METROPOLITAN
TRANSPORTATION
COMMISSION

Bay Area Metro Center
375 Beale Street, Suite 800
San Francisco, CA 94105
415.778.6700
www.mtc.ca.gov

Air Quality Conformity Task Force Meeting

Metropolitan Transportation Commission

Join Zoom Meeting @
https://bayareametro.zoom.us/j/84383698853
Meeting ID: 843 8369 8853

(Additional Zoom Meeting Call-In Info on Next Page)

January 26, 2023
9:30 a.m. –11:00 a.m.

AGENDA

1. Welcome and Introductions

2. $PM_{2.5}$ Project Conformity Interagency Consultations

   a. Consultation to Determine Project of Air Quality Concern Status
      i. Interstate 680 Northbound Express Lane Completion Project
      ii. Open Road Tolling Conversion Northern Bridges Project
      iii. Richmond-San Rafael Bridge Open Road Tolling and I-580 Westbound High Occupancy Vehicle Lane Project
      iv. I-580 Westbound High Occupancy Vehicle Lane Conversion Project

   b. Confirm Project Projects Exempt from $PM_{2.5}$ Conformity
      Projects Exempt Under 40 CFR 93.126 – Not of Air Quality Concern

3. Projects with Regional Air Quality Conformity Concerns

   a. Review of the Regional Conformity Status for New and Revised Projects
      3a_Regional_AQ_Conformity_Review_012623.pdf
      3a_Attachment-A_List_of_Proposed_New_Projects_012623.pdf
   b. Dumbarton Forward Operational Improvements Project
      – Task Force discussion for regional conformity determination

4. Consent Calendar

   a. December 1, 2022 Air Quality Conformity Task Force Meeting Summary

5. Other Items

   Next Meeting: February 23, 2023

MTC Staff Liaison: Harold Brazil hbrazil@bayareametro.gov

Harold Brazil is inviting you to a scheduled Zoom meeting.

Topic: Air Quality Conformity Task Force Meeting
Time: This is a recurring meeting Meet anytime

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213.19.144.110 (Amsterdam Netherlands)
213.244.140.110 (Germany)
103.122.166.55 (Australia Sydney)
103.122.167.55 (Australia Melbourne)
64.211.144.160 (Brazil)
69.174.57.160 (Canada Toronto)
65.39.152.160 (Canada Vancouver)
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Memorandum

TO: Air Quality Conformity Task Force DATE: January 23, 2023

FR: Harold Brazil W. I.

RE: $PM_{2.5}$ Project Conformity Interagency Consultation

A project sponsor representing one project, seeks interagency consultation from the Air Quality Conformity Task Force (AQCTF) at today's meeting and the projects are as follows:

No.	Project Sponsor	Project Title
1	Contra Costa Transportation Authority (CCTA)	Interstate 680 Northbound Express Lane Completion Project
2	Bay Area Toll Authority (BATA) in cooperation with Caltrans	Open Road Tolling Conversion Northern Bridges Project
3	Bay Area Toll Authority (BATA) in cooperation with Caltrans	Richmond-San Rafael Bridge Open Road Tolling and I-580 Westbound High Occupancy Vehicle Lane Project
4	Metropolitan Transportation Commission	I-580 Westbound High Occupancy Vehicle Lane Conversion Project

2ai_Interstate_680_NB_Exp_Lane_Completion_Project_Assessment_Form.pdf (for the Interstate 680 Northbound Express Lane Completion project)

2aii_Open_Rd_Toll_Convers_North_Bridges_Project_Assessment_Form.pdf (for the Open Road Tolling Conversion Northern Bridges project)

2aiii_Richmond_San_Rafael_Bridge_Open_Rd_Toll_HOV_Project_Assessment_Form.pdf (for the Richmond-San Rafael Bridge Open Road Tolling and I-580 Westbound High Occupancy Vehicle Lane project)

2aiv_I-580_WB_HOV_Lanes_Project_Assessment_Form.pdf (for the I-580 Westbound HOV Lanes project)

MTC also requests the review and concurrence from the Task Force on a project which a project sponsor has identified as exempt and likely not to be a POAQC. **2b_POAQC_Exempt_List_012323.pdf** lists exempt projects under 40 CFR 93.126.

Application of Criteria for a Project of Air Quality Concern

Project Title: Interstate 680 Northbound Express Lane Completion Project
Summary for Air Quality Conformity – Revision 1 3-28-2022, Revision 2 12-23-2022
Task Force Meeting: March 24, 2022

Description

Project will address the gap in the northbound (NB) managed lane on Interstate 680 (I-680) between Livorna Road and State Route 242 (SR-242). Currently, I-680 NB includes an express lane from Alcosta Boulevard to Livorna Road and an HOV lane from SR-242 to about one mile south of the Benicia-Martinez Bridge Toll Plaza. The 'gap' between these two managed lane segments extends for 7.5 miles.

Five alternatives are being evaluated as part of the Project: one No Build alternative and four Build Alternatives. The five alternatives are:

No Build Alternative - Under the No-Build Alternative, northbound I-680 would remain in its current configuration and no improvements made.

Build Alternative 1C - Alternative 1C proposes to close the 7.5 mile "gap" between the two existing managed lane segments by constructing a northbound express lane from Livorna Road to SR-242 and by converting the existing northbound HOV lane that runs from SR-242 to just south of the Benicia-Martinez Bridge Toll Plaza to an express lane. The existing NB truck scale facility, south of the Treat Boulevard overcrossing structure between northbound I-680 and the Treat Boulevard off-ramp, would remain in its current condition and location with minor restriping of the off-ramp gore.

Build Alternative 2 - Alternative 2 would leave a 2-mile gap in the northbound I-680 managed lane in the vicinity of the I 680/SR-24 interchange. Traffic operational improvements would be made by addressing the existing major bottleneck between North Main Street and Treat Boulevard. The existing weaving issues between these interchanges would be alleviated by modifying the on- and off-ramp configuration. The existing NB truck scale facility near the Treat Boulevard off ramp would remain in its current location with access provided directly from the mainline. Trucks will access the facility on a new dedicated truck scale off-ramp.

Build Alternative 3 - Alternative 3 represents the combined project improvements proposed under Alternative 1C and Alternative 2. Alternative 3 would close the 7.5 mile "gap" between the two existing managed lane segments on I-680 by constructing a northbound express lane from Livorna Road to SR-242 and by converting the existing northbound HOV lane that runs from SR-242 to just south of the Benicia-Martinez Bridge Toll Plaza to an express lane. The existing NB truck scale facility near the Treat Boulevard off ramp would remain in its current location with access provided directly from the mainline. Trucks will access the facility on a new dedicated truck scale off-ramp.

Build Alternative 5 - Alternative 5 is comparable to Alternative 2, leaving a 2-mile gap in the managed lane and constructing braided ramps between North Main Street and Treat Boulevard; however, instead of widening or reducing lane and shoulder widths to add an express lane from the Livorna interchange to the South Main Street interchange and south of the North Main Street off-ramp to the SR-242 interchange, Alternative 5 converts the inside general-purpose lane to an express lane at these locations.

Background

NEPA process for Environmental Impact Report/Environmental Assessment (EIR/EA) is in process
Public review for Draft EIR/EA is anticipated May/June 2023
No comments received on air quality thus far
Seeking air quality conformity determination on or before December 2023
Schedule based on deadline for STP funding allocation

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?
Not a new or expanded highway project.
Improvements to I-680 NB managed lanes only.
No change in traffic volume or truck percentages on I-680.

(ii) Affects intersections at LOS D, E, or F with a significant number of diesel vehicles?
Diesel vehicles (trucks) currently represent between 6.8% and 2.7% of the AADT on I-680, based on Caltrans 2020 Traffic Census Data. Truck percentages on NB I-680 are anticipated to be between 6.7% and 2.5% in the future years (2027, 2047, and 2050) for the Build Alternatives.

Interchanges and/or intersections will not be significantly altered by the project, nor do they serve a significant number of diesel trucks.

The project would not change land uses along the corridor. Thus, the project would not increase diesel traffic.

(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_{10} or $PM_{2.5}$ implementation plan as site of violation?
No. The Project would not result in an increase of either PM_{10} or $PM_{2.5}$ levels compared to the No-Build Alternative. Additionally, the Project location is not in an area identified by the SIP as one that could violate or possibly violate the NAAQS for $PM_{2.5}$.

RTIP ID# *(required)* 21-T12-116

TIP ID# *(required)* CC-170017

Air Quality Conformity Task Force Consideration Date
3/24/2022

Project Description *(clearly describe project)*

The Contra Costa Transportation Authority (CCTA), in cooperation with the California Department of Transportation (Caltrans) and Metropolitan Transportation Commission (MTC), is proposing to complete the Interstate 680 (I-680) express lane network in Contra Costa County, California, to improve system continuity, congestion relief, and operations. The I-680 Northbound Express Lane Completion Project (Project) is part of the CCTA INNOVATE 680 Program, which seeks to implement a suite of projects that, when operating together, will address corridor-wide congestion, travel delays, and operational challenges. The Project limits on I-680 are from post mile (PM) R4.4 at the southern limit to PM 24.5 at the northern limit. More than one configuration is under consideration for the proposed Project, including the construction of a northbound express lane between Livorna Road and State Route 242 (SR-242) (PM R11.30 to R18.87, approximately 7.5 miles). In addition, the Project would convert the existing northbound high-occupancy vehicle (HOV) lane that runs from SR-242 to south of the Benicia-Martinez Bridge Toll Plaza (PM R18.87 to R22.87, approximately 4.0 miles) to an express lane.

Five alternatives are being evaluated as part of the Project: one No Build alternative and four Build Alternatives. The Build Alternatives satisfy the Project purpose and need, while avoiding and/or minimizing environmental impacts. The five alternatives are:

No Build Alternative - Under the No-Build Alternative, northbound I-680 would remain in its current configuration and no improvements made.

Build Alternative 1C - Alternative 1C proposes to close the 7.5 mile “gap” between the two existing managed lane segments by constructing a northbound express lane from Livorna Road to SR-242 and by converting the existing northbound HOV lane that runs from SR-242 to just south of the Benicia-Martinez Bridge Toll Plaza to an express lane. The existing NB truck scale facility, south of the Treat Boulevard overcrossing structure between northbound I-680 and the Treat Boulevard off-ramp, would remain in its current condition and location with minor restriping of the off-ramp gore.

Build Alternative 2 - Alternative 2 would leave a 2-mile gap in the northbound I-680 managed lane in the vicinity of the I 680/SR-24 interchange. Traffic operational improvements would be made by addressing the existing major bottleneck between North Main Street and Treat Boulevard. The existing weaving issues between these interchanges would be alleviated by modifying the on- and off-ramp configuration. The existing NB truck scale facility near the Treat Boulevard off ramp would remain in its current location with access provided directly from the mainline. Trucks will access the facility on a new dedicated truck scale off-ramp.

Build Alternative 3 - Alternative 3 represents the combined project improvements proposed under Alternative 1C and Alternative 2. Alternative 3 would close the 7.5 mile “gap” between the two existing managed lane segments on I-680 by constructing a northbound express lane from Livorna Road to SR-242 and by converting the existing northbound HOV lane that runs from SR-242 to just south of the Benicia-Martinez Bridge Toll Plaza to an express lane. The existing NB truck scale facility near the Treat Boulevard off ramp would remain in its current location with access provided directly from the mainline. Trucks will access the facility on a new dedicated truck scale off-ramp.

Build Alternative 5 - Alternative 5 is comparable to Alternative 2, leaving a 2-mile gap in the managed lane and constructing braided ramps between North Main Street and Treat Boulevard; however, instead of widening or reducing lane and shoulder widths to add an express lane from the Livorna interchange to the South Main Street interchange and south of the North Main Street off-ramp to the SR-242 interchange, Alternative 5 converts the inside general-purpose lane to an express lane at these locations.

Type of Project:
Express Lane Extension/Gap Closure, Convert HOV lane to Express Lane

County	***Narrative Location/Route & Postmiles***
Contra Costa County	Construct an Express Lane on NB I680 from Livorna Rd. to SR-242 (PM R11.30 to R18.87, approximately 7.5 miles). Convert existing HOV lane to Express Lane on NB I-680 from Livorna to Benicia-Martinez Bridge (PM R18.87 to R22.87, approximately 4.0 miles) . **Caltrans Projects – EA#** 04-0Q3100

Lead Agency: Contra Costa Transportation Authority (CCTA)

Contact Person	*Phone#*	*Fax#*	*Email*
Stephanie Hu	(925) 256-4740		StephanieH@ccta.net

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

Categorical Exclusion (NEPA)		**EA or Draft EIS**	**FONSI or Final EIS**	**PS&E or Construction**	*Other*
	X				

Scheduled Date of Federal Action: June 2024

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

	Section 326 – Categorical Exclusion		**Section 327 – Non-Categorical Exclusion**
		X	

Current Programming Dates *(as appropriate)*

	PE/Environmental	**ENG**	**ROW**	**CON**
Start	June 2020	June 2024	June 2024	January 2026
End	June 2024	December 2026	December 2026	December 2027

Project Purpose and Need (Summary): *(please be brief)*

The purpose of the proposed Project is to:

- Reduce peak-period congestion and delay on northbound I-680.
- Reduce travel time and improve travel time reliability for travelers in the corridor.
- Encourage use of high occupancy vehicles and transit service.
- Optimize use of the existing HOV lane capacity in the I-680 corridor.
- Offer non-carpool eligible drivers a reliable travel time option.

The need for the project to address existing transportation problems within the PSL are:

- Congestion – Northbound I-680 general-purpose lanes within the area experience substantial congestion (over 30 minutes of delay) during peak hours.
- System Continuity – There is a 7.5-mile gap in the existing northbound I-680 managed lane system between Livorna Road and SR-242; system continuity is lacking through this area, diminishing the effectiveness of the managed lane system, and increasing travel time for all users.
- Operational Improvements – The weaving movement between Lawrence Way and Treat Boulevard creates a bottleneck on I-680 and a traffic queue as far back as Livorna Road during the peak traffic period. The situation is compounded by the gap in the managed lane system.

Surrounding Land Use/Traffic Generators *(especially effect on diesel traffic)*

The Project is located primarily within the cities of Walnut Creek, Pleasant Hill, Concord, and Martinez in Contra Costa County, California (Figure 1). The Project is bounded from Fostoria Way to slightly north of Marina Vista Road by an urbanized area with residential and commercial development south of State Route 4 (SR-4), and industrial and residential areas north of SR-4 (Figure 2). The Waterbird Regional Preserve, a 198-acre regional park that primarily consists of the Al McNabney Marsh, lies east of I-680 at the northern end of the Project.

I-680 is a major north-south freeway connecting the Southern San Francisco Bay Area with Interstate 80 (I-80), which crosses the Central Valley including the Sacramento metropolitan area. I-680 passes through Santa Clara, Alameda, Contra Costa, and Solano counties. I-680 is part of the National Network under the Surface Transportation Assistance Act (STAA) and provides connections to other National Network routes (such as I-580). I-680 also provides connections to STAA Terminal Access Routes and California Legal Truck Routes such as SR 84.

Land uses adjacent to the project area consist of both urban/developed land and open space and include industrial, residential, public/semi-public development. The existing (i.e., 2020) average truck volumes and percentages for the project area are provided in the table below. The project would not result in changes to land use that would affect diesel truck traffic in the area. Truck AADTs range between 9,440 and 5,643 (5.46 to 3.23 percent) based on the land uses served by this segment of I-680.

Figure 1. Regional Location and Project Vicinity

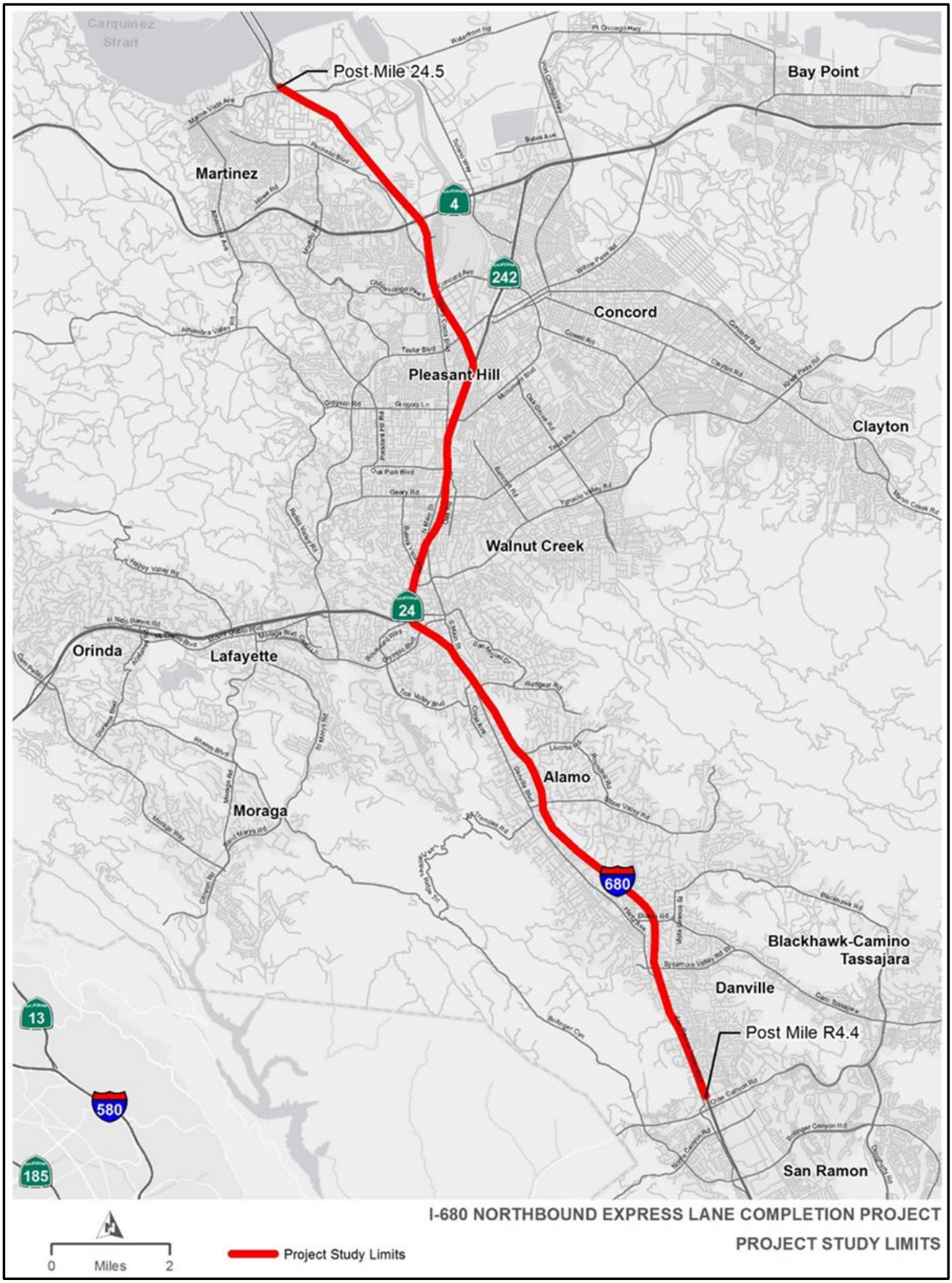


Figure 2. Project Study Limits

Brief summary of assumptions and methodology used for conducting analysis

Kittelson & Associates, Inc. developed the traffic forecasts by using the Contra Costa travel demand model. The model did not forecast truck percentages, therefore existing condition truck percentages from Caltrans 2020 Census Data are used to estimate truck AADT based on traffic forecasts for the No-Build conditions. The project Build Alternatives would not cause any changes in truck volumes, as it will not change adjacent land uses nor increase capacity for truck traffic.

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

Opening Year 2027

I-680 NB Location	Total NB AADT					NB Truck AADT					% Trucks				
	No Build	Alt 1C	Alt 2	Alt 3	Alt 5	No Build	Alt 1C	Alt 2	Alt 3	Alt 5	No Build	Alt 1C	Alt 2	Alt 3	Alt 5
N. of Alcosta	91,516	93,007	92,745	93,024	92,032	4,850	4,850	4,850	4,850	4,850	5.3	5.2	5.2	5.2	5.3
N. of Crow Canyon	103,687	105,506	105,216	105,536	104,496	6,636	6,636	6,636	6,636	6,636	6.4	6.3	6.3	6.3	6.4
N. of Sycamore Valley	108,570	111,136	110,667	111,103	109,688	6,948	6,948	6,948	6,948	6,948	6.4	6.3	6.3	6.3	6.3
N. of El Cerro	108,000	110,502	110,070	110,468	109,205	6,912	6,912	6,912	6,912	6,912	6.4	6.3	6.3	6.3	6.3
N. of Stone Valley	108,685	115,066	114,532	115,011	112,493	6,956	6,956	6,956	6,956	6,956	6.4	6.0	6.1	6.0	6.2
N. of Livorna	112,630	119,186	118,685	119,176	113,460	7,208	7,208	7,208	7,208	7,208	6.4	6.0	6.1	6.0	6.4
N. of Rudgear	115,699	120,939	119,237	120,922	116,654	7,405	7,405	7,405	7,405	7,405	6.4	6.1	6.2	6.1	6.3
S. of Olympic	105,720	111,041	108,521	111,034	106,619	6,766	6,766	6,766	6,766	6,766	6.4	6.1	6.2	6.1	6.3
N. of Olympic	85,629	93,027	88,814	93,405	87,222	5,480	5,480	5,480	5,480	5,480	6.4	5.9	6.2	5.9	6.3
S. of Ygnacio Valley	143,147	151,725	146,855	151,606	143,156	5,869	5,869	5,869	5,869	5,869	4.1	3.9	4.0	3.9	4.1
S. of N. Main	143,147	151,725	146,855	151,606	143,156	5,440	5,440	5,440	5,440	5,440	3.8	3.6	3.7	3.6	3.8
S. of Treat	155,772	165,728	147,479	145,042	137,308	4,206	4,206	4,206	4,206	4,206	2.7	2.5	2.9	2.9	3.1
N. of Oak Park	156,623	167,534	167,679	168,146	157,423	6,108	6,108	6,108	6,108	6,108	3.9	3.6	3.6	3.6	3.9
N. of Monument	146,856	156,101	155,683	156,224	147,002	5,727	5,727	5,727	5,727	5,727	3.9	3.7	3.7	3.7	3.9
S. of Willow Pass	77,561	86,693	86,460	86,605	77,947	3,800	3,800	3,800	3,800	3,800	4.9	4.4	4.4	4.4	4.9
N. of Willow Pass	89,628	96,006	95,751	95,862	90,976	4,392	4,392	4,392	4,392	4,392	4.9	4.6	4.6	4.6	4.8
N. of Concord Ave.	98,156	104,065	103,928	104,024	100,553	2,650	2,650	2,650	2,650	2,650	2.7	2.5	2.6	2.5	2.6
N. of SR 4	90,884	94,943	94,850	94,964	91,431	6,180	6,180	6,180	6,180	6,180	6.8	6.5	6.5	6.5	6.8
S. of Waterfront	86,742	89,688	89,596	89,706	86,802	5,898	5,898	5,898	5,898	5,898	6.8	6.6	6.6	6.6	6.8
N. of Waterfront	91,196	93,371	93,256	93,383	91,629	6,201	6,201	6,201	6,201	6,201	6.8	6.6	6.6	6.6	6.8
Benicia Bridge	91,196	93,371	93,256	93,383	91,629	6,201	6,201	6,201	6,201	6,201	6.8	6.6	6.6	6.6	6.8

Source: Based on traffic forecasts provided by Kittelson & Associates, Inc. (Innovate680_Segments_20220216.xlsx)

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

Design Year 2047

I-680 NB Location	Total NB AADT					NB Truck AADT					% Trucks				
	No Build	Alt 1C	Alt 2	Alt 3	Alt 5	No Build	Alt 1C	Alt 2	Alt 3	Alt 5	No Build	Alt 1C	Alt 2	Alt 3	Alt 5
N. of Alcosta	106,838	108,417	108,067	108,393	107,306	5,662	5,662	5,662	5,662	5,662	5.3	5.2	5.2	5.2	5.3
N. of Crow Canyon	110,525	112,732	112,454	112,690	111,230	7,074	7,074	7,074	7,074	7,074	6.4	6.3	6.3	6.3	6.4
N. of Sycamore Valley	116,495	119,232	118,860	119,383	117,515	7,456	7,456	7,456	7,456	7,456	6.4	6.3	6.3	6.2	6.3
N. of El Cerro	115,010	117,789	117,418	117,792	116,135	7,361	7,361	7,361	7,361	7,361	6.4	6.2	6.3	6.2	6.3
N. of Stone Valley	116,607	123,264	122,835	123,248	120,880	7,463	7,463	7,463	7,463	7,463	6.4	6.1	6.1	6.1	6.2
N. of Livorna	119,352	127,460	126,936	127,661	120,631	7,639	7,639	7,639	7,639	7,639	6.4	6.0	6.0	6.0	6.3
N. of Rudgear	123,731	129,695	128,449	129,677	123,806	7,919	7,919	7,919	7,919	7,919	6.4	6.1	6.2	6.1	6.4
S. of Olympic	112,644	119,091	117,054	119,095	112,901	7,209	7,209	7,209	7,209	7,209	6.4	6.1	6.2	6.1	6.4
N. of Olympic	92,429	101,902	96,830	102,285	92,558	5,915	5,915	5,915	5,915	5,915	6.4	5.8	6.1	5.8	6.4
S. of Ygnacio Valley	149,828	161,563	154,059	161,256	148,596	6,143	6,143	6,143	6,143	6,143	4.1	3.8	4.0	3.8	4.1
S. of N. Main	149,828	161,563	154,059	161,256	148,596	5,693	5,693	5,693	5,693	5,693	3.8	3.5	3.7	3.5	3.8
S. of Treat	163,277	175,949	156,727	157,132	143,244	4,408	4,408	4,408	4,408	4,408	2.7	2.5	2.8	2.8	3.1
N. of Oak Park	164,653	177,607	177,447	178,456	164,027	6,421	6,421	6,421	6,421	6,421	3.9	3.6	3.6	3.6	3.9
N. of Monument	156,073	166,474	166,230	166,715	155,040	6,087	6,087	6,087	6,087	6,087	3.9	3.7	3.7	3.7	3.9
S. of Willow Pass	84,850	94,489	94,491	94,655	84,176	4,158	4,158	4,158	4,158	4,158	4.9	4.4	4.4	4.4	4.9
N. of Willow Pass	98,457	105,012	104,766	105,051	99,150	4,824	4,824	4,824	4,824	4,824	4.9	4.6	4.6	4.6	4.9
N. of Concord Ave.	108,394	114,349	114,202	114,473	109,775	2,927	2,927	2,927	2,927	2,927	2.7	2.6	2.6	2.6	2.7
N. of SR 4	102,234	106,246	106,031	106,294	101,367	6,952	6,952	6,952	6,952	6,952	6.8	6.5	6.6	6.5	6.9
S. of Waterfront	98,899	101,492	101,234	101,484	98,543	6,725	6,725	6,725	6,725	6,725	6.8	6.6	6.6	6.6	6.8
N. of Waterfront	106,809	109,013	108,843	108,987	106,784	7,263	7,263	7,263	7,263	7,263	6.8	6.7	6.7	6.7	6.8
Benicia Bridge	106,809	109,013	108,843	108,987	106,784	7,263	7,263	7,263	7,263	7,263	6.8	6.7	6.7	6.7	6.8

Source: Based on traffic forecasts provided by Kittelson & Associates, Inc. (Innovate680_Segments_20220216.xlsx)

RTP Horizon Year 2050

I-680 NB Location	Total NB AADT					NB Truck AADT					% Trucks				
	No Build	Alt 1C	Alt 2	Alt 3	Alt 5	No Build	Alt 1C	Alt 2	Alt 3	Alt 5	No Build	Alt 1C	Alt 2	Alt 3	Alt 5
N. of Alcosta	109,137	110,728	110,365	110,699	109,598	5,784	5,784	5,784	5,784	5,784	5.3	5.2	5.2	5.2	5.3
N. of Crow Canyon	111,550	113,816	113,540	113,763	112,240	7,139	7,139	7,139	7,139	7,139	6.4	6.3	6.3	6.3	6.4
N. of Sycamore Valley	117,684	120,446	120,089	120,625	118,689	7,532	7,532	7,532	7,532	7,532	6.4	6.3	6.3	6.2	6.3
N. of El Cerro	116,061	118,882	118,521	118,891	117,175	7,428	7,428	7,428	7,428	7,428	6.4	6.2	6.3	6.2	6.3
N. of Stone Valley	117,795	124,493	124,081	124,484	122,138	7,539	7,539	7,539	7,539	7,539	6.4	6.1	6.1	6.1	6.2
N. of Livorna	120,360	128,701	128,174	128,933	121,707	7,703	7,703	7,703	7,703	7,703	6.4	6.0	6.0	6.0	6.3
N. of Rudgear	124,936	131,009	129,831	130,990	124,879	7,996	7,996	7,996	7,996	7,996	6.4	6.1	6.2	6.1	6.4
S. of Olympic	113,683	120,298	118,334	120,305	113,843	7,276	7,276	7,276	7,276	7,276	6.4	6.0	6.1	6.0	6.4
N. of Olympic	93,450	103,233	98,033	103,617	93,359	5,981	5,981	5,981	5,981	5,981	6.4	5.8	6.1	5.8	6.4
S. of Ygnacio Valley	150,830	163,039	155,139	162,703	149,413	6,184	6,184	6,184	6,184	6,184	4.1	3.8	4.0	3.8	4.1
S. of N. Main	150,830	163,039	155,139	162,703	149,413	5,732	5,732	5,732	5,732	5,732	3.8	3.5	3.7	3.5	3.8
S. of Treat	164,403	177,482	158,114	158,946	144,134	4,439	4,439	4,439	4,439	4,439	2.7	2.5	2.8	2.8	3.1
N. of Oak Park	165,858	179,118	178,912	180,002	165,017	6,468	6,468	6,468	6,468	6,468	3.9	3.6	3.6	3.6	3.9
N. of Monument	157,456	168,030	167,812	168,289	156,246	6,141	6,141	6,141	6,141	6,141	3.9	3.7	3.7	3.6	3.9
S. of Willow Pass	85,944	95,659	95,696	95,862	85,110	4,211	4,211	4,211	4,211	4,211	4.9	4.4	4.4	4.4	4.9
N. of Willow Pass	99,782	106,363	106,119	106,430	100,377	4,889	4,889	4,889	4,889	4,889	4.9	4.6	4.6	4.6	4.9
N. of Concord Ave.	109,929	115,891	115,743	116,040	111,159	2,968	2,968	2,968	2,968	2,968	2.7	2.6	2.6	2.6	2.7
N. of SR 4	103,936	107,942	107,708	107,993	102,857	7,068	7,068	7,068	7,068	7,068	6.8	6.5	6.6	6.5	6.9
S. of Waterfront	100,723	103,262	102,980	103,251	100,304	6,849	6,849	6,849	6,849	6,849	6.8	6.6	6.7	6.6	6.8
N. of Waterfront	109,151	111,359	111,181	111,328	109,057	7,422	7,422	7,422	7,422	7,422	6.8	6.7	6.7	6.7	6.8
Benicia Bridge	109,151	111,359	111,181	111,328	109,057	7,422	7,422	7,422	7,422	7,422	6.8	6.7	6.7	6.7	6.8

Source: Based on traffic forecasts provided by Kittelson & Associates, Inc. (Innovate680_Segments_20220216.xlsx)

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

Not Applicable – facility is an Interstate corridor.

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 – facility is an Interstate corridor.

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 – facility is an Interstate corridor.

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 – facility is an Interstate corridor.

Describe potential traffic redistribution effects of congestion relief *(impact on other facilities)*

The proposed Project would implement congestion priced tolling in the proposed express lane to provide a more reliable travel time option to travelers. It would encourage use of high occupancy vehicles and transit service by offering free access to the express lane. The proposed Project would also shift SOV drivers choosing to pay a toll from the general-purpose lanes to the Express Lane. It would also reduce recurring peak-period traffic congestion and delay on northbound I-680, which would reduce travel times for all travelers. In addition, the Project would optimize the use of the existing HOV lane capacity north of SR-242 by converting the HOV lane to an express lane. It should be noted that only two-axle vehicles are permitted in Express Lanes.

Comments/Explanation/Details (please be brief)

This project does not meet the definition of a Project of Air Quality Concern (POAQC) as defined by 40 CFR 93.123(b)(1). Specifically:

- The Project will not result in a significant number or significant increase in diesel vehicles in the area.
- The Build Alternatives do not change the number of diesel vehicles using the corridor nor do they degrade the LOS of the interchanges in in the corridor. The primary purpose of the project is to provide a reliable travel time option, encourage use of high occupancy vehicles and transit service while, at the same time, optimizing the use of the existing HOV lane capacity in the I-680 corridor to better meet current and future traffic demands for personal vehicles and transit (i.e., gasoline and electric powered vehicles).
- The Project does not involve a bus terminal, rail terminal, or transfer points involving a significant number of diesel vehicles congregating at a single location.
- The I-680 corridor is not an area identified by the SIP as a location where the NAAQS for $PM_{2.5}$ could be violated or possibly violated.

CCTA Northbound 680 Express Lane Completion Project

Prepared for the Bay Area Air Quality Conformity Task Force

Revised December 22, 2022

Purpose

- Bay Area Air Quality Conformity Task Force
  - Last Met March 29, 2022 to discuss the Project
  - Presented Alternatives 1C, 2, 3 and No-Build
  - Project determined **not** to be a POAQC
- Introduce a new Build Alternative 5 to the Project
  - Alternative 5 does not change land use along the corridor
  - Truck percentages along the corridor are consistent with other Build Alternatives
  - Information from the initial presentation not pertaining to Alternative 5 have been moved to Background Slides

PROJECT OVERVIEW

Project Limits

LEGEND/KEY

- Project limits
- SB & NB Express Lanes

Project Purpose

- **The purpose of the I-680 Express Lane Completion Project is to:**


Reduce peak-period congestion and delay

Optimize use of existing HOV lane capacity


Improve travel time reliability

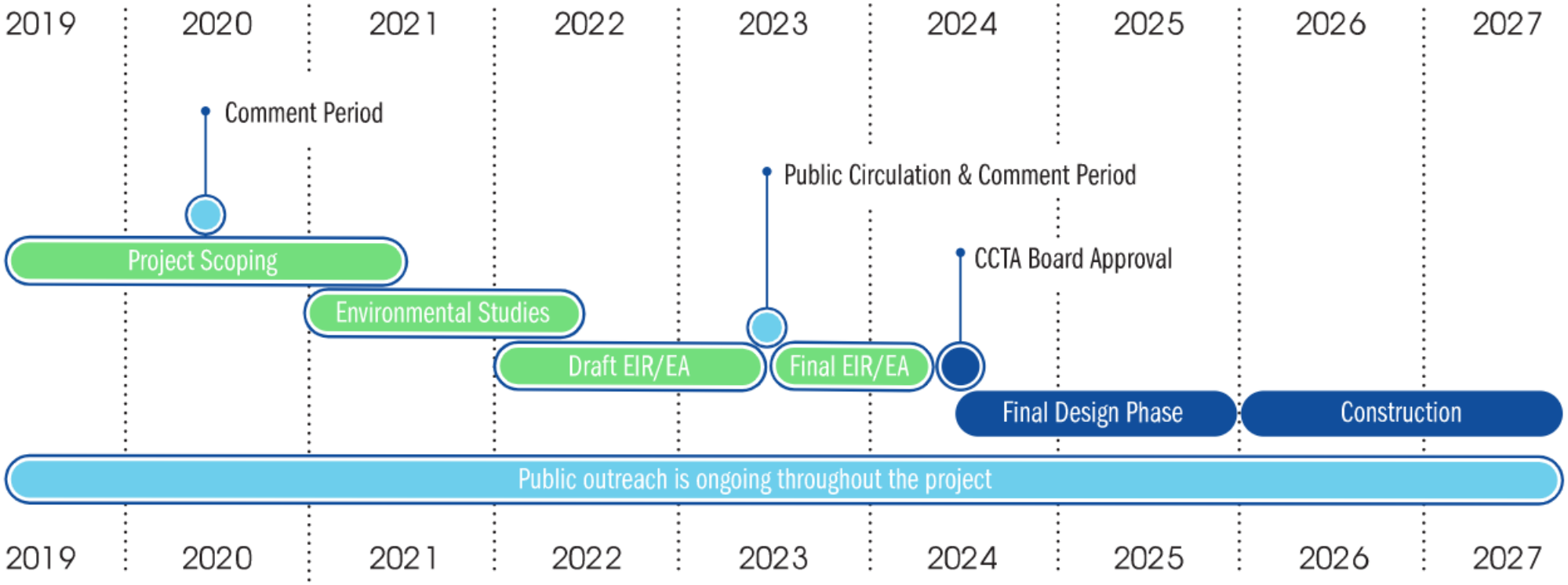

Provide efficient travel options for all vehicles

Project Need

The project is needed to address existing transportation problems within the project study limits:

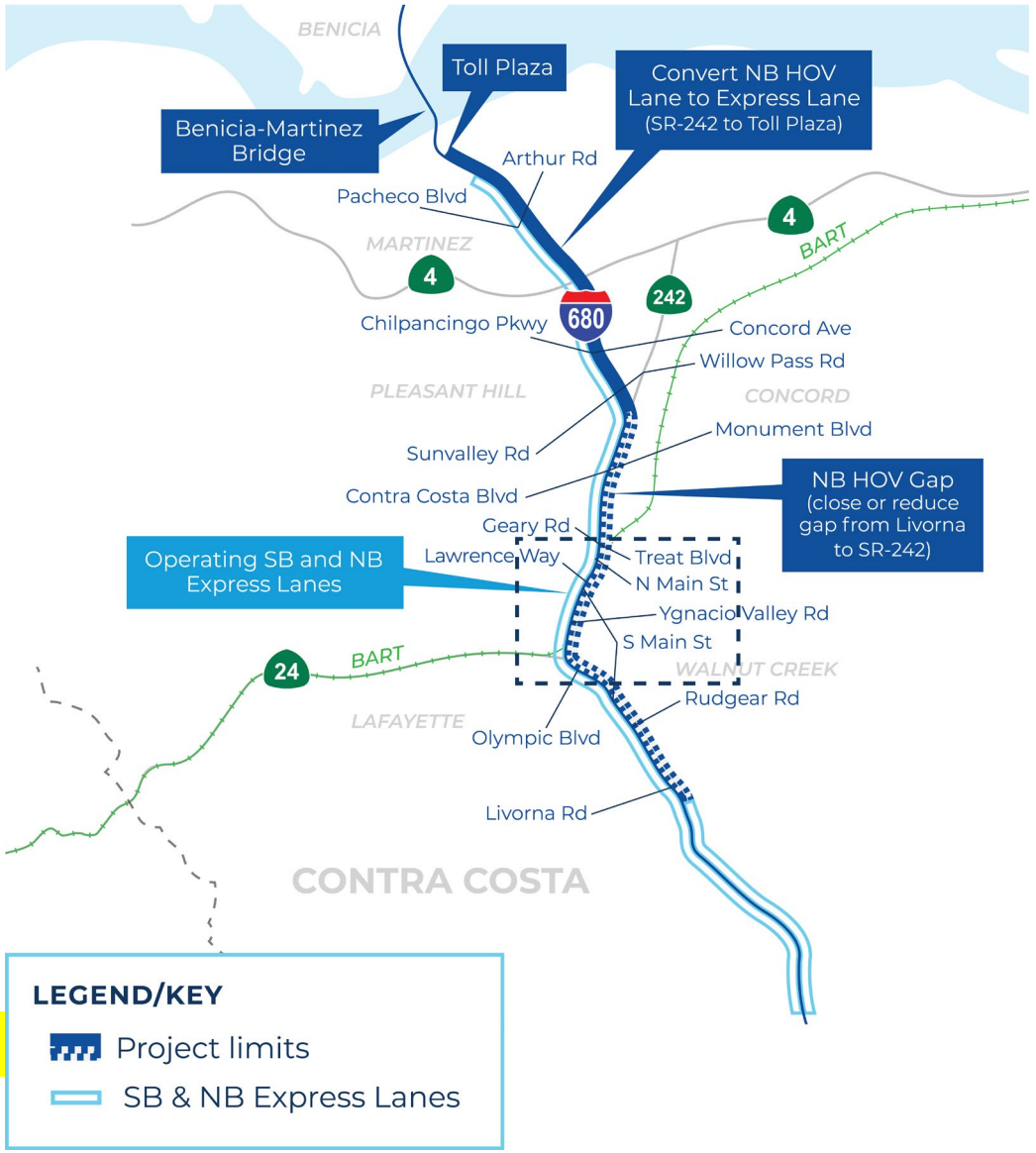
- **Congestion** – Northbound I-680 general-purpose lanes within the area experience substantial congestion (over 30 minutes of delay) during peak hours.
- **System Continuity** – There is a 7.5-mile gap in the existing northbound I-680 managed lane system between Livorna Road and SR-242; system continuity is lacking through this area, diminishing the effectiveness of the managed lane system, and increasing travel time for all users.
- **Operational Improvements** – The weaving movement between Lawrence Way and Treat Boulevard creates a bottleneck on I-680 and a traffic queue as far back as Livorna Road during the peak traffic period. The situation is compounded by the gap in the managed lane system.

Project Schedule



Build Alternatives

- Four Build Alternatives
  - **Alternative 1C**
    - Close the Gap with Realignment
  - **Alternative 2**
    - Reduce the Gap plus Braided Ramps
  - **Alternative 3**
    - Close the Gap with Realignment plus Braided Ramps
  - **Alternative 5**
    - Reduce the Gap with GP conversion plus Braided Ramps



Alternative 5

- **Convert NB I-680 Inside General Purpose Lane to an Express Lane**
  From Livorna Road to North of South Main Street
  - From South of North Main Street to the SR-242 Interchange
- **Construct Braided Ramps (Similar to Alternatives 2 & 3)**
  - Grade Separate Lawrence Way On-Ramp & Treat Boulevard Off-Ramp
  - Treat Boulevard Exits at Existing North Main Street Off-Ramp
  - NB Truck Scales Exit at Dedicated Off-Ramp
- **Convert Existing HOV Lane to Express Lane (All Build Alternatives)**
  - From SR-242 Interchange to South of Benicia-Martinez Toll Plaza

Opening Year 2027 AADT Summary
@ I-680 North of Oak Park

Alternative	Truck AADT	Total AADT**	% Trucks
No Build*	6,108	156,623	3.9%
Alternative 1C	6,108	167,534	3.6%
Alternative 2	6,108	167,679	3.6%
Alternative 3	6,108	168,146	3.6%
Alternative 5	6,108	157,423	3.9%

Source: Kittleson & Associates Traffic Forecast, 2022
*Truck Percentage from Caltrans 2020 Census Data applied to No Build AADT
**General Purpose Lanes plus Express Lane

Build Alternatives do not add lane capacity that is available to truck traffic.

Design Year 2047 AADT Summary
@ I-680 North of Oak Park

Alternative	Truck AADT	Total AADT**	% Trucks
No Build*	6,421	164,653	3.9%
Alternative 1C	6,421	177,607	3.6%
Alternative 2	6,421	177,447	3.6%
Alternative 3	6,421	178,456	3.6%
Alternative 5	6,421	164,027	3.9%

Source: Kittleson & Associates Traffic Forecast, 2022
*Truck Percentage from Caltrans 2020 Census Data applied to No Build AADT
**General Purpose Lanes plus Express Lane

Build Alternatives do not add lane capacity that is available to truck traffic.

Design Year 2047 Vehicle Hours of Delay

	No Build	Alt 1C	Alt 2	Alt 3	Alt 5
VHT (hr.)	45,428	44,280	41,689	46,166	41,996
Total delay (hr.)	27,101	25,390	22,607	27,046	23,778
Avg delay (sec/veh)	499	468	414	503	439

Source: DKS Associates I-680 NB Express Lanes VISSIM Operations Analysis, 2022

Not a Project of Air Quality Concern

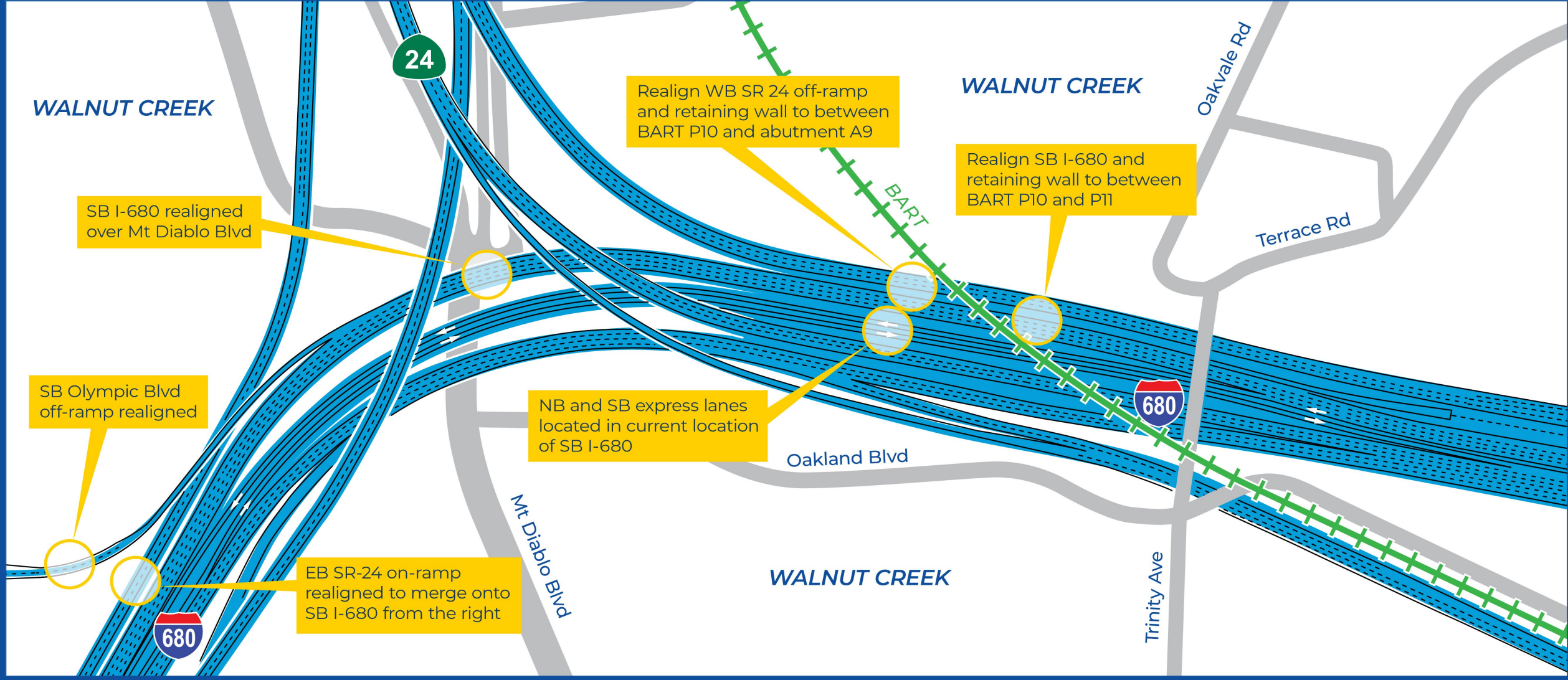
- Diesel vehicles (trucks) currently represent between 6.8% and 2.7% of the AADT on I-680, based on Caltrans 2020 Traffic Census Data. Truck percentages on NB I-680 are anticipated to be between 6.7% and 2.5% in the future years (2027, 2047, and 2050) for the Build Alternatives.
- Interchanges and/or intersections will not be significantly altered by the project, nor do they serve a significant number of diesel trucks.
- The project would not change land uses along the corridor. Thus, the project would not increase diesel traffic.
- Statements on this slide are valid for Alternative 5.

Questions

THANK YOU

Background

PROJECT ALTERNATIVES

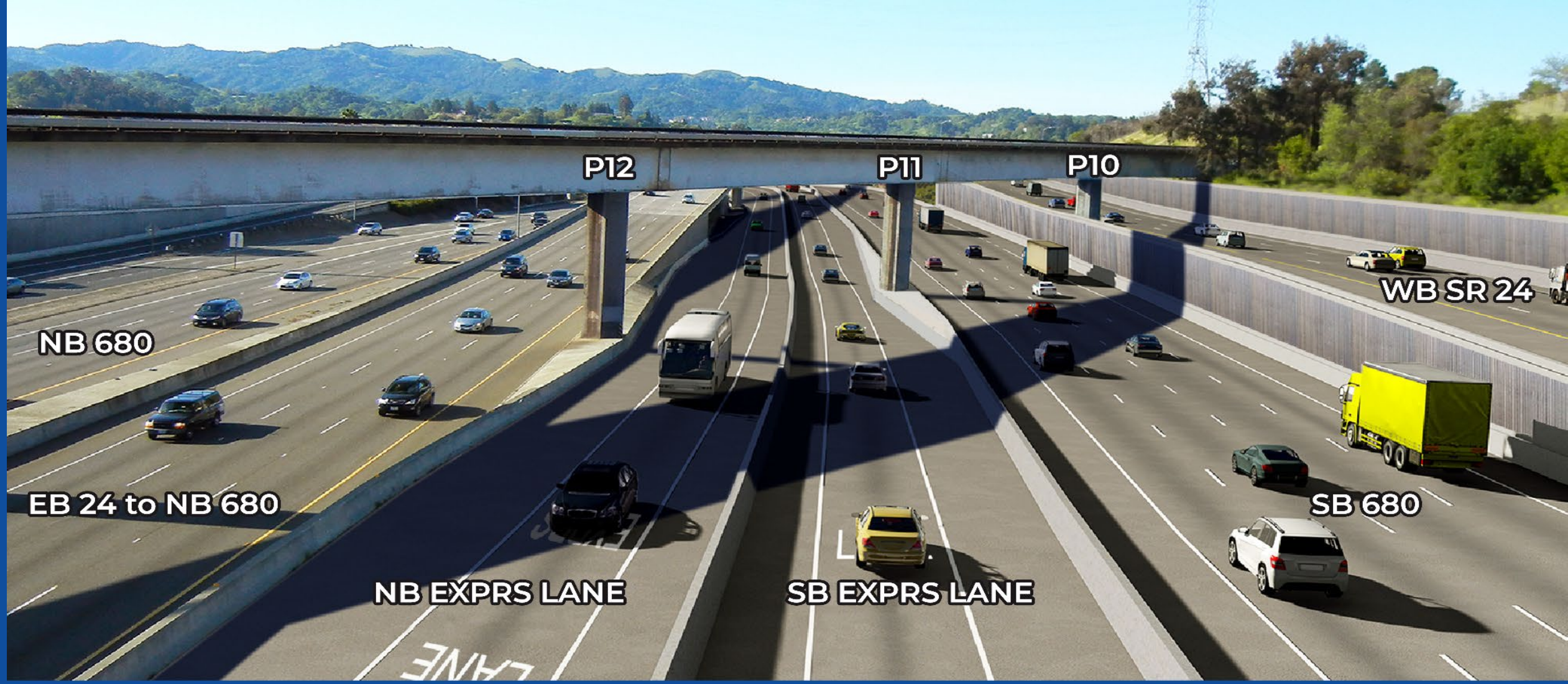


Innovate 680 | Express Lane Completion Project

Alternative 1C — Close the Gap with Realignment

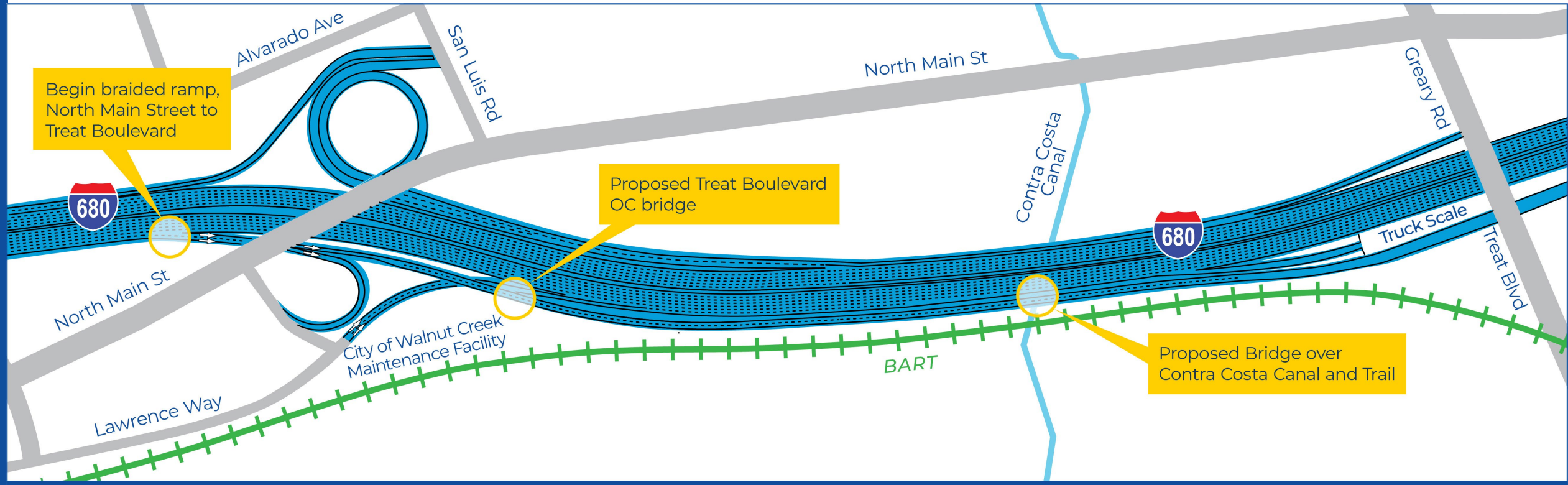
Innovate 680 | Express Lane Completion Project

Existing Condition



Innovate 680 | Express Lane Completion Project

Alternative 1C



Innovate 680 | Express Lane Completion Project

Alternative 2 — Reduce the Gap plus Braided Ramps

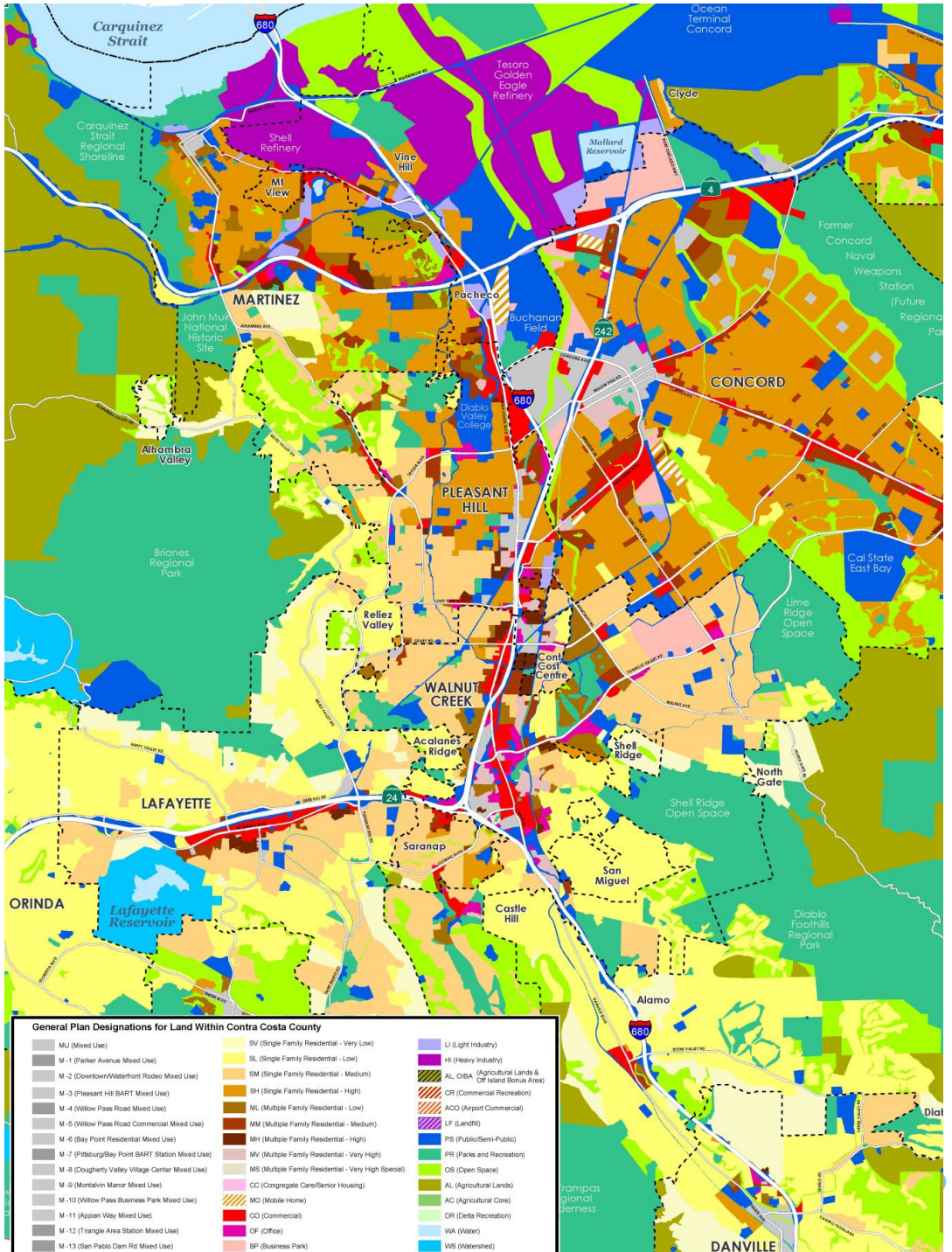
Innovate 680 | Express Lane Completion Project

Alternative 3 — Close the Gap with Realignment plus Braided Ramps

Land Uses

The project location and adjacent study area land uses are predominately:

- Commercial and Retail
- Residential
- Industrial
- Research and Development
- Open Space/Recreation



Application of Criteria for a Project of Air Quality Concern
Project Title: Open Road Tolling Conversion Northern Bridges Project
Project Summary for Air Quality Conformity Task Force Meeting: January 26, 2023

Description

- The Bay Area Toll Authority (BATA), in cooperation with the California Department of Transportation (Caltrans), proposes to convert the existing all All-Electronic Tolling (AET) systems to Open Road Tolling (ORT) systems at the Antioch Bridge, Benicia-Martinez Bridge, and Carquinez Bridge in Contra Costa and Solano Counties.
- The purpose of the Open Road Tolling Conversion Northern Bridges Project (Project) is to:
    - Replace aging tolling system infrastructure to improve operational efficiency and mobility for all users through bridge toll plazas; and
    - Enhance safety by eliminating the need to pass through the existing toll plazas.
- Remove the existing toll booths, tolling equipment, and canopy structures.
- Construct new overhead toll gantries.
- The Project is needed to address operational and safety deficiencies for vehicles traveling through the BATA toll collection facilities at toll plaza locations.
- The removal, replacement, or relocation of existing roadway signs, as needed, for the ORT conversion.
- Roadside signpost replacement and installation.
- Extending electrical and communication conduit and fiber would require trenching and/or horizontal directional drilling to bring these services to the electronic tolling equipment, signage, and toll equipment building.
- Trenching for electrical and fiber conduit would be up to 3-ft deep and up to 2-ft wide. Auxiliary cabinets may be required between toll equipment buildings and gantries.
- Modifications to drainage systems, grading, lighting, landscaping, and necessary utility connections/relocations for the new toll collection facilities.
- The Project would not be adding any additional lanes but reconfiguring and restriping existing lanes.
- The Project would reduce the number of lanes at each of the toll plazas.
- None of the proposed lane reconfigurations result in a lane that would exceed 1-mile in length.

Background

- Project documentation is being prepared in compliance with the California Environmental Quality Act (CEQA) and the National Environmental Policy Act (NEPA) as necessary. Caltrans is the lead agency under NEPA, and BATA is the lead agency under CEQA. BATA is the project sponsor.
- A CEQA Categorical Exemption and NEPA Categorical Exclusion with supporting technical studies currently in progress.
- The Project is programmed under the Toll Rehabilitation Program (TIP ID REG130002), which identifies that the 7 San Francisco Bay Area state-owned toll bridges under the rehabilitation program are exempt from Air Quality Conformity under ***40 Code of Federal Regulations (CFR) 93.126 – Safety – Widening narrow pavements or reconstructing bridges (no additional travel lanes)***.
- Seeking concurrence that the Project is exempt from Air Quality Conformity prior to completion of CEQA CE/NEPA CE by May 2023, or earlier.
- No public circulation is required.

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?

- Not a new or expanded highway project
- Replacement of older tolling technology and reconfiguration of existing lanes—no additional lanes on SR-160, I-680, or I-80 corridors within the Project limits.
- No change in traffic volume or truck percentages on SR-160, I-680, or I-80 corridors within the Project limits

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

- No intersections are modified by this Project.
- No intersections are anticipated to be significantly affected by this Project.

(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_{10} or $PM_{2.5}$ implementation plan as site of violation?

- 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 PM2.5 National Ambient Air Quality Standards (NAAQS). As a result, new state implementation plan (SIP) provisions are not necessary to demonstrate how the air basin will attain the standard.

RTIP ID# *(required)* 21-T01-005

TIP ID# *(required)* REG130002

Air Quality Conformity Task Force Consideration Date
January 26, 2023

Project Description *(clearly describe project)*
The Bay Area Toll Authority (BATA), in cooperation with the California Department of Transportation (Caltrans), proposes to convert the existing all All-Electronic Tolling (AET) systems to Open Road Tolling (ORT) systems at the Antioch Bridge, Benicia-Martinez Bridge, and Carquinez Bridge. Refer to Attachment A for a figure showing the Project Location.

The proposed Open Road Tolling Conversion Northern Bridges Project (Project) is located at the toll plazas for the Antioch Bridge, Benicia-Martinez Bridge, and Carquinez Bridge in Contra Costa and Solano Counties. Refer to Attachment B for the Project limits. The Project would provide toll discounts to high occupancy vehicles with three or more passengers (HOV 3+) at all three bridge locations. The following describes the proposed conversion activities for each location:

- Antioch Bridge Toll Plaza (Northbound [NB] State Route 160 [SR-160])
    - Remove the existing toll booths, tolling equipment and canopy structure on SR-160 at approximately postmile (PM) 0.7.
    - Construct a new overhead toll gantry.
    - Construct a toll equipment building near the new toll gantry.
    - Restripe to one lane for combined general purpose (GP) lane and high- occupancy vehicle (HOV) lane use at the proposed gantry.
    - Minor pavement widening of up to 5-feet wide for about 200 feet in length at approximately PM 0.8
    - NB Wilbur Avenue on-ramp would remain open with modifications to on-ramp striping and reconstruction of the gore area.
    - Grind and overlay hot mix asphalt (HMA) pavement approximately between PM 0.3 and PM 0.8.
    - Maintain mainline access to and from the toll administration building and parking lot.
    - Install new tolling equipment on new overhead gantry to convert to ORT and install overhead and roadside signage.
    - Connection to a power source would require a temporary construction easement (TCE) within City of Oakley right-of-way (ROW). The approximate 2-feet (ft) wide and 3-ft deep utility trench will extend up to 2-ft in length.

- Benicia-Martinez Bridge Toll Plaza (NB Interstate 680 [I-680])
    - Remove the existing toll booths and toll equipment along NB I-680 between PM 24.5 and PM 24.6 and modify the existing toll canopy structure.
    - Install new electronic tolling equipment on the existing toll plaza canopy to convert to ORT and install overhead and roadside signage.
    - Construct a new toll equipment building adjacent to the existing toll canopy.
    - Restripe to four GP lanes and two HOV lanes on I-680 at the existing toll plaza.
    - Grind and overlay HMA pavement approximately between PM 24.5 and PM 24.9
    - Maintain mainline access to and from the toll administration building and parking lot(s).

- Carquinez Bridge Toll Plaza (Eastbound [EB] Interstate 80 [I-80])
    - Remove the existing toll booths, tolling equipment, and canopy structure along I-80 between PM 0.5 and PM 0.6.
    - Construct a new overhead toll gantry.
    - Construct a new toll equipment building adjacent to the new toll gantry.
    - Restripe to four GP lanes and one HOV lane at the proposed gantry.
    - Reconstruct pavement approximately between PM 0.5 and PM 0.8.
    - Pavement widening in the median of I-80, approximately between PM 0.4 and PM 0.5
    - Grind and overlay HMA pavement approximately between PM 0.35 and PM 0.5, and between PM 0.7 and PM 0.95.
    - Maintain mainline access to and from the toll administration and maintenance building and parking lot(s).
    - Install new tolling equipment on new overhead gantry to convert to ORT and install overhead and roadside signage, which includes replacing overhead signs on the Carquinez Bridge.

All proposed work would primarily occur within Caltrans' ROW, with the exception of a small area located in the City of Oakley, required for utility trenching during construction. Construction is anticipated to take approximately 15 months and is planned to begin in early 2025. Demolition of existing tolling infrastructure would occur following the installation and testing of the new ORT system.

Type of Project:

Toll rehabilitation program – Conversion of existing AET to ORT systems at three toll bridge locations.

County	*Narrative Location/Route & Postmiles*
Contra Costa Solano	The Project includes the conversion of existing AET to ORT systems at three toll plazas: the Antioch Bridge (04-CC-160- PM0.0/0.8), Benicia-Martinez Bridge (04-CC-680-PM23.3/24.9), and Carquinez Bridge (04-CC-80-PM13.4/14.1 & 04-SOL-80-PM 0.0/1.1). **EA#** 04-2W520

Lead Agency:

Contact Person	*Phone#*	*Fax#*	*Email*
Kenneth Young (Caltrans)	(510) 385-5767		kenneth.s.young@dot.ca.gov

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

X	*Categorical Exclusion (NEPA)*	**EA or Draft EIS**	**FONSI or Final EIS**	**PS&E or Construction**	*Other*

Scheduled Date of Federal Action: Anticipated on or before May 2023

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

	X **Section 326 – Categorical Exclusion**	**Section 327 – Non-Categorical Exclusion**

Current Programming Dates *(as appropriate)*

	PE/Environmental	**ENG**	**ROW**	**CON**
Start	April 2021	May 2023	N/A	Jan 2025
End	July 2023	Mar 2024	N/A	Apr 2026

Project Purpose and Need (Summary): *(please be brief)*

The purpose of the Project is to:

- Replace aging tolling system infrastructure to improve operational efficiency and mobility for all users through bridge toll plazas; and
- Enhance safety by eliminating the need to pass through the existing toll plazas.

The Project is needed to address operational and safety deficiencies for vehicles traveling through the BATA toll collection facilities at the Antioch, Benicia-Martinez, and Carquinez Bridge toll plazas. The existing toll collection system is aging, and improvements are required to meet the technological standards for both the existing AET systems and the proposed ORT systems. The existing toll collection booths and other civil infrastructure that were used during manual toll collection need to be removed to improve travel time and safety.

Surrounding Land Use/Traffic Generators *(especially effect on diesel traffic)*

There are no land uses within or immediately adjacent to the Project limits that would generate traffic.

Brief summary of assumptions and methodology used for conducting analysis
The traffic volume forecasting was based on the traffic data obtained from BATA, INRIX, Caltrans Performance Measurement System (PeMS), and historical counts. Annual growth rates were calculated per the BATA transaction data at each toll plaza and applied to develop the Opening Year (2025) forecasts. Existing Year (2022) and Opening Year (2025) traffic conditions were evaluated.

Traffic analysis was performed using Highway Capacity Manual 6th Edition methodologies on freeway mainline, weaving, or ramp junctions with the FreeVal software tool. A California Environmental Quality Act (CEQA) Vehicle Miles Traveled (VMT) analysis is not required based on Section 5.1 of the Transportation Analysis under CEQA (TAC).

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

Refer to Attachment C for the Opening Year (2025) level of service (LOS) and average annual daily traffic (AADT) data extracted from the Traffic Analysis Memorandum prepared by HDR (September 2022).

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

The ORT conversion at the three toll plazas is classified as operational improvement project per Highway Design Manual Chapter 103.2, 7th Edition, Caltrans, December 31, 2020. These operational improvements are designed based on current average daily traffic (ADT); thus, the minimum 20-year design period is not required. Therefore, no Design Year data is provided for this Project.

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

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

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
N/A

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
N/A

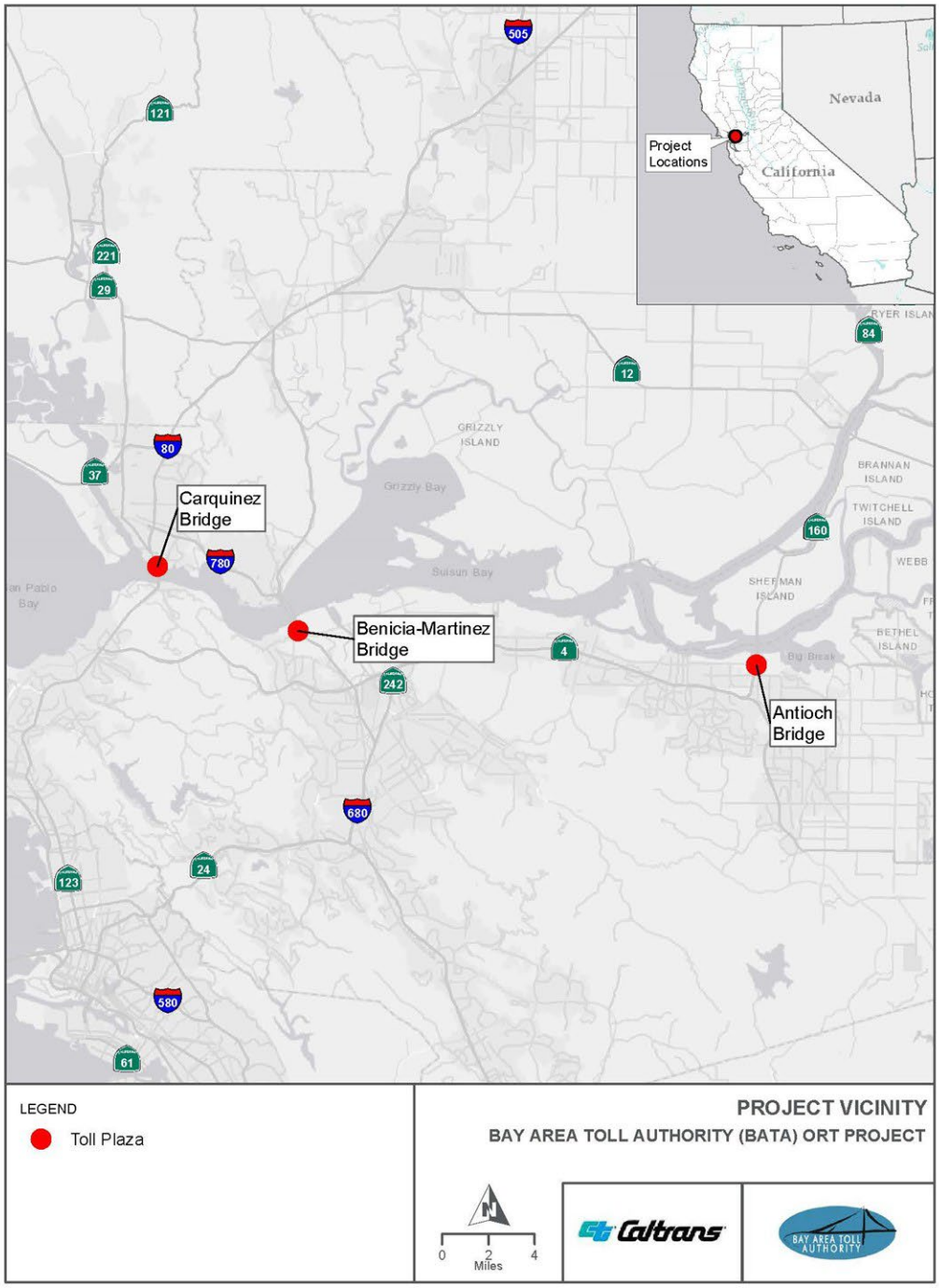
Describe potential traffic redistribution effects of congestion relief *(impact on other facilities)*
This Project proposes to convert existing toll collection booths to ORT systems at three bridge locations. Construction of the proposed Project is not anticipated to adversely impact highway traffic. The travel patterns would remain the same for all three bridge toll plaza locations. No traffic redistribution effects are anticipated for this Project. However, the proposed Project is expected to improve the travel speed and reduce turbulence, including speed variances and lane changing adjacent to the toll plazas, resulting in overall improvements of safety and efficiency on highway operations.

Comments/Explanation/Details (please be brief)

Based on the Project description provided, above, the proposed Project would not be adding any additional lanes but reconfiguring and restriping existing lanes. In addition, the Project would reduce the number of lanes at each of the toll plazas. None of the proposed lane reconfigurations result in a lane that would exceed 1-mile in length. Please refer to Attachment D, for further information regarding the congestion relief improvements at the existing bridge toll facility locations.

Further, based on the adopted Metropolitan Transportation Commission (MTC) 2021 Transportation Improvement Program (TIP) for the fiscal year, the Project is programmed under the Toll Rehabilitation Program (TIP ID REG130002), which identifies that the 7 San Francisco Bay Area state-owned toll bridges under the rehabilitation program are exempt from Air Quality Conformity under 40 Code of Federal Regulations (CFR) 93.126 – Safety – Widening narrow pavements or reconstructing bridges (no additional travel lanes).

Attachment A: Location Map



Attachment B – Project Limits Map

Path: \\WAL-FILSRV1\Projects\GIS\Projects\BATA\7.2_WIP\map_docs\ATTACHMENT_IMPACTAREA_MAPBOOKS.aprx

Path: \\WAL-FILSRV1\Projects\GIS\Projects\BATA\7.2_WIP\map_docs\ATTACHMENT_IMPACTAREA_MAPBOOKS.aprx

Path: \\WAL-FILSRV1\Projects\GIS\Projects\BATA\7.2_WIP\map_docs\ATTACHMENT_IMPACTAREA_MAPBOOKS.aprx

Attachment C – Opening Year (2025) LOS and AADT Data

Opening Year (2025) Level of Service (LOS)

Mainline Segment	Opening Year (2025) LOS No Build Alternative				Opening Year (2025) LOS Build Alternative			
	AM		PM		AM		PM	
	GP	HOV	GP	HOV	GP	HOV	GP	HOV
Antioch Bridge								
Main St Off-Ramp to Main St Loop On-Ramp	A	--	A	--	A	--	A	--
Main St Loop On-Ramp to Wilbur Ave Off-Ramp	A	--	A	--	A	--	A	--
Wilbur Ave Off-Ramp to Wilbur Ave On-Ramp	A	--	A	--	A	--	B	--
Wilbur Ave On-Ramp to Antioch Bridge Toll Plaza	**F**	A	**F**	C	A	--	C	--
Antioch Bridge Toll Plaza to Antioch Bridge	A	--	C	--	A	--	C	--
Benicia-Martinez Bridge								
Waterfront Rd Off-Ramp to Waterfront Rd On-Ramp	A	D	A	D	B	--	C	--
Waterfront Rd On-Ramp to Benicia-Martinez Bridge Toll Plaza	C	B	D	C	B	A	C	A
Benicia-Martinez Bridge Toll Plaza to Benicia-Martinez Bridge	A	B	A	C	B	--	D	--
Carquinez Bridge								
Carquinez Bridge to Carquinez Bridge Toll Plaza	**F**	A	**F**	B	B	A	C	B
Carquinez Bridge Toll Plaza to Sonoma Blvd (SR29) Off-Ramp	B	--	D	--	B	--	D	--
Sonoma Blvd (SR29) Off-Ramp to Sequoia Ave Off-Ramp	B	--	D	--	B	--	D	--

Note: St=Street; Ave=Avenue; Rd=Road; Blvd=Boulevard; -- Not Applicable.

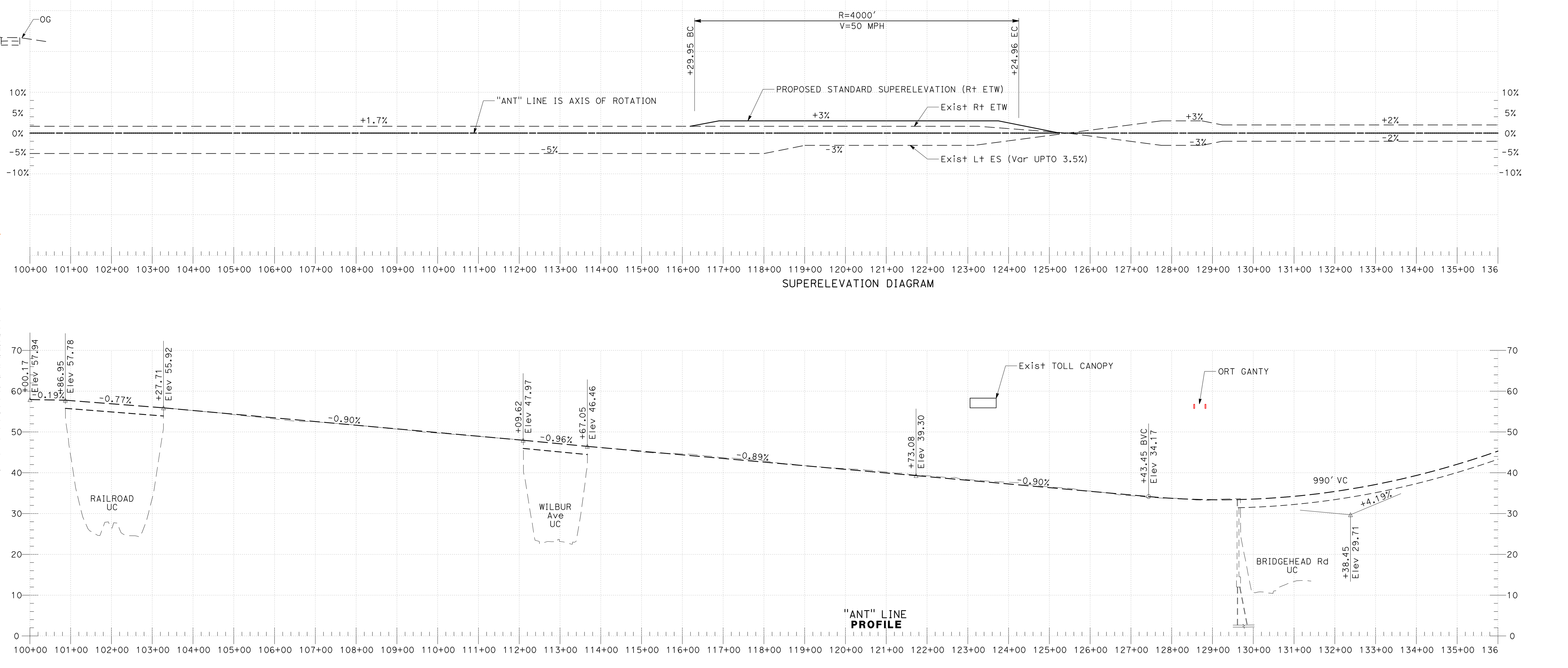
Opening Year (2025) Annual Average Daily Traffic (AADT)

Mainline Segment	Alternative	Direction	AADT	(AADT)ruck%	Truck AADT
Antioch Bridge					
Main St Off-Ramp to Main St Loop On-Ramp	No Build/Build	NB	3,590	7%	250
Main St Loop On-Ramp to Wilbur Ave Off-Ramp	No Build/Build	NB	7,300		510
Wilbur Ave Off-Ramp to Wilbur Ave On-Ramp	No Build/Build	NB	5,310		370
Wilbur Ave On-Ramp to Antioch Bridge	No Build/Build	NB	11,140		780
Benicia-Martinez Bridge					
Waterfront Rd Off-Ramp to Waterfront Rd On-Ramp	No Build/Build	NB	56,540	7%	3,960
Waterfront Rd On-Ramp to Benicia-Martinez Bridge	No Build/Build	NB	61,800		4,330
Carquinez Bridge					
Carquinez Bridge to Sonoma Blvd (SR29) Off-Ramp	No Build/Build	NB/EB	72,080	5%	3,600
Sonoma Blvd (SR29) Off-Ramp to Sequoia Ave Off-Ramp	No Build/Build	NB/EB	66,720		3,340

Note: ADT=Average Daily Traffic; St=Street; Ave=Avenue; Rd=Road; Blvd=Boulevard.

Attachment D – Preliminary Geometric Design Concepts


DETAIL A
PROPOSED TOLLING EQUIPMENT BUILDING
PROPOSED GANTRY LOCATION
RECONSTRUCT GORE
ANTIOCH
OAKLEY
TO RIO VISTA
TO ANTIOCH
EXISTING WARNING SIGN FREEWAY ENDS REDUCE SPEED
45 MPH SIGN
REMOVE EXISTING TOLL BOOTH STRUCTURE
REFERENCE: HDM SECTION 504.2(2) FIG 504.2A
UNDERLINED Std: FREEWAY ENTRANCES AND EXITS
REFERENCE: HDM SECTION 302.1
BOLDFACE Std: PAVED Shld WIDTH
REQUIRED: 5' Lt, 8' Rt
EXISTING: 1'-2' Lt, 5'-6' Rt
PROPOSED: CONFORM TO Exist
REFERENCE: HDM SECTION 309.1(3)(a)
BOLDFACE Std: Min HORIZONTAL Clr TO OBJECTS
REQUIRED: 5' Lt, 8' Rt
EXISTING: 1'-2' Lt, 5' Rt
PROPOSED: CONFORM TO Exist
ROUTE 160
NORTHBOUND
SOUTHBOUND
STA. 119+70.32 TO STA. 123+37.32
STA. 123+37.32 TO STA. 127+00
STA. 127+00 TO STA. 129+39.75
STA. 110+21.35 TO STA. 113+30.09
STA. 113+30.09 TO STA. 119+70.32
0.15' HMA (TYPE A)
GLASGRID 8501
0.10' HMA (TYPE A)
0.50' PCC
0.35' HMA (TYPE A)



YEAR 2025 TRAFFIC VOLUME (PEAK HOUR)

560 (AM) 1220 (PM) ← ANTIOCH BRIDGE | PROPOSED ORT GANTRY LOCATION | NB ON-RAMP (WILBUR AVE) 360 (AM) 580 (PM) | 200 (AM) 640 (PM) NB ROUTE 160

CURVE DATA

No. (#)	R	Δ	T	L	NORTHING	EASTING
1	4000'	11°23'15.11"	398.81'	795'	2194615.365	6197134.431
2	51845.8'	0°11'7.18"	83.85'	167.7'	2191160.365	6252890.148
3	4012'	3°0'6.79"	105.12'	210.2'	2194500.782	6197132.286

DESIGN SPEED = 50 MPH

POSTED SPEED = 45 MPH

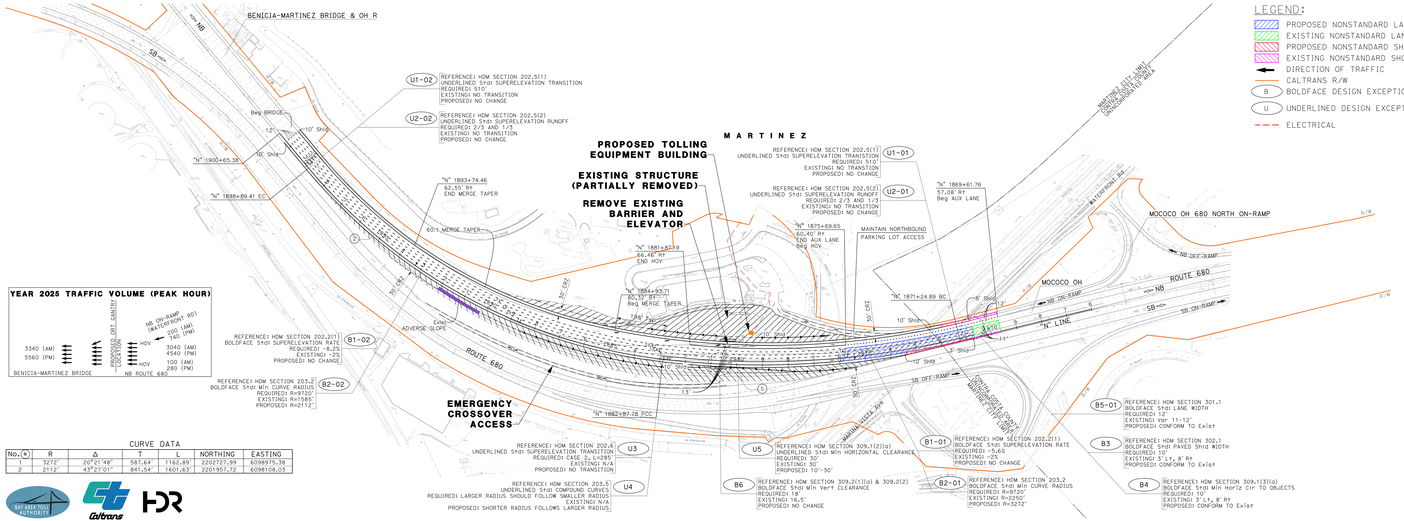
LEGEND:

- ← DIRECTION OF TRAFFIC
- CALTRANS R/W
- (B) BOLDFACE DESIGN EXCEPTION
- (U) UNDERLINED DESIGN EXCEPTION
- ELECTRICAL

BAY AREA TOLL AUTHORITY · Caltrans · HDR

OPEN ROAD TOLLING PROJECT
ANTIOCH BRIDGE
GEOMETRIC ENGINEERING DRAWINGS

SHEET ______
DATE 12/11/2022
SCALE 1" = 100'



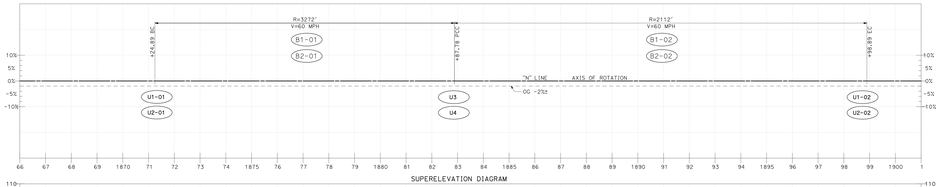
LEGEND:

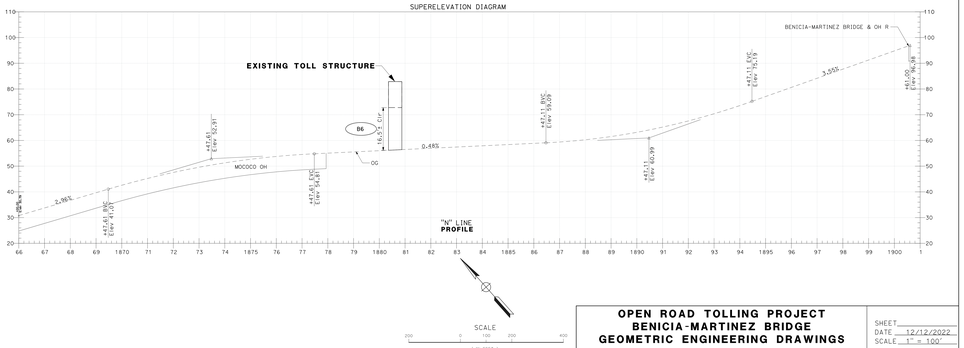
- PROPOSED NONSTANDARD LANE WIDTH
- EXISTING NONSTANDARD LANE WIDTH TO REMAIN
- PROPOSED NONSTANDARD SHOULDER WIDTH
- EXISTING NONSTANDARD SHOULDER WIDTH TO REMAIN
- DIRECTION OF TRAFFIC
- CALTRANS R/W
- (B) BOLDFACE DESIGN EXCEPTION
- (U) UNDERLINED DESIGN EXCEPTION
- ELECTRICAL

YEAR 2025 TRAFFIC VOLUME (PEAK HOUR)

CURVE DATA

No.	R	Δ	T	L	NORTHING	EASTING
1	3272'	20°21'48"	587.44'	1162.89	2202727.99	6098975.38
2	2112'	43°27'01"	841.54'	1601.65'	2201957.72	6098108.03

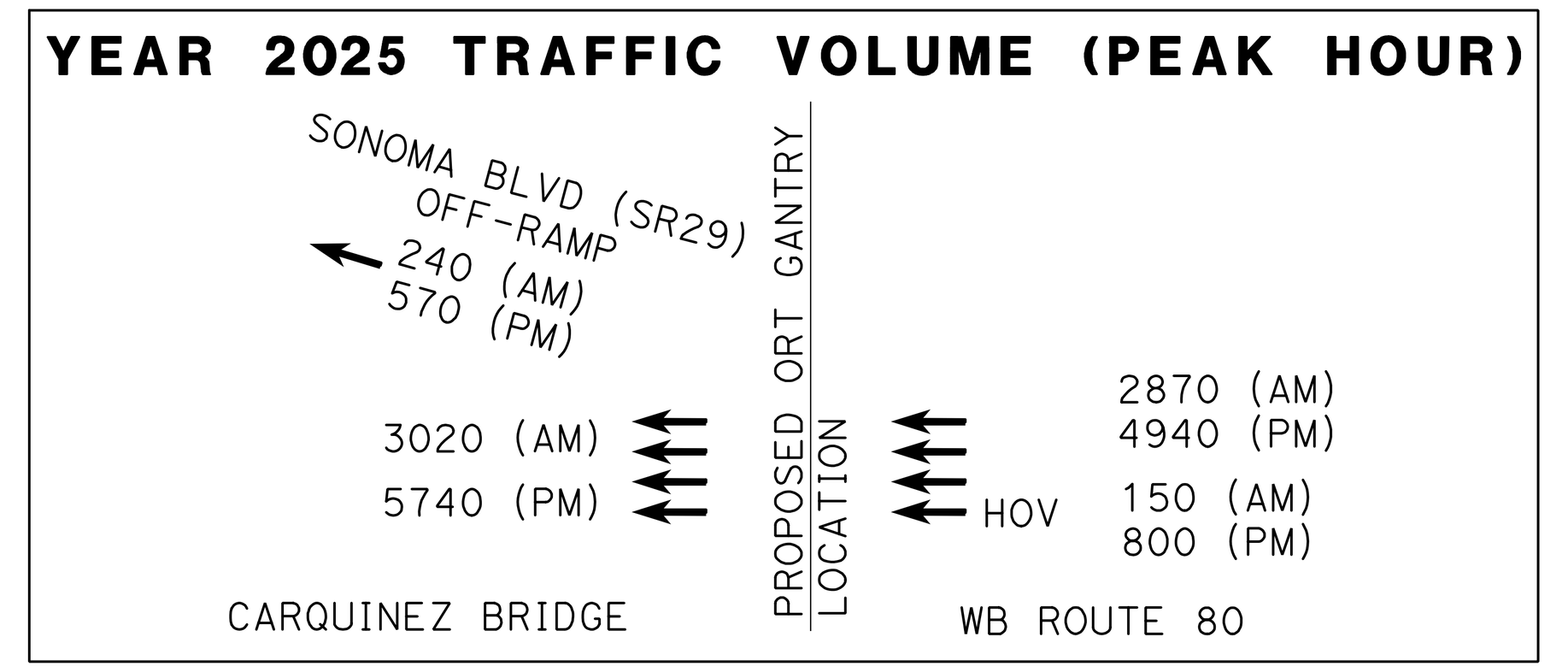




OPEN ROAD TOLLING PROJECT
BENICIA-MARTINEZ BRIDGE
GEOMETRIC ENGINEERING DRAWINGS

SHEET
DATE 12/12/2022
SCALE 1" = 100'


LEGEND:
DIRECTION OF TRAFFIC
CALTRANS ROW
BOLDFACED DESIGN EXCEPTION
UNDERLINE DESIGN EXCEPTION
ELECTRICAL
V A L L E J O
TO FAIRFIELD
SONOMA BLVD (SR29) OFF-RAMP
REMOVE EXISTING TOLL BOOTH STRUCTURE
PROPOSED GANTRY LOCATION
PROPOSED TOLLING EQUIPMENT BUILDING
MAINTAIN NORTHBOUND PARKING LOT ACCESS
MAINTAIN EASTBOUND ACCESS
CRASH CUSHION
END CARQUINEZ BRIDGE
CARQUINEZ BRIDGE
TO CROCKETT
WB ROUTE 80
EB ROUTE 80
"CAR" LINE
REFERENCE: HDM SECTION 305.1 UNDERLINED Std: MEDIAN WIDTH REQUIRED: 36' EXISTING: 22' TO 36' PROPOSED: 22' TO 36'
REFERENCE: HDM SECTION 309.1(3)(a) BOLDFACE Std: HORIZONTAL CLEARANCE TO EXISTING CONCRETE BARRIER REQUIRED: 10' EXISTING: 8' Lt, 5' Rt PROPOSED: CONFORM TO EXIST
REFERENCE: HDM SECTION 302.1 BOLDFACE Std: PAVED Shld WIDTH REQUIRED: 10' EXISTING: 3'-6' Lt, 5' Rt PROPOSED: CONFORM TO EXIST
REFERENCE: HDM SECTION 202.5(1) UNDERLINED Std: SUPERELEVATION TRANSITION REQUIRED: 360' EXISTING: -280' PROPOSED: 308'
N 4°05'01.74" W 3938.91'

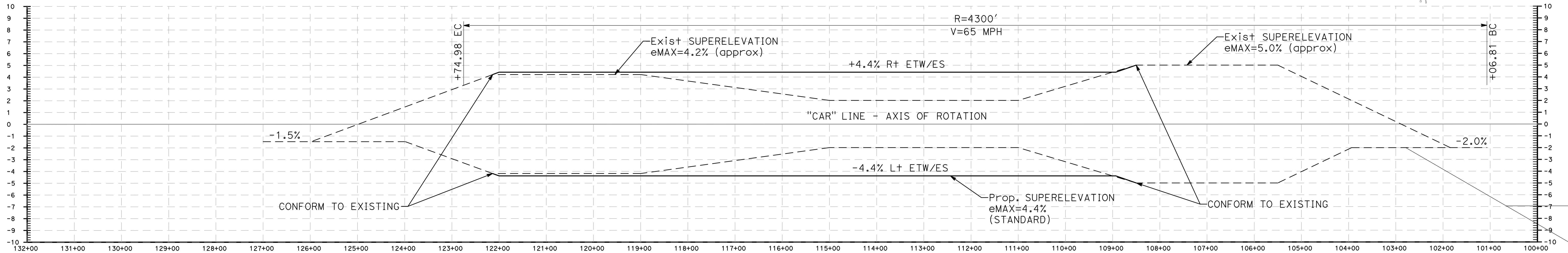


CURVE DATA

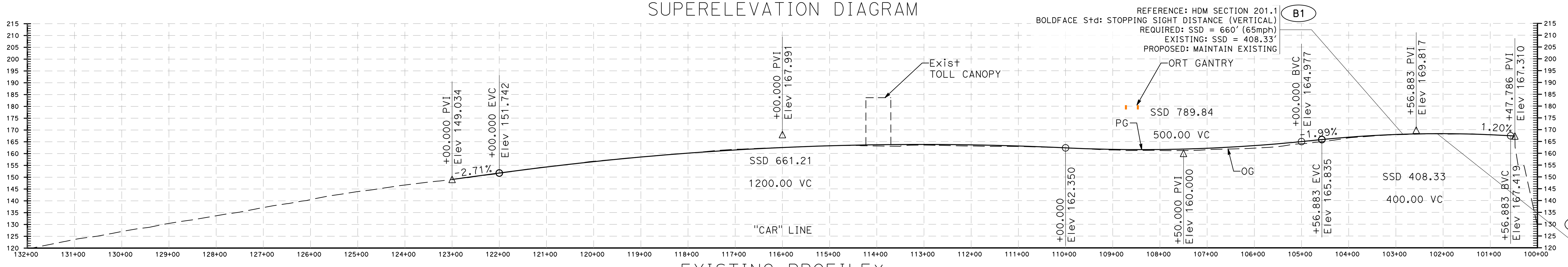
No. #	R	Δ	T	L	NORTHING	EASTING
①	4300'	23°53'24"	1107.65'	2168.17'	1785504.823	6492403.432
②	8000'	2°32'18"	177.23'	354.41'	1792656.235	6502425.614

DESIGN SPEED = 65 MPH

POSTED SPEED = 65 MPH

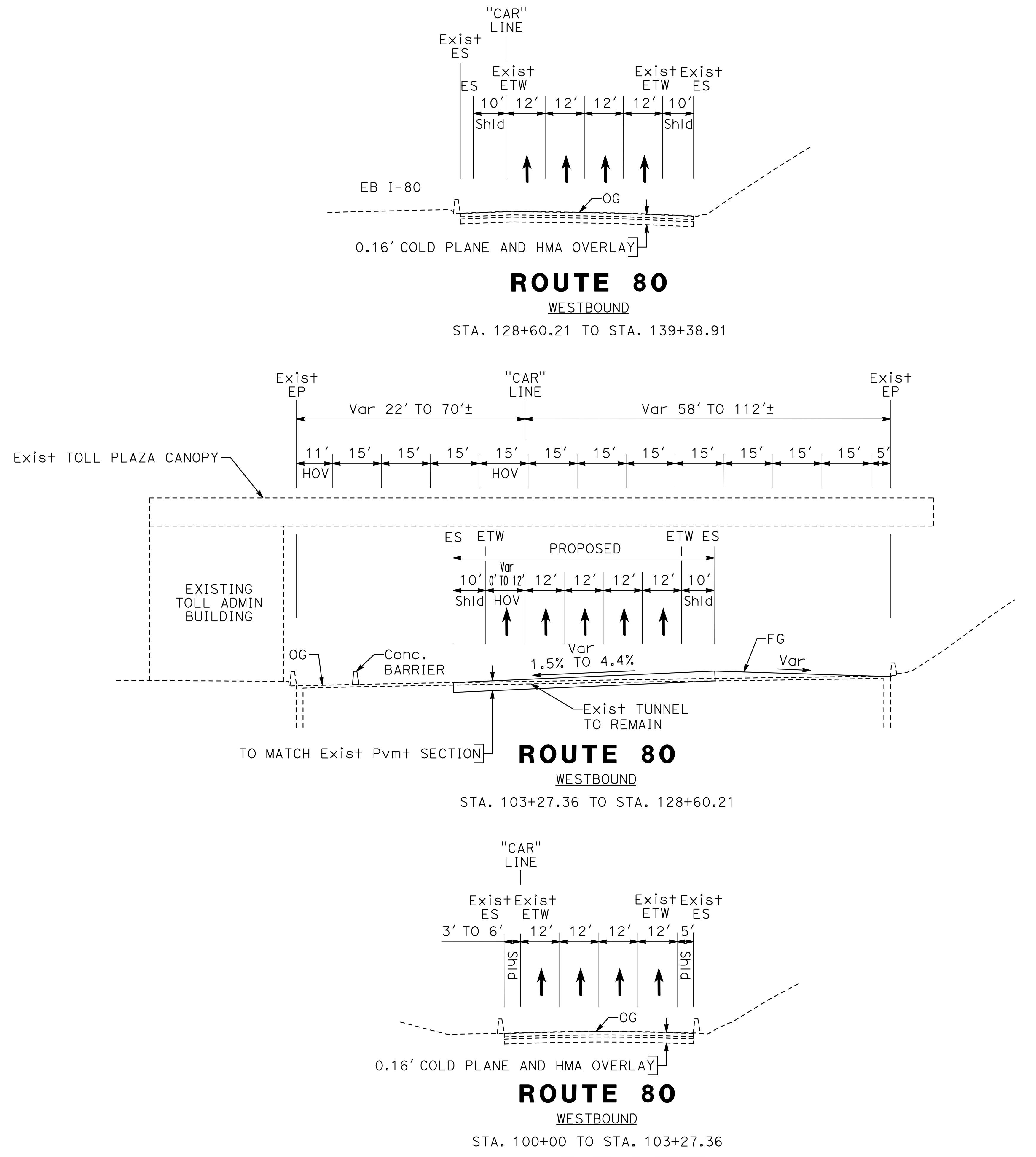

R=4300'
V=65 MPH
Exist SUPERELEVATION eMAX=4.2% (approx)
Exist SUPERELEVATION eMAX=5.0% (approx)
+4.4% Rt ETW/ES
"CAR" LINE - AXIS OF ROTATION
-4.4% Lt ETW/ES
-1.5%
-2.0%
CONFORM TO EXISTING
Prop. SUPERELEVATION eMAX=4.4% (STANDARD)
REFERENCE: HDM SECTION 202.5(1) UNDERLINED Std: SUPERELEVATION TRANSITION REQUIRED: 360' EXISTING: -261' PROPOSED: -261'
REFERENCE: HDM SECTION 202.5(2) UNDERLINED Std: SUPERELEVATION RUNOFF REQUIRED: 2/3 AND 1/3 EXISTING: ALL ON CURVE PROPOSED: NO CHANGE

SUPERELEVATION DIAGRAM


REFERENCE: HDM SECTION 201.1 BOLDFACE Std: STOPPING SIGHT DISTANCE (VERTICAL) REQUIRED: SSD = 660' (65mph) EXISTING: SSD = 408.33' PROPOSED: MAINTAIN EXISTING
Exist TOLL CANOPY
ORT GANTRY
SSD 789.84
500.00 VC
SSD 661.21
1200.00 VC
SSD 408.33
400.00 VC
"CAR" LINE
REFERENCE: HDM SECTION 204.4 UNDERLINED Std: VERTICAL CURVE LENGTH REQUIRED: LVC = 650' (65mph) EXISTING: LVC = 400' PROPOSED: MAINTAIN EXISTING

EXISTING PROFILE*

* PROFILE AS-BUILTS NOT AVAILABLE. BEST FIT IS SHOWN BASED ON TOPO


"CAR" LINE
0.16' COLD PLANE AND HMA OVERLAY
ROUTE 80
WESTBOUND
STA. 128+60.21 TO STA. 139+38.91
Exist TOLL PLAZA CANOPY
EXISTING TOLL ADMIN BUILDING
PROPOSED
Exist TUNNEL TO REMAIN
TO MATCH Exist Pvmt SECTION
ROUTE 80
WESTBOUND
STA. 103+27.36 TO STA. 128+60.21
0.16' COLD PLANE AND HMA OVERLAY
ROUTE 80
WESTBOUND
STA. 100+00 TO STA. 103+27.36

SCALE 1" = 100'

DRAFT

OPEN ROAD TOLLING PROJECT
CARQUINEZ BRIDGE
GEOMETRIC ENGINEERING DRAWING

SHEET
DATE 11/29/2022
SCALE 1" = 100'

BAY AREA TOLL AUTHORITY · Caltrans · HDR · Kimley»Horn

Open Road Tolling (ORT) Conversion Northern Bridges Project

Air Quality Conformity Task Force Presentation

January 26, 2023

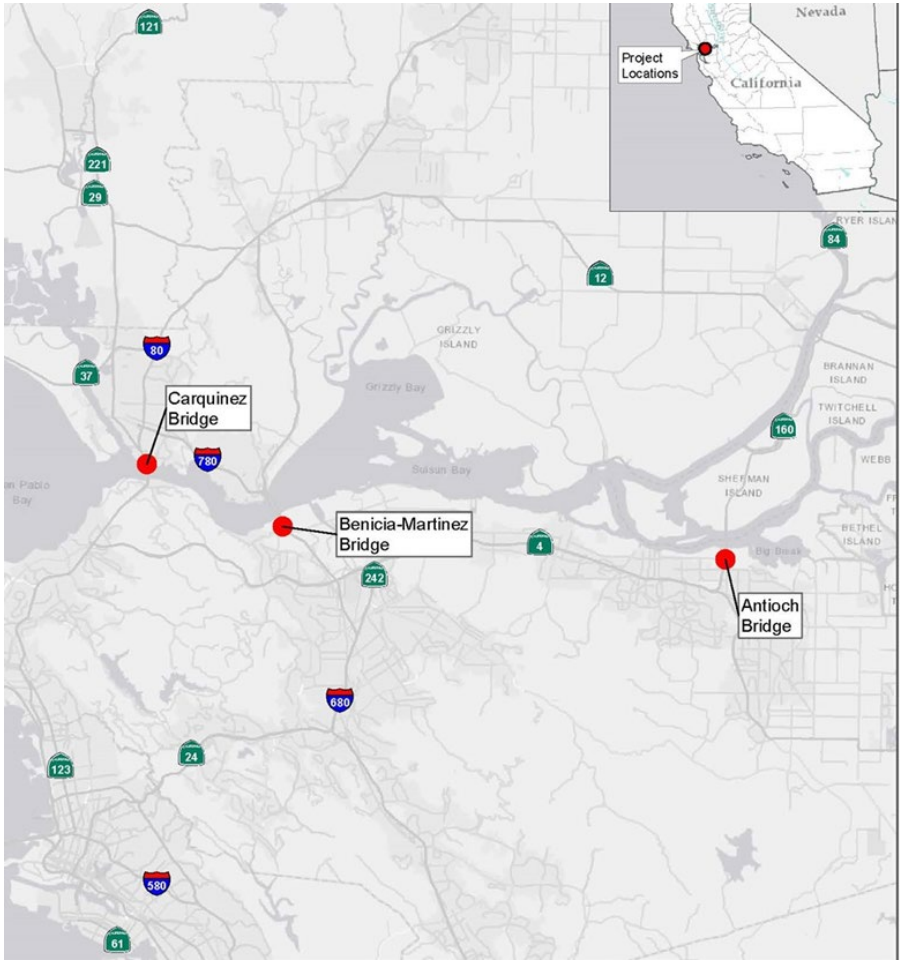
Agenda

- Project Overview
- Project Schedule
- Proposed Improvements
- Traffic Findings
- Recommendation/Concurrence
- Questions

Project Location

Northern Bridges (EA 04-2W520)

- **Antioch Bridge:** SR-160
  (Contra Costa County)
- **Benicia-Martinez Bridge:** I-680
  (Contra Costa County)
- **Carquinez Bridge:** I-80
  (Contra Costa and Solano Counties)



Proposed Project

- Toll booth demolition
- New toll gantry design and construction / Modify existing canopy
- Modified geometric design (realigning toll plaza approach, lane reduction)
- Construct new toll equipment building
- Pavement and striping improvements
- Project documentation prepared in compliance with CEQA and NEPA
- Caltrans is lead agency under NEPA
- BATA is lead agency under CEQA
- BATA is project sponsor

Project Purpose and Need

Replace aging tolling infrastructure

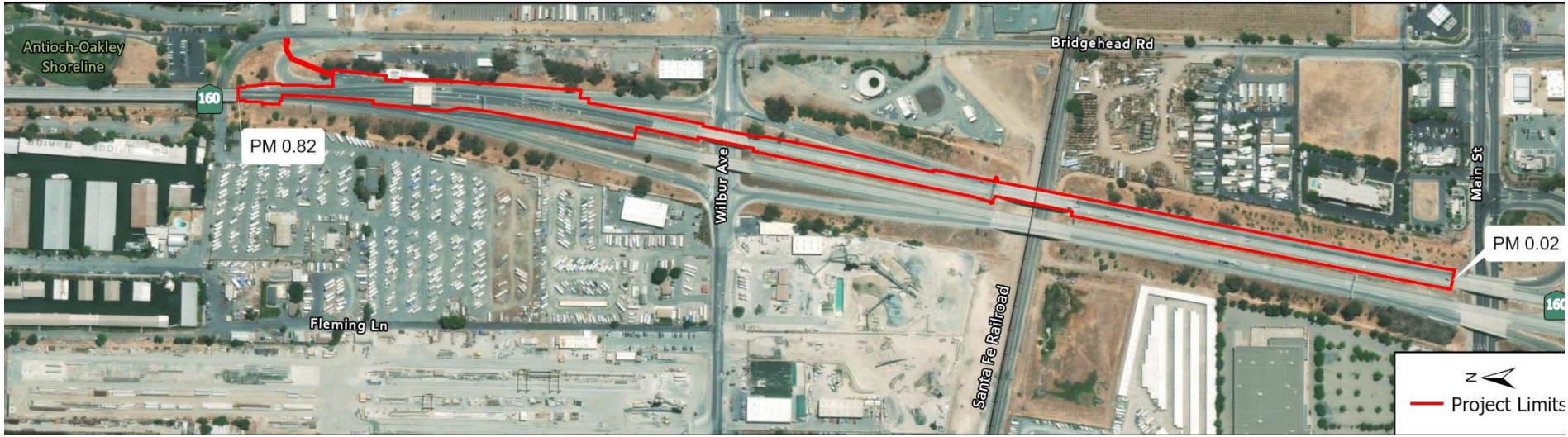
Enhance safety at toll plazas

Improve operations through bridge toll plazas

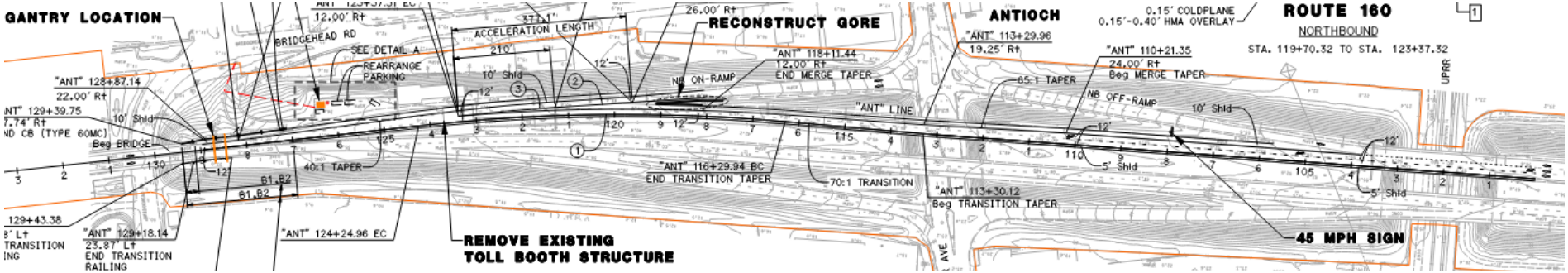
Project Milestone Schedule

MILESTONE	TARGET DATE
PSR-PR & ED	July 2023
PS&E	April 2024
Begin Construction	Oct 2024
End Construction	Apr 2026

Antioch Bridge Toll Plaza Northbound SR-160

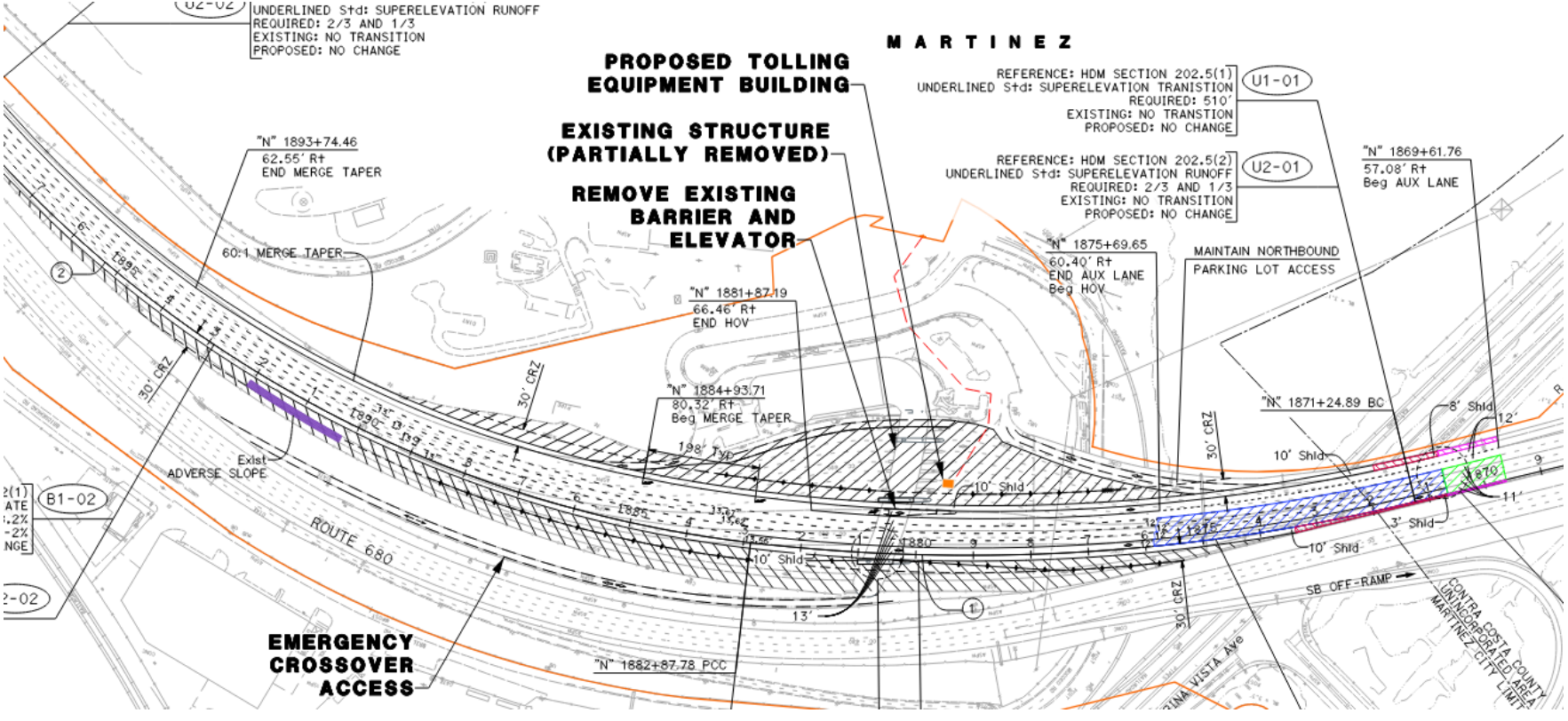


Antioch Bridge Toll Plaza Northbound SR-160



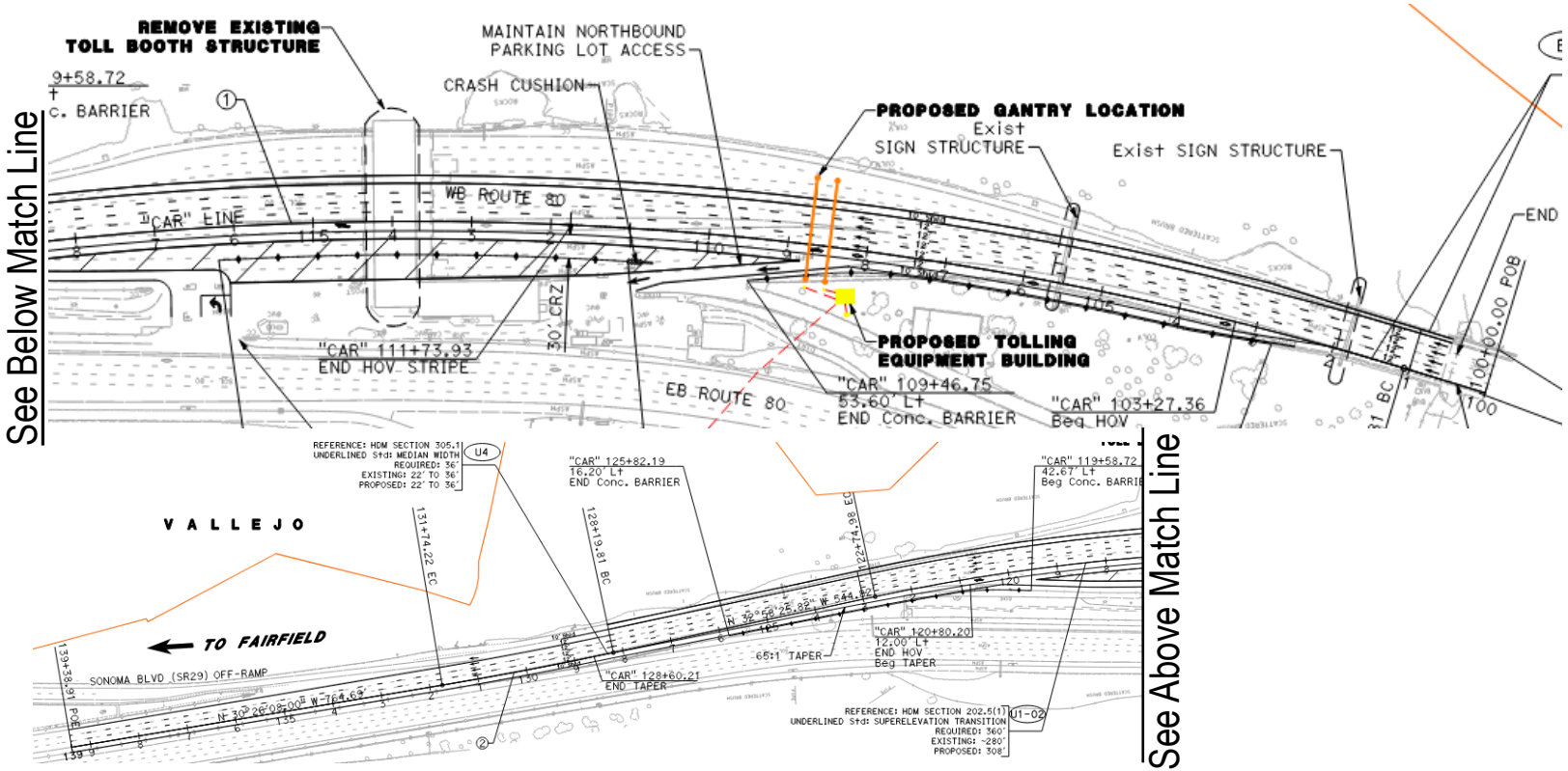
Benicia-Martinez Bridge Toll Plaza Northbound I-680

Benicia-Martinez Bridge Toll Plaza Northbound I-680



Carquinez Bridge Toll Plaza
Eastbound I-80

Carquinez Bridge Toll Plaza Eastbound I-80



Summary of Traffic Findings

- No change in traffic volume or truck percentages as a result of proposed Project
- Construction of proposed Project is not anticipated to adversely impact highway traffic.
- Travel patterns would remain the same for all three locations.
- No traffic redistribution effects are anticipated for this Project.
- Project expected to improve the travel speed and reduce lane changing adjacent to the toll plazas
- Project will result in overall improvements for safety and efficiency on highway operations.

2021 Final TIP Project Listing

TIP ID: **REG130002** **County:** Regional **System:** Tollway **RTP ID:** 21-T01-005 **CTIPS** 20600005317
Sponsor: Metropolitan Transportation Commission (MTC) **Implementing Agency:** Metropolitan Transportation
Project Name: Toll Bridge Rehabilitation Program
Description: Bay Area: On 7 state-owned toll bridges: Rehabilitation program
Air Quality Exempt Code: 1.19 - EXEMPT (40 CFR 93.126) - Widening narrow pavements or reconstructing bridges (no additional travel lanes)
Route: **Post Mile From:** **Post Mile To:** **Toll Credits:**

All funding in thousands of dollars

Phase	Fund Source	Prior Years	FY 2022/23	FY 2023/24	FY 2024/25	FY 2024/25	Future Years	Total Programmed
CON	BT	$ 1,038,092	$ 64,453	$ 38,343	$ 35,243	$ 29,413		$ 1,205,544
Total Programmed Funding:		$ 1,038,092	$ 64,453	$ 38,343	$ 35,243	$ 29,413		$ 1,205,544

Recommended Concurrence for Air Quality Conformity Exemption

- Not a new or expanded highway project, but a replacement of older tolling technology
- Limited to reconfiguration and restriping of existing lanes less than 1-mile in length within the Project limits
- No change in traffic volume or truck percentages as a result of the proposed Project
- No intersections modified or significantly impacted by this Project

Question?

Application of Criteria for a Project of Air Quality Concern
Project Title: Richmond-San Rafael Bridge Open Road Tolling and I-580 Westbound High Occupancy Vehicle Lane Project
Project Summary for Air Quality Conformity Task Force Meeting: January 26, 2022

Description

- The Bay Area Toll Authority (BATA), in cooperation with the California Department of Transportation (Caltrans), proposes the Richmond-San Rafael (RSR) Bridge Open Road Tolling (ORT) and Interstate 580 (I-580) Westbound High Occupancy Vehicle (HOV) Lane Project (Project).
- The purpose of the Project is to:
  - Promote mode shift by providing travel time savings for carpooling and transit riders;
  - Reduce Vehicle Miles Traveled (VMT) and corresponding greenhouse gas (GHG) emissions;
  - Improve safety by eliminating the need to pass through the existing toll plaza; and
  - Improve operational efficiency by upgrading the existing toll infrastructure to accommodate the future BATA system-wide upgrade on the toll collection system.
- The Project is needed to address operational and safety deficiencies for vehicles traveling through the BATA toll collection facilities at the toll plaza and to encourage carpooling and transit ridership.
- The project consists of the following improvements:
  - Remove the existing RSR Bridge Toll Booths, tolling equipment and canopy structure and install an ORT gantry.
  - Reconfigure I-580 mainline at the proposed ORT gantry to three lanes (two general purpose lanes and one HOV3+ lane) and improve weaving bottle neck caused by existing seven lanes merging to two lanes.
  - Realign Stenmark Drive on-ramp to conform to I-580 reconfiguration and install separate ORT gantry for the Stenmark Drive on-ramp.
  - Convert the leftmost general-purpose lane along I-580 to an HOV2+ lane from Regatta Boulevard interchange to the Stenmark Drive off-ramp
  - Removal, replacement, or relocation of existing roadway signs and signposts, as needed, for the ORT and HOV conversion.
  - Trenching and/or horizontal directional drilling (up to 3-ft deep and 2-ft wide) to extend electrical and communication conduit and fiber and bring these services to the tolling equipment, signage, and toll equipment building. Auxiliary cabinets may be required between toll equipment building and gantries.
  - Modifications to drainage systems, grading, lighting, landscaping, and necessary utility connections/relocations for the new toll collection facilities.
- The Project would not be adding any additional lanes but reconfiguring and restriping existing lanes.
- The Project would reduce the number of lanes at the toll plazas.
- None of the proposed lane reconfigurations result in a new lane that would exceed 1-mile in length.

Background

- Project falls under CEQA Categorical Exemption and NEPA Categorical Exclusion. Supporting technical studies are currently in progress.
- Draft Air Quality Assessment Report currently being prepared
- Final Air Quality Assessment Report Approval anticipated April 2023
- The Project is programmed under the Toll Rehabilitation Program (TIP ID REG130002), which identifies that the 7 San Francisco Bay Area state-owned toll bridges under the rehabilitation program are exempt from Air Quality Conformity under ***40 Code of Federal Regulations (CFR) 93.126 – Safety – Widening narrow pavements or reconstructing bridges (no additional travel lanes)***.
- Seeking concurrence that the Project is exempt from Air Quality Conformity prior to completion of CEQA CE/NEPA CE by May 2023, or earlier.
- Draft Environmental Document Approval May 2023

- Final Environmental Document July 2023

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?

- Not a new or expanded highway project.
- No increase in capacity.
- No change in traffic volume or truck percentages on I-580.

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

- The project does not involve interchange or intersection LOS.
- The project would not result in substantial redistribution of traffic or changes in the percentage of truck trips through the site.
- The project would not create any new connections to other roadways or areas, and the project would not open any new areas to development.
- 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_{10} or $PM_{2.5}$ implementation plan as site of violation?

- The project is consistent with the MTC RTP (ID *21-T06-020*) and is intended to meet the transportation needs in the area based on local land use plans.
- No change in traffic volume or truck percentages on I-580. The project does not increase capacity and would not increase diesel truck volumes or AADT.
- The purpose of the project is to promote mode shift by providing travel time savings for carpooling and transit riders, reduce VMT and corresponding emissions, improve safety, and improve operational efficiency.

RTIP ID# 21-T06-020
RSR Forward: ORT and I-580 WB HOV Lane

TIP ID# CC-210010

Air Quality Conformity Task Force Consideration Date
January 26, 2023

Project Description *(clearly describe project)s*

The Bay Area Toll Authority (BATA) proposes the Richmond-San Rafael (RSR) Bridge Open Road Tolling (ORT) and Interstate 580 (I-580) Westbound High Occupancy Vehicle (HOV) Lane Project (proposed project). BATA developed the RSR Bridge Forward initiative which implements a suite of strategies to address congestion and improve options for travelling in the RSR Bridge Corridor. The RSR Bridge ORT and I-580 Westbound HOV Lane Project would provide safety and operational improvements on westbound I-580 approaching the RSR Bridge by reinstating a previous westbound I-580 HOV lane through Richmond to encourage carpooling and transit ridership, and replacing the existing tolling structure with open road tolling.

The purpose of the project is to:
- Promote mode shift by providing travel time savings for carpooling and transit riders;
- Reduce Vehicle Miles Traveled (VMT) and corresponding greenhouse gas (GHG) emissions;
- Improve safety by eliminating the need to pass through the existing toll plaza; and
- Improve operational efficiency by upgrading the existing toll infrastructure to accommodate the future BATA system-wide upgrade on the toll collection system.

The Project is needed to address operational and safety deficiencies for vehicles traveling through the BATA toll collection facilities at the toll plaza and to encourage carpooling and transit ridership.

The project consists of the following improvements:
- Remove the existing RSR Bridge Toll Booths, tolling equipment and canopy structure and install an ORT gantry.
- Reconfigure I-580 mainline at the proposed ORT gantry to three lanes (two general purpose lanes and one HOV3+ lane) and improve weaving bottle neck caused by existing seven lanes merging to two lanes.
- Realign Stenmark Drive on-ramp to conform to I-580 reconfiguration and install separate ORT gantry for the Stenmark Drive on-ramp.
- Convert the leftmost general-purpose lane along I-580 to an HOV2+ lane from Regatta Boulevard interchange to the Stenmark Drive off-ramp
- Removal, replacement, or relocation of existing roadway signs and signposts, as needed, for the ORT and HOV conversion.
- Trenching and/or horizontal directional drilling (up to 3-ft deep and 2-ft wide) to extend electrical and communication conduit and fiber and bring these services to the tolling equipment, signage, and toll equipment building. Auxiliary cabinets may be required between toll equipment building and gantries.
- Modifications to drainage systems, grading, lighting, landscaping, and necessary utility connections/relocations for the new toll collection facilities.

All proposed work would primarily occur within Caltrans' ROW. Construction is anticipated to take approximately 28 months and is planned to begin in mid-2024. Demolition of existing tolling infrastructure would occur following the installation and testing of the new ORT system.

Type of Project:
Bridge Open Road Tolling (ORT) and High Occupancy Vehicle (HOV) Lane Conversion

County	*Narrative Location/Route & Postmiles*
Contra Costa	The I-580 study corridor is entirely within the State right of way (ROW), extending from the east end of the RSR Bridge on the west, to the I 580/Regatta Boulevard Interchange on the east. 04-CC-580 0.2/6.3

	Caltrans Project – EA# 04-0W030 **CTIPS**: 20600006796

Lead Agency: Caltrans (NEPA)

Contact Person	*Phone#*	*Fax#*	*Email*
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Federal Action for which Project-Level PM Conformity is Needed *(check appropriate box)*

X	*Categorical Exclusion (NEPA)*	**EA or Draft EIS**	**FONSI or Final EIS**	**PS&E or Construction**	*Other*

Scheduled Date of Federal Action: 7/6/23

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

	X **Section 326 – Categorical Exclusion**	**Section 327 – Non-Categorical Exclusion**

Current Programming Dates *(as appropriate)*

	PE/Environmental	**ENG**	**ROW**	**CON**
Start	07/01/2021	05/12/2023	N/A	05/10/2024
End	8/18/2023	01/5/2024	N/A	09/15/2026

Project Purpose and Need (Summary): *(please be brief)*

Purpose

The purpose of the project is to:

- Promote mode shift by providing travel time savings for carpooling and transit riders;
- Reduce Vehicle Miles Traveled (VMT) and corresponding greenhouse gas (GHG) emissions;
- Improve safety by eliminating the need to pass through the existing toll plaza; and
- Improve operational efficiency by upgrading the existing toll infrastructure to accommodate the future BATA system-wide upgrade on the toll collection system.

Need

Traffic congestion has dramatically increased in recent years for motorists accessing the RSR Bridge in the westbound direction from I-580, especially during AM peak hours. Currently, bottlenecks occur at both the existing toll plaza, and at the transition from the seven-lane toll plaza to two lanes at east end of the RSR Bridge. Congestion resulting from the toll plaza occurs due to:

- Drivers slowing down or stopping to pay tolls at the toll plaza; and
- Reduction in toll plaza capacity when toll booths are closed.

While the conversion to All Electronic Tolling (AET) in 2020 removes the requirement for cash-paying motorists to stop at the toll plaza, all motorists still must slow down to pass through the toll plaza.

Congestion resulting from the two-lane RSR Bridge occurs when demand for the bridge exceeds its capacity and all toll plaza lanes are open to traffic. Factors affecting the capacity and throughput of the RSR Bridge include:

- Friction between vehicles as they merge from seven lanes at the toll plaza to two lanes on the RSR Bridge; and
- Higher traffic volume within the HOV lane during portions of the peak period, which increases the merging friction and further reduces the RSR Bridge's throughput.

Given the extensive level of congestion in this corridor, there is a need to improve travel time, alleviate congestion and backup, and reduce corresponding air quality and safety concerns. Traditional approaches to alleviate such problems, such as freeway widening to add travel lanes, are not feasible or prudent in this corridor due to limited available ROW. Any freeway widening will have the potential to impact nearby communities and environmentally sensitive areas—such as the wetland areas west of I-

580 between Bayview Avenue and Central Avenue—by inducing greater demand and expanding the footprint into undeveloped areas. Therefore, solutions must focus on maximizing the efficiency of existing infrastructure within the corridor.

Aside from an approximately 250-foot HOV lane at the toll plaza, there is no transit priority or HOV facility in the corridor. Golden Gate Transit has developed plans to increase the frequency of their express bus service but would not do so unless investments like an HOV lane in the corridor were implemented. The lack of HOV priority in the corridor discourages people from taking transit or carpooling.

Surrounding Land Use/Traffic Generators *(especially effect on diesel traffic)*

I-580 in the vicinity of the RSR Bridge crosses the San Francisco Bay and connects Richmond and San Rafael. Diesel heavy truck traffic accounts for an average of approximately 8.8 percent of the total traffic volumes along I-580 within the project limits.

Brief summary of assumptions and methodology used for conducting analysis

An Air Quality Study Report will be prepared to identify sensitive receptors and provide a quantitative analysis of construction-related emissions. The analysis will assess No Build and Build scenarios to determine whether the project would reduce vehicle delay and traffic congestion in the westbound direction on I-580 approaching the RSR Bridge when compared to a no build scenario. It is anticipated that a carbon monoxide hot spot analysis is not needed.

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

Table 1 (I-580 RSR ORT Existing and Opening Year AADT summarizes the annual average daily traffic (AADT) within the project study segments. The project would not add lanes or create additional capacity. Therefore, traffic volumes would not change between Build and No Build conditions.

Table 1: I-580 RSR ORT Existing and Opening Year AADT

	Existing Conditions			Opening Year (2024)		
Segment on I-580 WB	AADT	% Truck	Truck AADT	AADT	% Truck	Tuck AADT
East of Buchanan Mainline	23,700	8.9%	2,100	26,400	8.7%	2,300
On Ramp from Buchanan St	1,400	7.1%	100	1,800	11.1%	200
WB from Buchanan On to Central Off Mainline	25,100	8.8%	2,200	28,200	8.9%	2,500
WB Off Ramp to Central Ave	1,300	7.7%	100	1,400	7.1%	100
WB On Ramp from Central Ave	1,500	6.7%	100	2,200	9.1%	200
WB from Central On to Bayview Off Mainline	25,300	8.7%	2,200	29,000	9.0%	2,600
WB Off Ramp to Bayview Ave	1,000	10.0%	100	1,400	7.1%	100
WB from Bayview off to Bayview on Mainline	24,300	8.6%	2,100	27,600	9.1%	2,500
WB On Ramp from Bayview Ave	4,800	8.3%	400	5,200	9.6%	500
WB from Bayview on to Juliga Woods Off Mainline	29,100	8.6%	2,500	32,800	9.1%	3,000
WB Off Ramp to Juliga Woods St	700	14.3%	100	1,000	10.0%	100
WB from Juliga Woods St off to Juliga Woods St on Mainline	28,400	8.5%	2,400	31,800	9.1%	2,900
WB On Ramp from Juliga Woods St	2,100	9.5%	200	2,200	9.1%	200
WB Off Ramp to Marina Bay Pkwy	1,900	10.5%	200	2,700	7.4%	200
WB On Ramp from Marina Bay Pkwy (NB)	1,000	10.0%	100	1,100	9.1%	100
WB On Ramp from Marina Bay Pkwy (SB)	4,400	9.1%	400	4,600	8.7%	400
WB from MB Pkwy On to Harbor Way S Off Mainline	34,000	8.5%	2,900	37,000	9.2%	3,400
WB Off Ramp to Harbor Way S	1,900	10.5%	200	2,100	9.5%	200
WB Off Ramp to Cutting Blvd	2,100	9.5%	200	3,300	9.1%	300
WB On Ramp from Cutting Blvd	8,100	8.6%	700	8,500	8.2%	700
WB from Cutting Blvd On to Canal Blvd Off Mainline	38,100	8.4%	3,200	40,100	9.0%	3,600
WB Off Ramp to Canal Blvd	3,700	8.1%	300	3,900	7.7%	300
WB from Canal Blvd Off to Canal Blvd Off Mainline	34,400	8.4%	2,900	36,200	9.1%	3,300
WB Off Ramp to Castro St E of Overpass	1,500	6.7%	100	1,900	10.5%	200
WB On Ramp from Castro	12,800	8.6%	1,100	13,300	9.0%	1,200
WB from Castro St On to Stenmark off Mainline	45,700	8.5%	3,900	47,600	9.0%	4,300
WB Offramp to Stenmark	300	10.0%	30	400	10.0%	40
WB from Stenmark Off to Stenmark On Mainline	45,400	8.6%	3,900	47,200	9.1%	4,300
WB On Ramp from Stenmark	100	10.0%	10	100	10.0%	10
WB from Stenmark On to Main St Off Mainline	45,500	8.6%	3,900	47,300	9.1%	4,300
WB Offramp to Main	4,000	10.0%	400	4,200	9.5%	400
WB from Main St Off to Francisco On Mainline	41,500	8.4%	3,500	43,100	9.0%	3,900
WB On Ramp from Francisco	1,900	10.5%	200	2,100	9.5%	200
WB between Francisco On and SFD Off	43,400	8.5%	3,700	45,200	9.1%	4,100
WB Offramp to SFD	18,500	8.6%	1,600	19,300	8.8%	1,700
West of SFD Off	24,900	8.4%	2,100	25,900	9.3%	2,400

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

Table 2 (I-580 RSR ORT Design Year AADT summarizes the annual average daily traffic (AADT) within the project study segments. The project would not add lanes or create additional capacity. Therefore, traffic volumes would not change between Build and No Build conditions.

Table 2: I-580 RSR ORT Design Year AADT

Segment on I-580 WB	Design Year (2044)		
	AADT	% Truck	Tuck AADT
East of Buchanan Mainline	37,200	8.9%	3,300
On Ramp from Buchanan St	3,100	9.7%	300
WB from Buchanan On to Central Off Mainline	40,300	8.9%	3,600
WB Off Ramp to Central Ave	1,800	11.1%	200
WB On Ramp from Central Ave	5,200	9.6%	500
WB from Central On to Bayview Off Mainline	43,700	8.9%	3,900
WB Off Ramp to Bayview Ave	3,300	9.1%	300
WB from Bayview off to Bayview on Mainline	40,400	8.9%	3,600
WB On Ramp from Bayview Ave	7,000	8.6%	600
WB from Bayview on to Juliga Woods Off Mainline	47,400	8.9%	4,200
WB Off Ramp to Juliga Woods St	2,000	10.0%	200
WB from Juliga Woods St off to Juliga Woods St on Mainline	45,400	8.8%	4,000
WB On Ramp from Juliga Woods St	2,500	8.0%	200
WB Off Ramp to Marina Bay Pkwy	5,800	8.6%	500
WB On Ramp from Marina Bay Pkwy (NB)	1,300	7.7%	100
WB On Ramp from Marina Bay Pkwy (SB)	5,200	9.6%	500
WB from MB Pkwy On to Harbor Way S Off Mainline	48,600	8.8%	4,300
WB Off Ramp to Harbor Way S	2,800	7.1%	200
WB Off Ramp to Cutting Blvd	7,800	9.0%	700
WB On Ramp from Cutting Blvd	10,100	8.9%	900
WB from Cutting Blvd On to Canal Blvd Off Mainline	48,100	8.9%	4,300
WB Off Ramp to Canal Blvd	4,800	8.3%	400
WB from Canal Blvd Off to Canal Blvd Off Mainline	43,300	9.0%	3,900
WB Off Ramp to Castro St E of Overpass	3,300	9.1%	300
WB On Ramp from Castro	15,500	9.0%	1,400
WB from Castro St On to Stenmark off Mainline	55,500	9.0%	5,000
WB Offramp to Stenmark	400	10.0%	40
WB from Stenmark Off to Stenmark On Mainline	55,100	9.1%	5,000
WB On Ramp from Stenmark	100	10.0%	10
WB from Stenmark On to Main St Off Mainline	55,200	9.1%	5,000
WB Offramp to Main	4,700	8.5%	400
WB from Main St Off to Francisco On Mainline	50,500	9.1%	4,600
WB On Ramp from Francisco	2,800	7.1%	200
WB between Francisco On and SFD Off	53,300	9.0%	4,800
WB Offramp to SFD	22,400	8.9%	2,000
West of SFD Off	30,900	9.1%	2,800

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

Not applicable. The project does not involve interchanges or intersections.

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. The project does not involve interchanges or intersections.

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. The project does not involve bus, rail, or intermodal facilities.

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. The project does not involve bus, rail, or intermodal facilities.

Describe potential traffic redistribution effects of congestion relief *(impact on other facilities)*
The Project would remove the existing RSR Bridge Toll Booths and install an ORT gantry on I-580 mainline and a separate ORT gantry on the Stenmark Drive on-ramp. At the tolling location, the existing seven lanes on I-580 will be reduced to three lanes (two general purpose lanes and one HOV3+ lane). The Project would not add new traffic lanes, increase capacity, or create any new connections to other roadways or areas, and the project would not open any new areas to development. Thus, no traffic redistribution effects are anticipated for this project. However, the Project is expected to improve traffic congestion, reduce travel delay, and encourage mode-shift towards carpool and transit, resulting in overall improvements of safety and efficiency on highway operations.

Comments/Explanation/Details (please be brief)

The proposed project is in a nonattainment area for federal $PM_{2.5}$ 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 traffic analysis for this project to date shows that the percentage of trucks will remain the same with and without the project and the AADT will remain the same with and without the project. The project does not increase capacity, therefore AADT would not change in the Build scenario. As discussed above, the project does not involve interchanges or intersections and would not affect LOS.

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

   As described above under "Describe potential traffic redistribution effects of congestion relief," the project would reduce vehicle delay and traffic congestion and would not add traffic lanes or increase capacity. The project would not create any new connections to other roadways or areas, and the project would not open any new areas to development. Therefore, the project would not result in substantial redistribution of traffic or changes in the percentage of truck trips through the site.

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 $PM_{2.5}$ applicable implementation plan or implementation plan submission, as appropriate, as sites of violation or possible violation (40 CFR Section 93.123 (b)(1)(v)).

   The proposed project is consistent with the MTC RTP (ID 21-T06-020) and is intended to meet the transportation needs in the area based on local land use plans. EPA's March 2006 guidance document, Transportation Guidance for Qualitative Hot-spot Analysis in $PM_{2.5}$ and PM_{10} Nonattainment and Maintenance Areas, references two-step criteria to identify "a significant volume of diesel truck traffic."

   The project does not include capacity improvements and the project would not increase traffic or truck volumes. 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 PM2.5 National Ambient Air Quality Standards (NAAQS). As a result, new state implementation plan (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 does not require a quantitative hot-spot analysis to demonstrate that it will not cause or worsen an existing $PM_{2.5}$ violation.

Richmond-San Rafael Bridge Open Road Tolling and I-580 Westbound High Occupancy Vehicle Lane Project

Air Quality Conformity Task Force Presentation

January 26, 2023

Agenda

- Project Overview
- Project Schedule
- Proposed Improvements
- Traffic Findings
- Recommendation/Concurrence
- Questions

Project Location

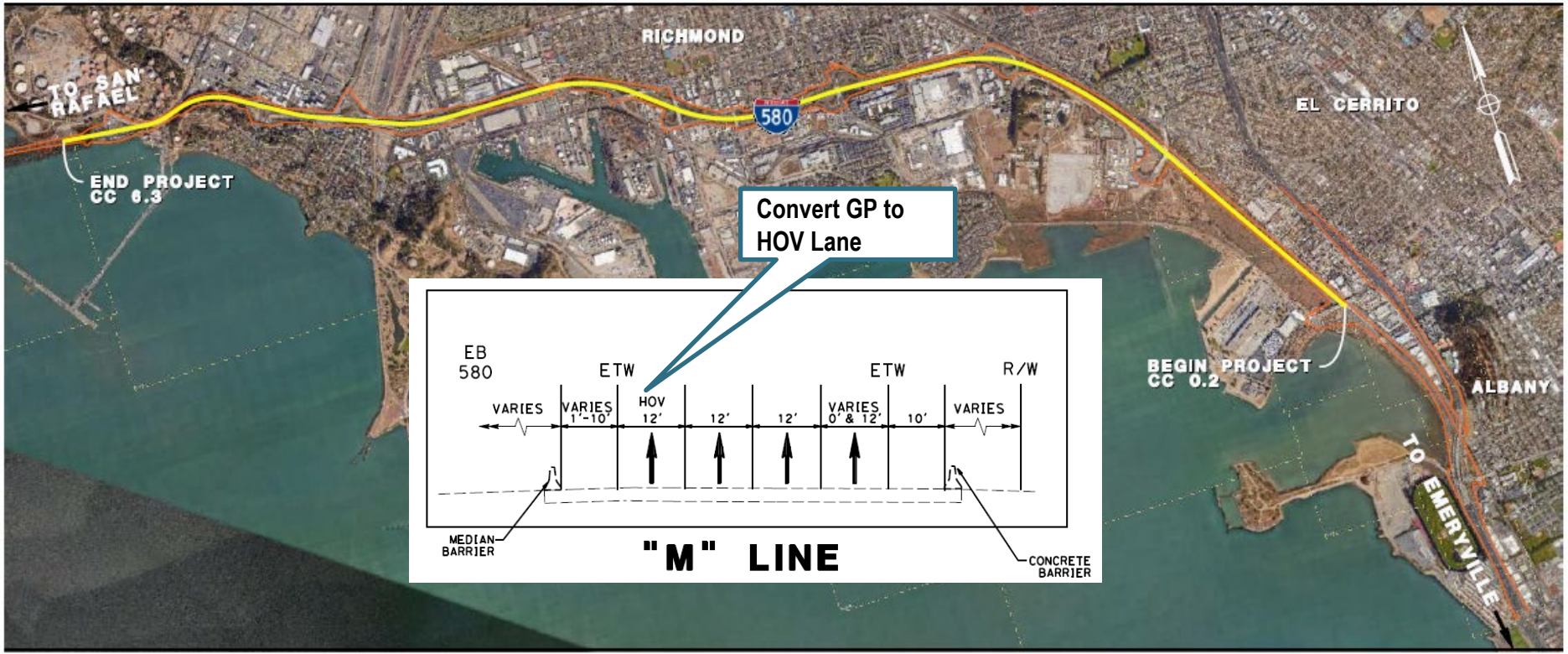
Project Purpose

- Promote mode shift by providing travel time savings for carpooling and transit riders
- Reduce Vehicle Miles Traveled (VMT) and corresponding greenhouse gas (GHG) emissions
- Improve safety by eliminating the need to pass through the existing toll booths; and
- Improve operational efficiency by upgrading the existing toll infrastructure to accommodate the future BATA system-wide upgrade on the toll collection system.

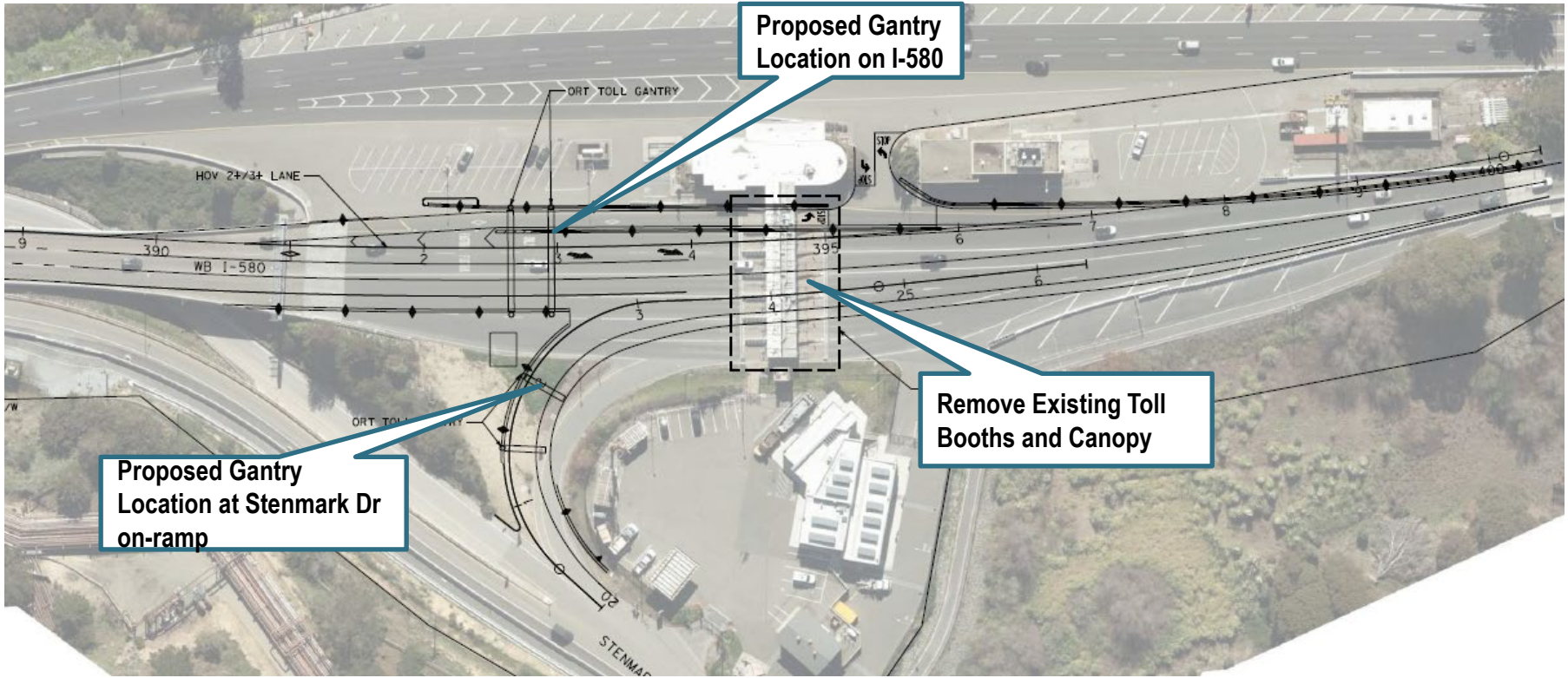
Project Milestone Schedule

MILESTONE	TARGET DATE
PSR-PR & ED	August 2023
PS&E	January 2024
Begin Construction	May 2024
End Construction	September 2026

I-580 Westbound High Occupancy Vehicle Lane



Richmond San Rafael Bridge Toll Plaza Westbound I-580



Summary of Project Improvements

- Toll booth demolition and New Open Road Toll gantry Installation
- Reconfigure I-580 at toll plaza from 7 lanes to 3 lanes
- Realign Stenmark Drive on-ramp
- Convert the leftmost GP lane HOV2+ lane from Regatta Blvd interchange to the Stenmark Dr
- Signing, Striping, Drainage, Toll Equipment Building and electrical Elements
- Documentation prepared in compliance with CEQA and NEPA
- Caltrans is lead agency under NEPA; BATA is lead agency under CEQA
- BATA is project sponsor

Summary of Traffic Findings

- No change in traffic volume or truck percentages as a result of the Project.
- Construction of proposed Project is not anticipated to adversely impact highway traffic.
- No traffic redistribution effects are anticipated for this Project.
- Project expected to promote mode shift by providing travel time savings for carpooling and transit riders.
- Project will result in overall improvements for safety and efficiency on highway operations.
- The Project is not expected to affect diesel traffic and land use.

2021 Final TIP Project Listing

TIP ID: **REG130002** County: Regional System: Tollway RTP ID: 17-10-0024 CTIPS 20600005317

Sponsor: Metropolitan Transportation Commission (MTC) Implementing Agency: Metropolitan Transportation

Project Name: Toll Bridge Rehabilitation Program

Description: Bay Area: On 7 state-owned toll bridges: Rehabilitation program

Air Quality Exempt Code: 1.19 - EXEMPT (40 CFR 93.126) - Widening narrow pavements or reconstructing bridges (no additional travel lanes)

Route: Post Mile From: Post Mile To: Toll Credits:

All funding in thousands of dollars

Phase	Fund Source	Prior Years	FY 2020/21	FY 2021/22	FY 2022/23	FY 2023/24	Future Years	Total Programmed
CON	BT	$ 953,092	$ 51,000	$ 34,000	$ 41,000	$ 33,000		$ 1,112,092
Total Programmed Funding:		$ 953,092	$ 51,000	$ 34,000	$ 41,000	$ 33,000		$ 1,112,092

Recommended Concurrence for Air Quality Conformity Exemption

- Not a new or expanded highway project, but a replacement of older tolling technology
- Limited to reconfiguration and restriping of existing lanes less than 1-mile in length within the Project limits
- No change in traffic volume or truck percentages as a result of the proposed Project
- No intersections modified or significantly impacted by this Project

Questions

Application of Criteria for a Project of Air Quality Concern
Project Title: I-580 Westbound High Occupancy Vehicle Lane Conversion Project
Project Summary for Air Quality Conformity Task Force Meeting: January 26, 2023

Description

- Project converts 1.7 miles of an existing general purpose (GP) lane to a HOV 3+ lane.
- The proposed HOV lane would extend from the beginning of the existing HOV lane on I-580 WB at the Interstate 80 (I-80) WB connector (I-580 Post Mile 46.7) to immediately west (I-580 Post Mile 44.7) of the Broadway-Richmond Boulevard Undercrossing (I-580 Post Mile 44.5).
- Project limit extends further along I-580 WB from the Broadway-Richmond Boulevard Undercrossing (I-580 Post Mile 44.5) to the Lakeshore Park Undercrossing (I-580 PM 43.6) for the installation of HOV lane signs only.
- GP Lane conversion to a HOV lane would entail the removal of current striping, application of new striping, and installation of signs.
- The HOV lane would be separated from the remaining GP lanes by a combination of dashed white striping (continuous access), a single solid white stripe (access discouraged), and solid, double, white striping (restricted access).
- Signs indicating the beginning of the HOV lane, HOV lane restrictions, and HOV lane operating hours would be installed starting west of the Lakeshore Park Undercrossing (I-580 Post Mile 43.6), approximately 1 mile in advance of the beginning of the proposed HOV lane (I-580 Post Mile 44.7).
- The project would increase person throughput during peak hours, improve travel time reliability, and encourage mode shift.

Background

- Particulate Matter Hot Spot Analysis Project Summary Form currently being prepared
- Draft Air Quality Assessment Report currently being prepared
- Final Air Quality Assessment Report Anticipated Approval April 2023
- Draft Environmental Document Approval May 2023
- Air Quality Conformity Report Approval June 2023
- Final Environmental Document July 2023

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?

- Not a new or expanded highway project
- No increase in the number of lanes or capacity improvements
- No increase in traffic volume or truck percentages on I-580

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

- The project does not include interchanges or intersection LOS's.
- The project would not result in substantial redistribution of traffic or changes in the percentage of truck trips through the site.
- The project would not create any new connections to other roadways or areas, and the project would not open any new areas to development.
- No project changes to land use that would substantially 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_{10} or $PM_{2.5}$ implementation plan as site of violation?

- The project is consistent with MTC RTP (ID 04-ALA-580; 21-T06-049) and is intended to meet the transportation needs in the area based on local land use plans.
- No increase in traffic volume or truck percentages on I-580.
- The purpose of the project is to promote mode shift by providing travel time savings for carpooling and transit riders, reduce VMT and corresponding emissions, improve safety, and improve operational efficiency.

Project Assessment Form for $PM_{2.5}$ Interagency Consultation

RTIP ID# 04-ALA-580; 21-T06-049

TIP ID# ALA190018

Air Quality Conformity Task Force Consideration Date
January 26, 2023

Project Description *(clearly describe project)*
The Bay Bridge Forward (BBF) Interstate 580 (I-580) Westbound (WB) High Occupancy Vehicle (HOV) Lane Extension Project (Project) is located in the City of Oakland within Alameda County, California. The Metropolitan Transportation Commission (MTC) is the Project sponsor, implementing agency, and lead agency. Project partners include the California Department of Transportation (Caltrans) and the Alameda County Transportation Commission (CTC).
The Project proposes to convert 1.7 miles of an existing general-purpose (GP) lane to an HOV lane. Signing and striping work would occur along the existing HOV lane between I-580 Post Mile 46.9 and I-580 Post Mile 46.7. The proposed HOV lane would extend from the beginning of the existing HOV lane on I-580 WB at the Interstate 80 (I-80) WB connector to approximately the Broadway-Richmond Boulevard Undercrossing. The Project limit extends further along I-580 WB from the Broadway-Richmond Boulevard Undercrossing to I-580 Post Mile 43.2 at the Lake Park Ave Overcrossing for the installation of advanced HOV lane signs and restriping. No HOV lane extension is proposed for this portion of the Project site.
GP Lane conversion to an HOV lane would entail the removal of current striping, application of new striping, and installation of signs. The proposed HOV lane would be an HOV 3+. The HOV lane would be separated from the remaining GP lanes by a combination of dashed white striping (continuous access), a single solid white stripe (access discouraged), or solid, double, white striping (restricted access). The proposed HOV lane would operate during the same hours as the existing facility between 5 A.M and 10 A.M. and 3 P.M. and 7 P.M. Monday through Friday. All Project work would occur within the current freeway roadway width and right-of-way.
Approximately four roadside signs indicating the HOV lane restrictions and HOV lane operating hours would be installed on existing overhead sign poles and concrete barriers up to 1 mile in advance of the beginning of the proposed HOV lane. Two new overhead sign structures would be installed, one immediately west of the Lakeshore Park Undercrossing (I-580 Post Mile 43.5) and one near the Broadway-Richmond Boulevard Undercrossing (I-580 Post Mile 44.5), to support one HOV lane sign each. Approximately ten additional roadside signs would be installed along the HOV lane on existing concrete barriers, overhead sign poles, and lighting poles and new wood posts.

Type of Project:
High Occupancy Vehicle (HOV) Lane Extension

County	**Narrative Location/ Route & Postmiles**
Alameda	The Project is located in Alameda County from the beginning of the existing HOV lane on I-580 WB at the Interstate 80 (I-80) WB connector (I-580 Post Mile 46.7) to immediately west (I-580 Post Mile 44.7) of the Broadway-Richmond Boulevard Undercrossing (I-580 Post Mile 44.5) in the Cities of Oakland and Emeryville. **Caltrans 04-ALA-580-PM 43.2/46.9** **EA 04-1W160** **Project ID: 0420000336**

Lead Agency: *Metropolitan Transportation Commission (MTC)*

Contact Person	Phone #	Fax #	Email
Pamela Kwan	415.778.5378		pkwan@bayareametro.gov

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

X **Categorical Exclusion (NEPA)**	**EA or Draft EIS**	**FONSI or Final EIS**	**PS&E or Construction**	**Other**

Schedules Date of Federal Action: June 22, 2023

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

Exempt	X **Section 326 – Categorical Exemption**	**Section 327 – Non-Categorical Exemption**

Current Programming Dates (*as appropriate)*

	PE/ Environmental	ENG	ROW	CON
Start	Spring 2021	Fall 2022	Summer 2022	Winter 2023
End	Summer 2023	Summer 2023	Late 2024	Fall 2024

Project Purpose and Need (Summary): *(please be brief)*

Purpose

The purpose of the Project is to:

- Increase person throughput during peak hours.
- Improve travel time reliability to support buses and high-occupancy vehicles.
- Encourage mode shift by providing travel time savings for HOV and transit users.

Need

I-580 is one of Alameda County's key transportation routes, carrying over 200,000 vehicles per day in its most heavily used segments and serves as a primary conduit to the Transbay/ San Francisco – Oakland Bay Bridge (SFOBB) corridor. SFOBB is the most congested bridge in the San Francisco Bay Area, with the queues on I-580 WB approaching the SFOBB toll plaza bottleneck extending to the Interstate 980 (I-980)/State Route 24 (SR 24) Interchange (I-580 Post Mile 45.2) during the morning peak period from 6 A.M. to 10 A.M. These queues are exacerbated by the heavy weaving associated with lane changes prior to the I-80/I-580 junction. With the SFOBB traffic and population and employment around the San Francisco Bay Area anticipated to continue to grow, corridor improvements along I-580 are required to improve current and future travel conditions for the travelers who use the corridor.

Solutions to reduce the congestion along I-580 WB approaching the SFOBB toll plaza are limited by constrained right-of-way. Currently, the congestion approaching the SFOBB toll plaza is a result of lane changes required for vehicles to enter I-80 eastbound (EB) and WB from I-580 WB since lane changes typically require drivers to slow down to avoid crashes. These lane changes occur between the I-980/SR 24 Interchange (I-580 Post Mile 45.2) and the I-80 Interchange (I-580 Post Mile 46.2). Vehicles in the left lanes on I-580 WB need to cross from the left to right lanes to enter I-80 EB. Simultaneously, vehicles entering I-580 WB from I-980/SR 24 must cross from the right to the left lanes of I-580 to enter I-80 WB and SFOBB. Therefore, solutions must focus on improving the efficiency along the corridor to reduce congestion approaching the toll plaza. Currently, there is no transit priority or HOV facility in the corridor. The lack of an HOV priority lane discourages people from taking transit or carpooling.

Surrounding Land Use/ Traffic Generators (*especially effect on diesel traffic)*

Within the area, I-580 serves activity areas in the cities of Oakland and Emeryville. The proposed Project is surrounded by high-density and single-family residential, and commercial land uses. Diesel heavy truck traffic accounts for approximately 3 percent of the total traffic volumes along I-580 within the Project limits.

Brief summary of assumptions and methodology used for conducting analysis

An Air Quality Study Report will be prepared to identify sensitive receptors and provide a quantitative analysis of construction-related emissions. The analysis will assess No Build and Build scenarios to determine whether the Project would reduce vehicle delay and traffic congestion in the westbound direction on I-580 approaching the Broadway-Richmond Boulevard Undercrossing from the I-80 Connector when compared to a no build scenario. It is anticipated that a carbon monoxide hot spot analysis is not needed.

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

Table 1, Opening Year (2025) below highlights the No Build Annual Average Daily Traffic (AADT) of three I-580 segments (Before the I-980/Highway 24 interchange, After the interchange, and the connector from I-580 to the Bay Bridge) in the westbound direction based on orientation of the roadway. On I-580 before the interchange, trucks are approximately 3.9 percent of total AADT or 3,131 trucks in the westbound direction. I-580 after the interchange would have approximately 2.6 percent of trucks in 2025 or approximately 1,334 trucks. The I-580 Connector would have approximately 3.5 percent of AADT as trucks or approximately 2,270 trucks in the westbound. The Project would not add lanes or create additional capacity. Therefore, traffic volumes would not change between Build and No Build conditions.

Table 1: Opening Year (2025) No Build AADT

Segment	Total AADT[1]	Truck AADT	Truck
I-580 Before the Highway 24 and I-980 Interchange			
I-580 West Bound	80,543	3,131	3.9%
Harrison On	9,419	1,562	16.6%
I-980 Off	10,555	1,547	14.7%
SR-24 Off	17,103	1,046	6.1%
San Pablo Off	10,746	765	7.1%
I-580 After the Highway 24 and I-980 Interchange			
I-580 West Bound	51,560	1,334	2.6%
I-980 On	31,712	1,180	3.7%
SR-24 On	13,726	3,167	23.1%
I-80 Off	47,099	5,576	11.8%
Connector			
I-580 to Bay Bridge	64,276	2,270	3.5%

[1] Traffic data provided by Elite Transportation Group, December 2023

Table 2, Opening Year (2025) below highlights AADT of three I-580 segments (Before the I-980/Highway 24 interchange, After the interchange, and the connector from I-580 to the Bay Bridge) in the westbound direction based on orientation of the roadway with the Project. On I-580 before the interchange, trucks are approximately 4 percent of total AADT or 3,103 trucks in the westbound direction. I-580 after the interchange would have approximately 2.4 percent of trucks in 2025 or approximately 1,224 trucks. The I-580 Connector would have approximately 3.4 percent of AADT as trucks or approximately 2,113 trucks in the westbound. The Project would not add lanes or create additional capacity. Therefore, traffic volumes would not change between Build and No Build conditions.

Table 2: Opening Year (2025) With Project AADT

Segment	Total AADT[1]	Truck AADT	Truck
I-580 Before the Highway 24 and I-980 Interchange			

I-580 West Bound	80,424	3,103	3.9%
Harrison On	9,245	1,541	16.7%
I-980 Off	11,253	1,580	14.0%
SR-24 Off	17,310	1,065	6.1%
San Pablo Off	10,852	776	7.1%
I-580 After the Highway 24 and I-980 Interchange			
I-580 West Bound	50,255	1,224	2.4%
I-980 On	31,267	1,148	3.7%
SR-24 On	14,061	3,071	21.8%
I-80 Off	47,373	5,494	11.6%
Connector			
I-580 to Bay Bridge	62,587	2,113	3.4%
[1] Traffic data provided by Elite Transportation Group, December 2023			

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

Table 3, Future (2050) AADT below highlights the No Build scenario of three I-580 segments (Before the I-980/Highway 24 interchange, After the interchange, and the connector from I-580 to the Bay Bridge) in the westbound direction based on orientation of the roadway. On I-580 before the interchange, trucks are approximately 4.3 percent of total AADT or 4,451 trucks in the westbound direction. I-580 after the interchange would have approximately 3.4 percent of trucks in 2050 or approximately 2,484 trucks. The I-580 Connector would have approximately 4.7 percent of AADT as trucks or approximately 3,998 trucks in the westbound. The Project would not add lanes or create additional capacity. Therefore, traffic volumes would not change between Build and No Build conditions.

Table 3: Future (2050) No Build AADT

Segment	Total AADT[1]	Truck AADT	Truck
I-580 Before the Highway 24 and I-980 Interchange			
I-580 West Bound	103,094	4,451	4.3%
Harrison On	12,734	2,229	17.5%
I-980 Off	13,992	1,940	13.9%
SR-24 Off	18,408	1,141	6.2%
San Pablo Off	10,498	1,115	10.6%
I-580 After the Highway 24 and I-980 Interchange			
I-580 West Bound	72,932	2,484	3.4%
I-980 On	44,153	1,973	4.5%
SR-24 On	30,335	6,190	20.4%
I-80 Off	51,919	5,206	10.0%
Connector			
I-580 to Bay Bridge	85,916	3,998	4.7%
[1] Traffic data provided by Elite Transportation Group, December 2023			

Table 4, Future (2050) AADT below highlights three I-580 segments (Before the I-980/Highway 24 interchange, After the interchange, and the connector from I-580 to the Bay Bridge) in the westbound direction based on orientation of the roadway with the Project. On I-580 before the interchange, trucks are approximately 4.2

percent of total AADT or 4,325 trucks in the westbound direction. I-580 after the interchange would have approximately 3.0 percent of trucks in 2050 or approximately 1,979 trucks. The I-580 Connector would have approximately 4.2 percent of AADT as trucks or approximately 3,281 trucks in the westbound. The Project would not add lanes or create additional capacity. Therefore, traffic volumes would not change between Build and No Build conditions.

Table 4: Future (2050) With Project AADT

Segment	Total AADT[1]	Truck AADT	Truck
I-580 Before the Highway 24 and I-980 Interchange			
I-580 West Bound	102,550	4,325	4.2%
Harrison On	11,938	2,134	17.9%
I-980 Off	17,185	2,089	12.2%
SR-24 Off	19,353	1,227	6.3%
San Pablo Off	10,984	1,163	10.6%
I-580 After the Highway 24 and I-980 Interchange			
I-580 West Bound	66,965	1,979	3.0%
I-980 On	42,116	1,826	4.3%
SR-24 On	31,868	5,749	18.0%
I-80 Off	53,168	4,832	9.1%
Connector			
I-580 to Bay Bridge	78,195	3,281	4.2%

[1] Traffic data provided by Elite Transportation Group, December 2023

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

Not Applicable. The Project does not involve interchanges or intersections.

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. The Project does not involve interchanges or intersections.

Opening Year: If facility is 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. The Project is not a bus, rail, or intermodal facility, it is a highway improvement.

RTP Horizon Year/ Design Year: If facility is 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. The Project is not a bus, rail, or intermodal facility, it is a highway improvement.

Describe potential traffic redistribution effects of congestion relief (*impact on other facilities)*

The Project is located within an urbanized area of the Cities of Oakland and Emeryville and its construction would not result in substantial traffic redistribution. The Project is proposed to improve person throughput during peak hours and travel time reliability to support buses and HOV and encourage mode shift by converting a GP lane to a HOV lane. The Project would improve safety and level of service operation in the immediate Project area. While the proposed conversion of a GP lane to a HOV on I-580 would improve traffic operations, the overall capacity of I-580 would not substantially change because the segments nearby the Project would remain unchanged. The Project would not create any new connections to other roadways or areas, and the project would not open any new areas to development. Similarly, the overall capacity of I-580 in the Project site would not substantially change because the Project would not add any new through lanes to those roadways.

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

The proposed project is in a nonattainment area for federal $PM_{2.5}$ 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 traffic analysis for this Project to date shows that the percentage of trucks will remain the same with and without the Project and the AADT will remain the same with and without the Project. The Project does not increase capacity, therefore AADT would not change in the Build scenario. As discussed above, the Project does not involve interchanges or intersections and would not affect LOS.

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

As described above under "Describe potential traffic redistribution effects of congestion relief," the Project would improve person throughout during peak hours and travel time reliability to support buses and high-occupancy vehicles and encourage mode shift by converting a GP lane to a HOV lane. The Project would improve safety and level of service operation in the immediate Project area.

The Project would not affect any intersections and would provide an extension of the I-580 HOV lane. This change would improve the level of service operation in the immediate area and would relieve congestion along the highway.

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)).

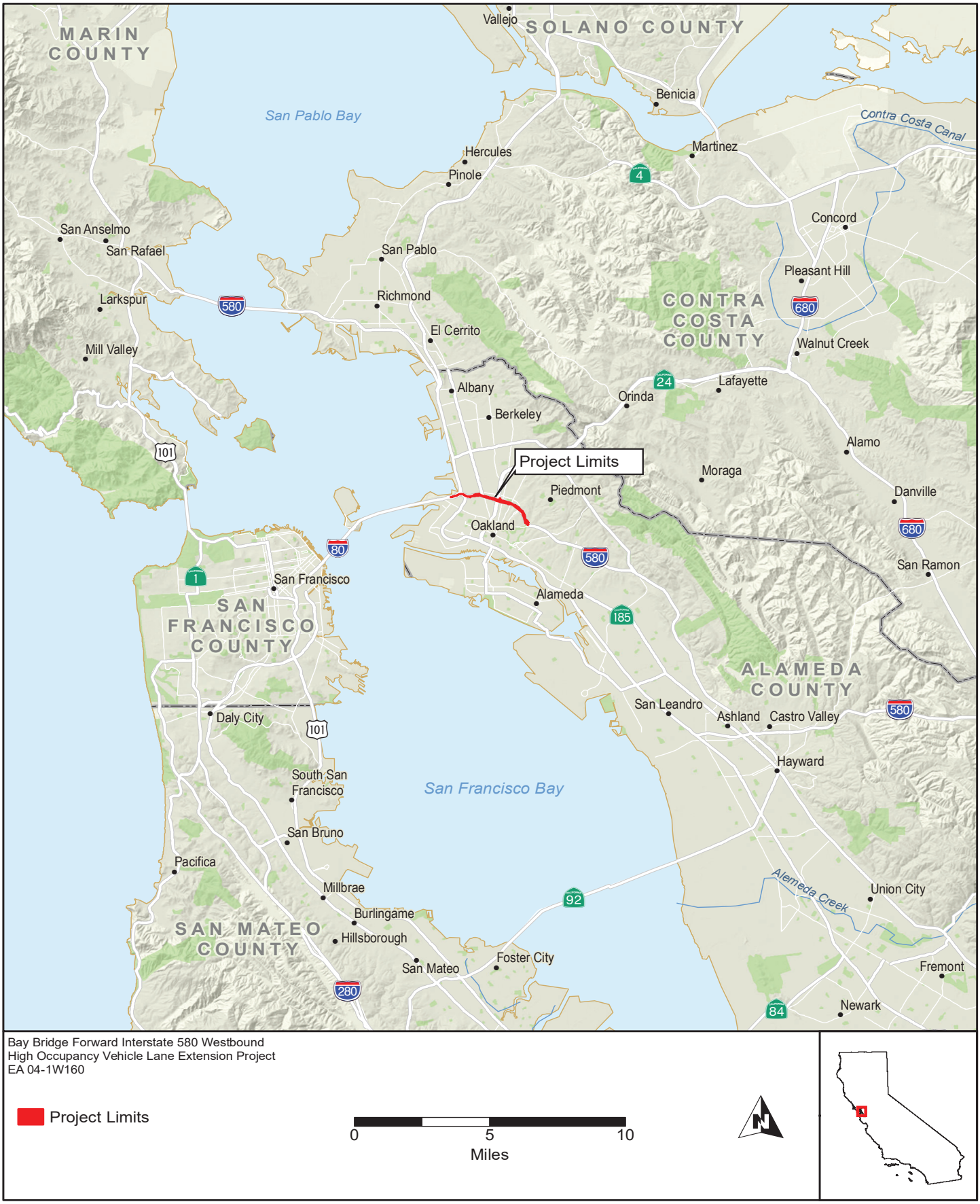
Not applicable - No bus or rail terminals are affected by the Project.

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

The proposed Project is consistent with MTC RTP (IDs 04-ALA-580; 21-T06-049) and is *intended to meet the transportation needs in the area based on local land use plans. EPA's March 2006 guidance document, Transportation Guidance for Qualitative Hot-spot Analysis in $PM_{2.5}$ and PM_{10} Nonattainment and Maintenance Areas, references two-step criteria to identify "a significant volume of diesel truck traffic." The first criterion is facilities with greater than 125,000 ADT volumes. If the first criterion is met, the second criterion is that 8 percent or more of said traffic volumes (i.e., 10,000 vehicles or more) are diesel truck traffic volumes. As discussed above, ADT volumes are not greater than 125,000 on the specified road segments. Furthermore, the truck volumes along the segments do not exceed 10,000 vehicles.*

The purpose of the Project is to alter an existing lane and add improvements along the highway. The Project does not include capacity improvements and therefore would not increase diesel truck volumes or AADT. The 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 PM2.5 National Ambient Air Quality Standards (NAAQS). As a result, new state implementation plan (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 does not require a quantitative hot-spot analysis to demonstrate that it will not cause or worsen an existing $PM_{2.5}$ violation.



Bay Bridge Forward Interstate 580 Westbound
High Occupancy Vehicle Lane Extension Project
EA 04-1W160

Project Limits

0 5 10
Miles

LOCATION MAP

Please note, the last page of the assessment form for the I-580 Westbound High Occupancy Vehicle Lane Conversion project included a diagram which was too large to include in an email and the diagram page can be accessed here:

https://www.dropbox.com/s/mvdsmsago5fp5ep/Pages%20from%202aiv_I-580_WB_HOV_Lanes_Project_Assessment_Form.pdf?dl=0

The entire assessment form for the I-580 Westbound High Occupancy Vehicle Lane Conversion project can be accessed here:

https://www.dropbox.com/s/4sg7lb2e3ycbs0r/2aiv_I-580_WB_HOV_Lanes_Project_Assessment_Form.pdf?dl=0

EA #04-1W160

BBF - I-580 Westbound HOV Lane Extension Project

Air Quality Conformity Task Force Presentation

ALAMEDA County Transportation Commission

Caltrans

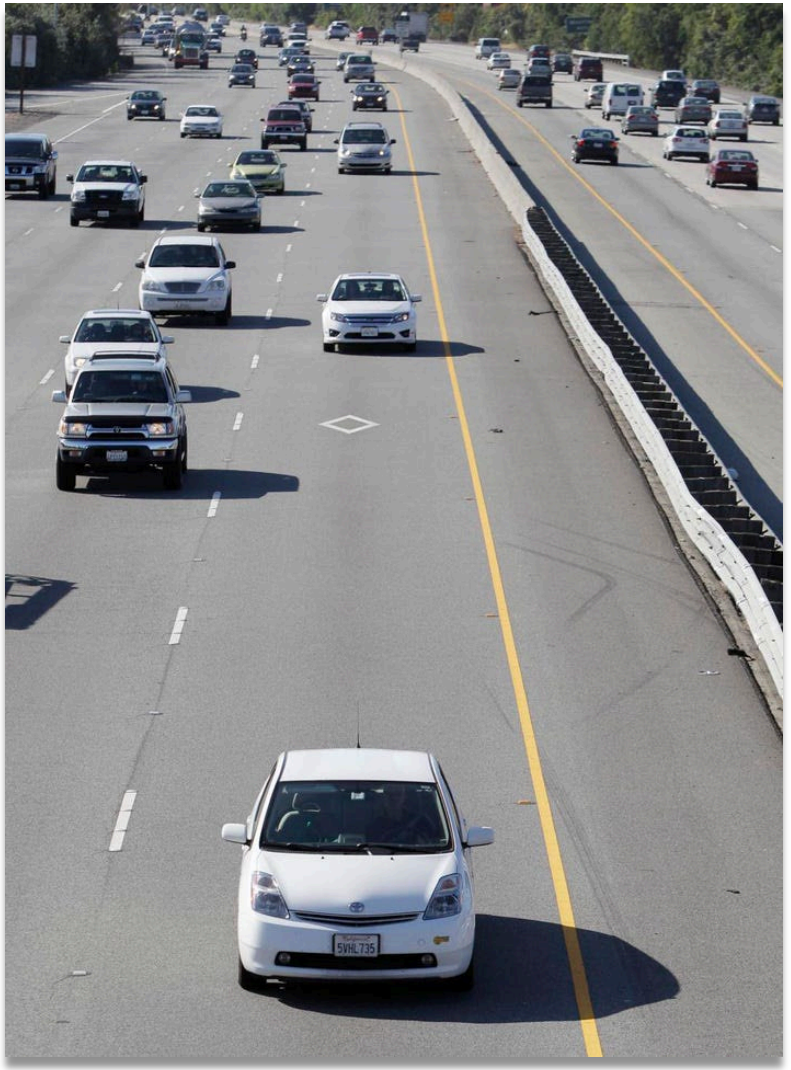
METROPOLITAN TRANSPORTATION COMMISSION

Kimley»Horn
Expect More. Experience Better.

January 26, 2023

Agenda

- Project Overview
- Project Schedule
- Proposed Improvements
- Traffic Data
- Summary
- Question



Project Location

Project Purpose

- Increase person throughput during peak hours
- Improve travel time reliability to support buses and high-occupancy vehicles
- Encourage mode shift by providing travel time savings for HOV and transit users

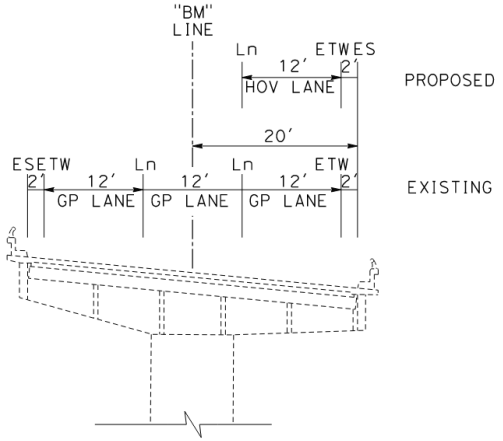
Project Milestone

Milestone	Target Delivery Date (Month/Year)
PSR-PDS	02/2023
PS&E	07/2023
CEQA/NEPA Approval	06/2023
Begin Construction	12/2023
Open to Traffic	07/2024

Proposed Project

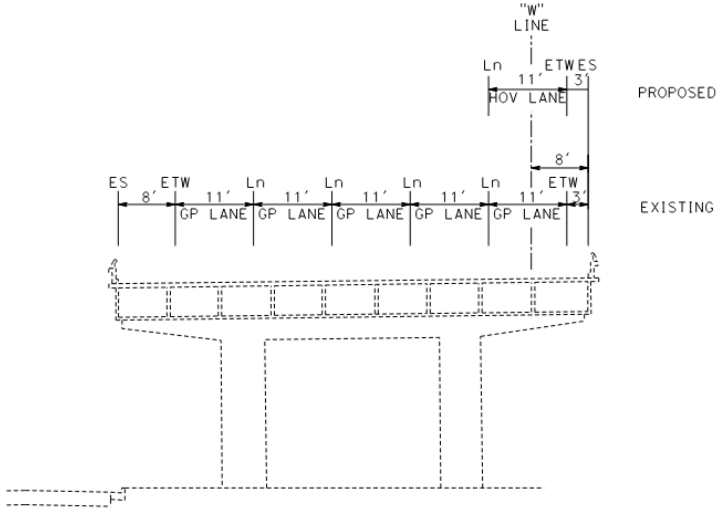
- Conversion of the existing left lane into an HOV 3+ lane on WB I-580
- Installation of two overhead sign structures
- Installation of barrier-mounted and bridge rail-mounted signs
- Pavement delineation for the proposed HOV lane
- The project is constructed entirely within the existing State ROW
- No pavement widening is anticipated for the project
- Categorical Exemptions for CEQA and Categorical Exclusion for NEPA environmental clearance
- MTC is the Project sponsor, implementing agency, and lead agency for CEQA
- Caltrans is the lead agency for NEPA

Proposed Build Alternative



WB I-580

SECTION A-A



WB I-580

SECTION B-B

- HOV Hours of Operation

Traffic Data

Opening Year (2025) AADT No Build

Segment	Total AADT	Truck AADT	% Trucks
I-580 WB east of the Highway 24 and I-980 Interchange			
I-580 West Bound	80,543	3,131	3.9%
Harrison On	9,419	1,562	16.6%
I-980 Off	10,555	1,547	14.7%
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I-580 WB Connector to I-80 WB			
I-580 to Bay Bridge	64,276	2,270	3.5%

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Segment	Total AADT	Truck AADT	% Trucks
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I-580 WB Connector to I-80 WB			
I-580 to Bay Bridge	85,916	3,998	4.7%

Source: Traffic data provided by Elite Transportation Group, January 2023

Traffic Data

Opening Year (2025) AADT With Project

Segment	Total AADT	Truck AADT	% Trucks
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I-580 WB Connector to I-80 WB			
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I-80 Off	53,168	4,832	9.1%
I-580 WB Connector to I-80 WB			
I-580 to Bay Bridge	78,195	3,281	4.2%

Source: Traffic data provided by Elite Transportation Group, January 2023

TIP Project Listing

TIP ID ALA190018 **FMS ID** 6963

Status Active

County Alameda **Sponsor** MTC **Implementing Agency** MTC

Description

Alameda County: On I-580 westbound approach to the San Francisco-Oakland Bay Bridge toll plaza from the SR 24/I-980 interchange to I-80: convert one general purpose lane to an HOV lane. This is part of Bay Bridge Forward 2020.

Jurisdiction

- Alameda County

Location On I-580 westbound approach to the San Francisco-Oakland Bay Bridge toll plaza from the SR 24/I-980 interchange to I-80

State HWY 580 **Post Mile From** 42.6 **to** 46.9

Activities

Convert one general purpose lane to an HOV lane.

Regional Transportation Plan

RTP 21-T06-049 **RTP Cost$**

Cycle PLANBAYAREA2050

RTP Title

Contacts

Project Contact

CTIPS 20600006624

System State Highway

Mode

- 51% Auto
- 49% Bus

Submode

- 51% Auto
- 49% Shuttle Bus

Investment Type

- 100% System Management

Legislative District

CA Assembly	CA Senate	US Congressional
25		
18	10	17
15	7	13
16	9	15
20		

Version 5

Updated 12/16/22

Created 2/15/22

TIP Revision 2023-00

Type Amendment

Cost$ 12,500,000

Approvals

Regional 9/28/22

State 11/16/22

Federal 12/16/22 (Final)

Description of Change

2023 TIP Update - Update the funding plan

Extended Change Description

2023 TIP Update - Update the funding plan

AirQuality

Air Quality Status Non-Exempt

Category N/A

Project Type N/A

Air Basin San Francisco Bay Area

Air District BAAQMD

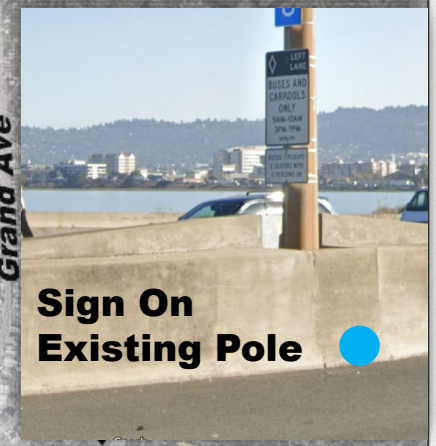
Summary of Air Quality Conformity Analysis

Why the I-580 Westbound HOV Lane Extension Project is not of Air Quality Concern –

- Not a new or expanded highway project.
- No change in traffic volume or truck percentages on I-580.
- The Project does not include capacity improvements.
- No project changes to land use that would affect diesel traffic percentage.
- No substantial traffic redistribution effects

Question

Installation of Signs



40 CFR 93.126 Exempt Projects List

County	TIP ID	Sponsor	Project Name	Project Description	Additional Description	Project Type under 40 CFR 93.126
ALA	ALA170057	MTC	I-880 Integrated Corridor Management - Central	Alameda County: I-880 Corridor from Davis Street in San Leandro to Whipple Road in Union City: Building on the ICM work being done in the northern segment of the I-880 corridor, the I-880 ICM Central Alameda Project will identify how existing and planned incident management strategies and operations can be better coordinated and integrated across networks and jurisdictional boundaries in the central segment of the I-880 Corridor. Phase I: Along San Leandro Blvd and Washington Ave from West Juana Ave and Lewelling Blvd: Implement an integrated corridor management system	Update the funding plan to reprogram $1.5M in CMAQ from FY24 to FY23 to reflect planned obligation	Safety - Traffic control devices and operating assistance other than signalization projects

METROPOLITAN
TRANSPORTATION
COMMISSION

Bay Area Metro Center
375 Beale Street, Suite 800
San Francisco, CA 94105
415.778.6700
www.mtc.ca.gov

TO: Air Quality Conformity Task Force DATE: January 26, 2023

FR: Adam Crenshaw

RE: Review of the Regional Conformity Status for New and Revised Projects

Staff has prepared the following information in an effort to streamline the review of the regional air quality conformity implications of projects that staff proposes to add into the 2023 TIP through current or future revisions. This item is for advisory purposes only. The inclusion of these projects and project changes in a proposed revision to the TIP is subject to Commission approval in the case of amendments and MTC's Executive Director or Deputy Executive Director in the case of administrative modifications. The final determination of the regional air quality conformity status of these projects will be made by the Federal Highway Administration, the Federal Transit Administration and the Environmental Protection Agency as part of their review of proposed final TIP amendments and by the Executive Director or Deputy Executive Director as part of their review for TIP administrative modifications.

Changes Staff is Proposing to Include in 2023 TIP

Staff is proposing to add two new projects to 2023 TIP. The description of the new projects along with the regional air quality category that staff believes best describes the projects are included on Attachment A.

MTC staff is not seeking a determination on the status of these projects for project-level conformity purposes with this item.

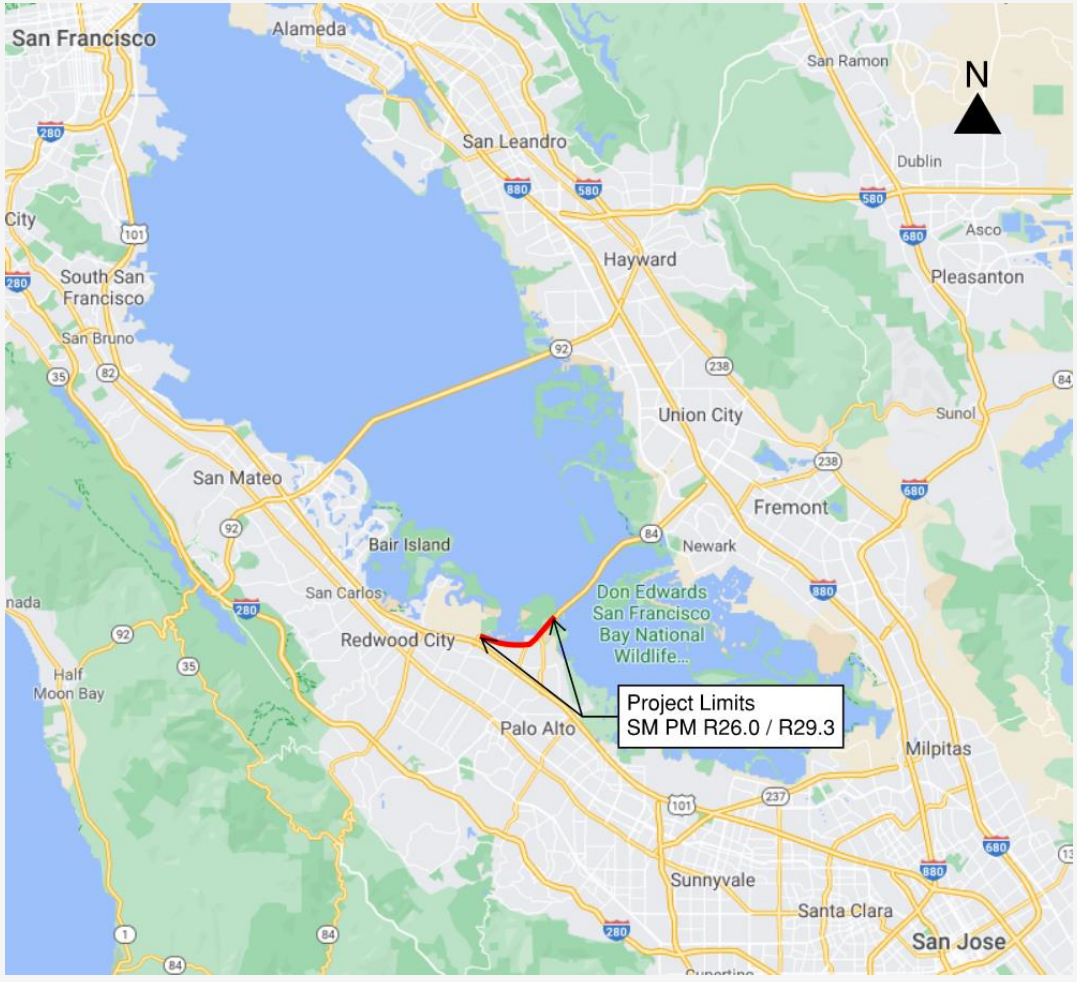
Review of the Regional Conformity Status for New and Revised Projects - Attachment A

#	County	TIP ID/FMS ID	Sponsor	Project Name	Project Description	Project Expanded Description	Project Type
1	Contra Costa	CC-230201	CCCTA	CCCTA - Replace 40ft Diesel Buses - Diesel	CCCTA: Fleet: Replace Diesel Buses	CCCTA: Fleet: Replace 20 40' Diesel Buses	EXEMPT (40 CFR 93.126) - Purchase of new buses and rail cars to replace existing vehicles or for minor expansions of the fleet
2	Santa Clara	10024	VTA	Cerone Operations Command and Control Center	VTA: At Cerone Bus Operating Division: Construct a new Operations Command and Control Center (OCC)	VTA: At Cerone Bus Operating Division: Construct a new Operations Command and Control Center (OCC) Theater that would include Bus and Light Rail Workstations displaying the entire VTA Bus and Light Rail System in real time. The new OCC would support SCADA, Information Technology, and Telecommunications Rooms with staff offices for both the OCC facility and field staff. The new facility would also include a Training Center and Situation Room.	EXEMPT (40 CFR 93.126) - Construction of new bus or rail storage/maintenance facilities categorically excluded in 23 CFR part 771

Dumbarton *Forward*

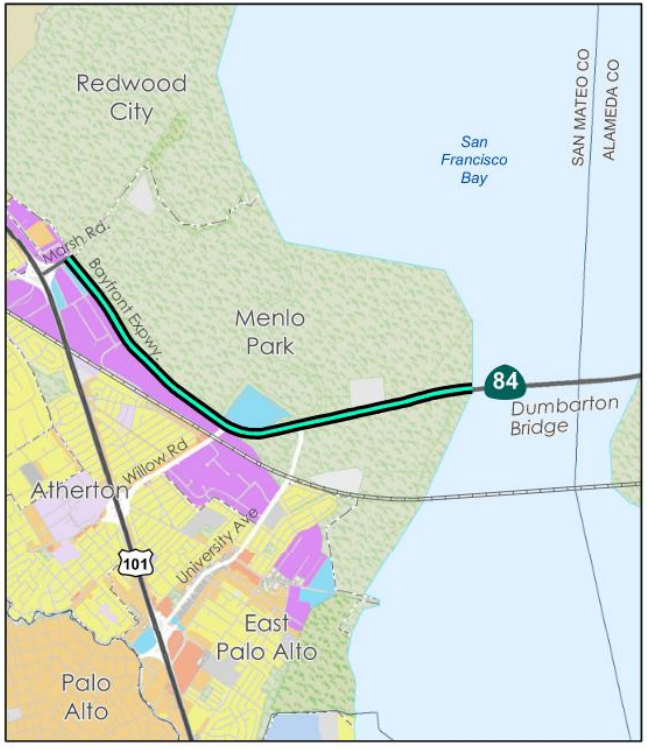
Air Quality Conformity
Task Force Presentation
January 26, 2023

Project Location



Land Uses

Bayfront Expressway Land Use



Legend

- Office Park
- High Density Residential
- Industrial
- Commercial
- Low Density Residential
- Public/Institutional
- Open Space
- Project Location
- Rail Line
- County Boundary
- Freeway
- Bay
- City Boundary

DATA SOURCES: City of Redwood City; City of Menlo Park; City of Attheron; City of Palo Alto; City of East Palo Alto; City of Fremont; City of Newark; City of Union City; Alameda County; San Mateo County; Caltrans; Metropolitan Transportation Commission; U.S. Census Tigerline 2017. Created August 2018.

0 Miles 1.5

Purpose and Need

Need

- Significant highway peak period congestion results in increased travel times
- Accelerated growth in the jobs-housing imbalance between the East Bay and Peninsula has increased traffic congestion and travel times along the corridor
- Limited Transbay highway capacity is available, resulting in the need implement innovative strategies to improve operations and mobility, and incentivize bus use
- Current Transbay buses do not have travel time reliability for users

Purpose

- Increase person throughput by encouraging use of Transbay bus services
- Improve travel time reliability for bus commuters
- Reduce peak-period congestion and delay along the SR 84/Dumbarton Bridge corridor

Bayfront Expressway Contour Plots

WB SR 84 AM Peak Period (5:00 AM - 11:00 AM) Contour Plot

Westbound SR 84

Segment	Distance	5:00 AM	5:30 AM	6:00 AM	6:30 AM	7:00 AM	7:30 AM	8:00 AM	8:30 AM	9:00 AM	9:30 AM	10:00 AM	10:30 AM
West end Dumbarton Bridge to University Avenue intersection	1.19	57	60	61	34	30	27	28	29	27	27	35	61
University Avenue intersection to Willow Road intersection	0.52	41	44	51	25	28	30	28	28	20	21	23	42
Willow Road intersection to Marsh Road intersection	1.68	44	43	40	39	36	25	18	24	35	36	36	38

Red indicates speeds less than 35 mph, yellow indicates speeds between 35 and 55 mph, and green indicates speeds above 55 mph

← Travel Direction

EB SR 84 PM Peak Period (2:00 PM - 9:00 PM) Contour Plot

Eastbound SR 84

Segment	Distance	2:00 PM	2:30 PM	3:00 PM	3:30 PM	4:00 PM	4:30 PM	5:00 PM	5:30 PM	6:00 PM	6:30 PM	7:00 PM	7:30 PM	8:00 PM	8:30 PM
Independence Drive off-ramp to Willow Road	1.65	36	36	28	20	13	8	6	5	6	7	15	37	43	40
Willow Road stop bar to University Avenue	0.47	35	26	20	33	31	32	32	25	19	18	25	31	38	38
University Avenue intersection to west end Dumbarton Bridge	1.17	58	56	54	57	56	55	55	52	41	42	51	50	54	55

Red indicates speeds less than 35 mph, yellow indicates speeds between 35 and 55 mph, and green indicates speeds above 55 mph

← Travel Direction

Project Description

Caltrans and the Bay Area Toll Authority proposes to implement a part-time bus-only lane (PTBOL) on SR 84/Bayfront Expressway to improve mobility between southern Alameda County and San Mateo County, incentivize bus use, increase person throughput, and reduce congestion along the Dumbarton Bridge corridor. The Project would complete operational improvements, including:

- Implement a contiguous preferential bus-only lane along the right side of Bayfront Expy in both directions, between Marsh Rd and the Dumbarton Bridge (< 3 mi), by use of signing, striping, and signals
- Operate the PTBOL in the WB direction during the AM peak period, and in the EB direction during the PM peak period, at a maximum speed of 35 mph (Note: the PTBOL is closed all other times)
- Implement an additional traffic signal phase at the intersections with Marsh Rd and Willow Rd, to accommodate a dedicated left-turn phase for buses (in the WB direction)
- Deploy Transit Signal Prioritization at the following five intersections: Marsh Rd, Chrysler Dr, Chilco St, and the two Facebook Wy intersections
- Complete other minor improvements – relocations and/or protection of fixed objects, cold planing and overlaying pavement sections, modifying curb ramps and sidewalks

Project Exhibit

Summary of Traffic Data

Location	Study Period	Existing/Opening Year Build/No Build		
		AADT	Truck %	Truck Number
Marsh Road at Independence Drive	AM (SB)	4624	2.6%	122
	PM (NB)	3538	4.5%	160
SB Willow Road at Newbridge Street	AM (SB)	2556	3.5%	90
	PM (NB)	3475	2.5%	88
SB University Avenue at Bay Road	AM (SB)	2046	1.7%	35
	PM (NB)	2283	1.3%	29

Source: Fehr and Peers, December 2021. *Revised Final Traffic Operations Analysis Report for the PA/ED.*

Summary of Bus Data

Commuter Transit Services on the SR 84 Corridor

Transit Operator	Route
AC Transit	DB: Union City BART to Stanford University
	DB1: Union City BART to Stanford Research Park
AC Transit/Stanford University	Line U: Fremont BART to Stanford University
Stanford University	Line AE-F: Fremont BART to Stanford University
Private	Alameda County to San Mateo County

NOTE: The project would not change the number of buses operating on SR 84.

Existing Transbay Transit Volumes

Hour	To/From US 101/ Willow Road	To/From US 101/ Marsh Road	To/From Facebook Transit Center	Total Buses
AM Peak Period (5:00 AM to 11:00 AM)				
5:00 AM	5 / 0	0 / 0	0 / 0	5 / 0
6:00 AM	9 / 4	0 / 4	0 / 12	9 / 20
7:00 AM	9 / 12	0 / 17	0 / 33	9 / 62
8:00 AM	6 / 13	0 / 9	0 / 36	6 / 58
9:00 AM	3 / 12	0 / 13	0 / 35	3 / 60
10:00 AM	1 / 4	0 / 4	0 / 12	1 / 20
PM Peak Period (2:00 PM to 9:00 PM)				
2:00 PM	3 / 6	0 / 3	0 / 12	3 / 21
3:00 PM	6 / 6	0 / 3	0 / 12	6 / 21
4:00 PM	8 / 12	0 / 8	0 / 25	8 / 45
5:00 PM	9 / 16	0 / 9	0 / 33	9 / 58
6:00 PM	6 / 22	0 / 12	0 / 47	6 / 81
7:00 PM	7 / 12	0 / 8	0 / 25	7 / 45
8:00 PM	2 / 3	0 / 2	0 / 6	2 / 11

NOTE: Number of buses presented as “number of public buses/number of private buses”

Conclusion

- The Project would reduce vehicle-hours of delay (VHD), person-hours of delay (PHD), travel times, and maximum individual delays; the Project would also increase travel speeds for all modes of travel;
- The PTBOL on SR 84/Bayfront Expressway would improve mobility between southern Alameda County and San Mateo County, increase person throughput, and reduce congestion within cities that are directly affected by traffic along the Dumbarton Bridge corridor.;
- The Project is not anticipated to generate additional vehicular or truck trips, therefore AADT and truck percentages along SR 84 for the Build and No Build conditions are considered the same;
- The Project does not increase the number of buses on this route and there will be no divergence or redistribution of traffic;
- The Project is included in the Plan Bay Area 2040;
- This Project should not be considered a project of air quality concern.

Air Quality Conformity Task Force
Summary Meeting Notes
December 1, 2022

Participants:

Rodney Tavitas – Caltrans
Dick Fahey – Caltrans
Andrea Gordon – BAAQMD
Abhijit Bagde – Caltrans
Ace Malisos – Kimley-Horn
Erika Espinosa Araiza – Caltrans
Paul Hensleigh – YSAQMD
Jean Mazur – FTA
Patrick Pittenger – FHWA
Michael Dorantes – EPA
Jacqueline Kahrs – Caltrans
Adam Crenshaw – MTC
Harold Brazil – MTC

1. **Welcome and Self Introductions**: Harold Brazil (MTC) called the meeting to order at 9:35 am.

2. **$PM_{2.5}$ Project Conformity Interagency Consultation**

   a. **Consultation to Determine Project of Air Quality Concern Status**

      i. Interstate-80/Powell Street Interchange Transit Access Improvement Project (Follow-up Discussion on Task Force Determination)

Harold Brazil (MTC) confirmed Jean Mazur (FTA) and Alexander Smith (FTA) had concurred that the Interstate-80/Powell Street Interchange Transit Access Improvement project wasn't of air quality concern. Michael Dorantes (EPA) and Patrick Pittenger (FHWA) also indicated their concurrence.

Final Determination: After follow-up discussions and with input from EPA, FTA, FHWA and Caltrans (deferring their determination to FHWA), the Task Force concluded that the Interstate-80/Powell Street Interchange Transit Access Improvement project was not of air quality concern.

3. **Projects with Regional Air Quality Conformity Concerns**

Adam Crenshaw (MTC) made the following points:

- The extension of San Teresa Boulevard out of Gilroy cannot be classified as exempt under 40 CFR 93.126 or 40 CFR 93.127
- The roadway being extended currently classified as is a minor arterial.
- MTC believes the extension of the roadway is not regionally significant and adding this project to the TIP would not require an update to be able to the regional conformity analysis

Rodney Tavitas (Caltrans) did not think the project would influence the regional conformity analysis and Harold Brazil (MTC) concurred with Mr. Tavitas.

Michael Dorantes (EPA) asked for confirmation of the road facility classifications in the project area and Mr. Brazil stated MTC will follow-up.

Final Determination; Task Force concluded that the US 101/SR-25/Santa Teresa Blvd Extension project should not be considered regionally significant for regional air quality conformity purposes.

4. Other Items

- Rodney Tavitas (Caltrans) discussed and provided guidance on project environmental documentation requirements
- Patrick Pittenger (FHWA) provided an update on the National Electric Vehicle Infrastructure (NEVI) Program
- Task Force members gave their sincere congratulations to Dick Fahey (Caltrans) on his upcoming retirement and thanked Mr. Fahey his years of participation and contribution to the Task Force.

Please note: Consent calendar item, the October 27, 2022 meeting summary agenda item, inadvertently was not discussed at this meeting.