Land Use/Traffic Generators:</b>				
I-680 is a north-south transportation corridor for interregional commercial, commuter, and recreational traffic connecting the Bay Area with the Central Valley. Land uses along the I-680 corridor within the project limits include open space, residential, retail, and commercial.				

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**Brief summary of assumptions and methodology used for conducting analysis:**

The Average Annual Daily Traffic (AADT) and truck percentages are taken from the Traffic Forecast for PM<sub>2.5</sub>. Analysis data prepared by *Fehr & Peers*.<sup>1</sup> The project forecasts were prepared using recent traffic and truck counts along the I-680 corridor as well as model runs using the Contra Costa Countywide Travel Demand Model.

Two analysis years, along with the existing conditions, were evaluated:

- Year 2013 represents the existing conditions.
- Year 2020 represents the possible opening year of the project.
- Year 2040 represents the planning horizon for the project.

**Opening Year: If facility is a highway or street, Build and No Build LOS, AADT, % and # trucks, truck AADT of proposed facility.**

	I-680 from Marina Vista Avenue in Martinez to SR4 AADT		I-680 from SR4 to SR 242		I-680 from SR 242 to SR 24		I-680 from SR 24 to Rudgear Road in Walnut Creek	
	No Build	Build	No Build	Build	No Build	Build	No Build	Build
AADT	139,500	139,500	159,500	159,500	272,600	272,600	210,500	210,500
LOS	D	D	E	E	F	F	E	E
Truck AADT	7,000	7,000	6,400	6,400	8,200	8,200	10,500	10,500
% Trucks	5%	5%	4%	4%	3%	3%	5%	5%

**RTP Horizon Year / Design Year: If facility is a highway or street, Build and No Build LOS, AADT, % and # trucks, truck AADT of proposed facility.**

	I-680 from Marina Vista Avenue in Martinez to SR4 AADT		I-680 from SR4 to SR 242		I-680 from SR 242 to SR 24		I-680 from SR 24 to Rudgear Road in Walnut Creek	
	No Build	Build	No Build	Build	No Build	Build	No Build	Build
AADT	169,000	169,000	191,000	191,000	311,600	311,600	241,500	241,500
LOS	F	F	F	F	F	F	F	F
Truck AADT	8,500	8,500	7,600	7,600	9,300	9,300	12,100	12,100
% Trucks	5%	5%	4%	4%	3%	3%	5%	5%

<sup>1</sup> "I-680 PM<sub>2.5</sub> traffic needs". Message from Francisco Martin of Fehr & Peers. December 10, 2014. E-mail

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**Opening Year: If facility is an interchange(s) or intersection(s), Build and No Build cross-street AADT, % and # trucks, truck AADT.**

Not applicable; see above for highway facility.

**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.**

Not applicable; see above for highway facility.

**Opening Year: If facility is a bus, rail or intermodal facility/terminal/transfer point, # of bus arrivals for Build and No Build, % and # of bus arrivals will be diesel buses.**

Not applicable; see above for highway facility.

**RTP Horizon Year / Design Year: If facility is a bus, rail or intermodal facility/terminal/transfer point, # of bus arrivals for Build and No Build, % and # of bus arrivals will be diesel buses.**

Not applicable; see above for highway facility.

**Describe potential traffic redistribution effects of congestion relief:**

The results of the traffic study indicate that the project (converting existing HOV lanes to express lanes) would not cause an increase in the AADT on I-680 for the Design Year of 2020 or the Horizon Year of 2040 and there would be no degradation of the LOS. The truck AADT percentage would not change in the Design or Horizon year with the project. The conversion of HOV to express lane in the NB and SB direction would not add capacity nor increase congestion. California Vehicle Code Section 21655(b) restricts large trucks from using express lanes; therefore the truck volumes should not be affected by the conversion of the HOV lanes to express lanes.

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### Comments/Explanation/Details: *(please be brief)*

The proposed project is in a nonattainment area for federal PM<sub>2.5</sub> standards. Therefore, according to 40 CFR Part 93, a hotspot analysis is required for conformity purposes. However, the Environmental Protection Agency (EPA) does not require a quantitative hotspot analysis for projects that are not a project of air quality concern (POAQC). Five types of projects listed in 40 CFR Section 93.123(b)(1) qualify as a POAQC. The following discussion evaluates whether the proposed project falls into any of these POAQC categories.

1. The project is not a new or expanded highway project that would have a significant number of or increase in the number of diesel vehicles (40 CFR Section 93.123 (b)(1)(i)).

*The conversion of a HOV lane to an express lane will not have a change on the number of diesel trucks on the road. Therefore, the proposed project would not increase future PM<sub>2.5</sub> levels in the project vicinity.*

2. The project is not likely to affect any intersections (40 CFR Section 93.123 (b)(1)(ii)).

*The project converts HOV lanes to Express Lanes, and therefore, would not affect local intersections*

3. The project does not include the construction of a new bus or rail terminal with a significant number of diesel vehicles congregating at a single location (40 CFR Section 93.123 (b)(1)(iii)).

*Not applicable - No bus or rail terminals are affected by the project.*

4. The project does not expand an existing bus or rail terminal with significant increases in the number of diesel vehicles congregating at a single location (40 CFR Section 93.123 (b)(1)(iv)).

*Not applicable - No bus or rail terminals are affected by the project.*

5. The project is not in or affecting locations, areas or categories of sites that are identified in the PM<sub>2.5</sub> applicable implementation plan or implementation plan submission, as appropriate, as sites of violation or possible violation (40 CFR Section 93.123 (b)(1)(v)).

*Project does not affect locations identified in an applicable implementation plan or implementation plan submission. On January 9, 2013, the U.S. EPA issued a final rule that determined the San Francisco Bay Area air basin has attained the 24-hour PM<sub>2.5</sub> NAAQS. As a result, new SIP provisions are not necessary to demonstrate how the air basin will attain the standard.*

Based on the evaluation above, the project should not be considered a POAQC and not require a quantitative hot-spot analysis to demonstrate that it will not cause or worsen an existing PM<sub>2.5</sub> violation.

