

RTIP ID# <i>(required)</i> REG0701/ ORA001105				
TCWG Consideration Date October 22, 2019				
Project Description <i>(clearly describe project)</i> This operational improvement project is on the South Bound (SB) State Route (Rte) 133 from SB Interstate 5 (I-5)/SB Rte 133 connector (SB I-5 Connector) to the SB Rte 133/Northbound (NB) Interstate 405 (I-405) connector (NB-I405 Connector) in the City of Irvine in South Orange County. The project extends from NB I-405 Connector (PM 8.3) to SB I-5 Connector (PM M9.3). Following are the two alternatives considered and analyzed for this project. Alternative #1: This is the No Build Alternative. Alternative #2 This is Build Alternative. Alternative 2 proposes to construct a new auxiliary lane (0.56 mile) on the SB Rte 133 from the SB I-5 Connector to the NB I-405 connector. This auxiliary lane will become the second lane on the NB I-405 connector. This alternative also proposes to extend the number three lane on SB Rte 133 approximately 300 feet south of the San Diego Creek to match the existing roadway pavement. This work will also construct shoulder, retaining walls and Midwest Guardrail System (MGS), widen ramps, realign Barranca Pkwy loop on ramp, and replaces light poles, drainage, disturbance and removal of vegetation and trees. Project Location is shown in the attached Figure 1.				
Type of Project <i>(use Table 1 on instruction sheet)</i> Change to existing State Highway				
County Orange12-ORA-133	Narrative Location/Route & Postmiles: 12-ORA-133-PM8.3/PM9.3 Caltrans Projects – EA# 12-0N890			
Lead Agency: Caltrans District 12				
Contact Person Rabindra Bade	Phone# (657) 328 6573	Fax#	Email Rabindra.Bade@dot.ca.g	
Hot Spot Pollutant of Concern <i>(check one or both)</i> PM2.5 × PM10 ×				
Federal Action for which Project-Level PM Conformity is Needed <i>(check appropriate box)</i>				
× Categorical Exclusion (NEPA)	EA or Draft EIS	FONSI or Final EIS	PS&E or Construction	Other
Scheduled Date of Federal Action: 2020				
NEPA Assignment – Project Type <i>(check appropriate box)</i>				
Exempt	× Section 326 –Categorical Exemption	Section 327 – Non-Categorical Exemption		
Current Programming Dates <i>(as appropriate)</i>				
	PE/Environmental	ENG	ROW	CON
Start	August 2018	February 2020	April 2020	April 2022
End	April 2020	March 2022	March 2025	March 2025

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

Purpose:

The purpose of this project is to improve traffic flow on the SB Rte 133 by reducing congestion and improving operational deficiencies between the SB I-5 connector and the NB I-405 connector. In addition, this project will provide additional vehicular storage, shorten the queue length of vehicles, enhance operations, and improve safety for the drivers traveling on the SB I-5 connector and SB Rte 133 mainline during peak periods.

Need:

The segment of SB Rte 133 is operating under severe congestion during morning peak hours. The number three lane of SB Rte 133 mainline experiences long traffic queues which back up all the way to the SB I-5 connector and the SB Rte 133 mainline (north of the SB I-5 connector).

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

Rte 133 is a north-south route located in the City of Irvine, in Central Orange County. This route serves as a commuter route between Riverside County and central/southern areas of Orange County. The area is urbanized in nature. Development within the project site includes Irvine Spectrum, Costco, Walmart Business Center, on the west includes other business units and Cal State Fullerton, Irvine Center. The SB Rte 133 mainline between the SB I-5 connector and NB I-405 connector is having congestion problem creating long queue on the lane number 3 of the SB Rte 133 mainline well into the SB I-5 connector. Truck represents about 4.5% of the vehicle volume.

Opening Year: Build and No Build LOS, AADT, % and # trucks, truck AADT of proposed facility

The project does not include the construction of a new highway or the expansion of an existing highway. There would be no change to vehicle volume or daily diesel vehicle volumes on the SB Rte 133.

RTP Horizon Year / Design Year: Build and No Build LOS, AADT, % and # trucks, truck AADT of proposed facility

The project does not include the construction of a new highway or the expansion of an existing highway. There would be no change to vehicle volume or daily diesel vehicle volumes on the SB Rte 133.

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

Table#1 AADT and Truck volume in Base year (2018, Opening year (2024) and Design year (2044)

Scenario	Road Segment	Type	Base year 2018		Opening year 2024		Design year 2044	
			Total	Truck #	Total	Truck #	Total	Truck #
SB Rte 133	SB Rte 133/SB I-5 connector-SB Rte 133/Barranca Parkway	ML	26,580	1,196	29,530	1,329	42,300	1,904
SB Rte 133	SB Rte 133/Barranca Parkway to SB Rte 133/NB I-405 connector	ML	32,750	1,474	35,700	1607	48,470	2,181
SB Rte 133	SB Rte133/NB I-405 connector to the Ramp	Ramp	12,990	585	14,710	662	22,450	1,010

Table 1 shows AADT and truck volumes for the base year (2018), Opening year (2024) and the design year (2044). Implementation of the project would not change percentage of trucks travelling on roadways throughout the project area and would not have effect on SB Rte 133. The project would not increase vehicle or truck traffic along the road segments. Truck percent in this project is 4.5%.

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

Table#2 LOS in Base year (2018, Opening year (2024) and Design year (2044)

Scenario	Road Segment	Type	Base Year 2018		No Build Opening Year 2024		Build Opening Year 2024		No Build Design Year 2044		Build Design Year 2044	
			AM	PM	AM	PM	AM	PM	AM	PM	AM	PM
SB Rte 133	SB Rte 133/SB I-5 connector-SB Rte 133/Barranca Parkway	ML	B	A	B	B	B	A	C	B	C	B
SB Rte 133	SB Rte 133/Barranca Parkway to SB Rte 133/NB I-405 connector	ML	B	B	B	B	B	B	C	C	C	C
SB Rte 133	SB Rte133/NB I-405 connector to the Ramp	Fwy Ramp	D	C	D	D	B	B	F	E	C	C

Table 2 shows LOS for the base year (2018), Opening year (2024) and the design year (2044). LOS in the Build condition is better than the no Build condition in the AM and PM peak hours in the design year 2044.

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

Adding an auxiliary lane on the SB Rte 133 and an additional lane on the NB I-405 connector improve flow of vehicle on the SB 133 and I405 connector, as a result congestion on the SB Rte 133 mainline will be reduced. It eventually improves vehicle safety by improving mobility of the vehicles.

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

Located in the nonattainment area for federal PM2.5 standards and within an attainment/maintenance area for the federal PM10 standards. Therefore, per 40 CFR Part 93 hot-spot analysis are required for conformity purposes. However, the EPA does not require hot-spot analyses, qualitative or quantitative, for projects that are not listed in section 93.123 (b)(1) as an air quality concern.

According to 40 CFR Part 93.123 (b) (1), the following are Projects of Air Quality Concern:

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

The project does not qualify as a Project of Air Quality Concern (POAQC) because of the following reasons:

- i. The proposed Project is not a new or expanded highway project. The proposed Project would reduce traffic congestion at the SB Rte 133 mainline and NB I-405 connector and reduce queuing without increasing capacity. Truck volume would not exceed 10,000 average daily truck trip criteria for a POAQC.
- ii. The LOS conditions in the project with and without the project are shown in Table 2. LOS is improved in the project area (LOS of C or better in the Design Year Build Scenario) and the project would not result in a significant increase in the number of diesel vehicles in the project limits.
- iii. The proposed build alternative does not include the construction of a new bus or rail terminal.
- iv. The proposed build alternative does not expand an existing bus or rail terminal.
- v. The proposed build alternative is not in or affection locations, areas, or categories of sites that are identified in the PM2.5 and PM10 applicable implementation plan or implementation plan submission, as appropriate, as sites of violation or possible violation.

Therefore, the proposed Project meets the CAA requirements and 40 CFR 93.116 without any explicit hot-spot analysis. The proposed Project would not create a new, or worsen an existing, PM10 or PM2.5 violation. Therefore, the project would not be considered a Project of Air Quality Concern under this criterion.



Build Alternative New Auxiliary lane from SB Rte 133/SB I-5 connector to SB Rte 133/ NB I-405 connector and construct second lane on SB Rte 133/ NB I-405 Connector