## RTIP ID\# (required) SBD990218

## TCWG Consideration Date May 23, 2023

## Project Description (clearly describe project)

The California Department of Transportation (Caltrans) proposes a part-time shoulder use pilot project for 3 to 5 years by installing 12 Extinguishable Message Signs (EMS) every 0.5 mile on Interstate 15 between post mile (PM) 180.2 and PM 186.2 in San Bernardino County. Part-time shoulder use is the conversion of shoulders to travel lanes during some hours of the day as a congestion relief strategy. In this case the shoulders would be opened to traffic on Sundays, Mondays (with exact hours to be determined), and holidays or major incidents. The total length of the project is approximately 6 miles. All proposed improvements would be constructed within the existing Caltrans right of way.

## No Build Alternative

The No-Build Alternative would leave the existing facilities in their current condition and no improvements to address traffic congestion would be made. There are no capital costs associated with this alternative. This alternative does not fulfill the purpose and need.

## Build Alternative

Under the Build Alternative, the following improvements are included:

- Install 12 Dynamic Cantilever EMS within project limits.
- Nonstandard Design Features.

The proposed project will not alter or introduce new roadway geometry features.


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

 PurposeThe purpose of this project is to install 12 Dynamic Cantilever EMS, which will allow for parttime travel on the shoulder on l-15 southbound between PMs 180.2 and 186.2 during weekend and major events (crashes, weather, and special event congestion) that cause significant disruption to operations along the freeway, crippling traffic for extended periods.

## Need

To enhance the safety of drivers and to reduce traffic queues on Sunday, Monday, and holidays on I-15 southbound near the California and Nevada state line.

Surrounding Land Use/Traffic Generators (especially effect on diesel traffic)
Land uses in the project area consist primarily of undeveloped lands, with Primm Valley Golf Club being the one sensitive location.

Opening Year: Build and No Build LOS, AADT, \% and \# trucks, truck AADT of proposed facility
I-15 - Weekday Mainline
2024 No Build Alternative: ADT=36,300; Truck ADT=9,438 (26\%); LOS=B
2024 Build Alternative: ADT=36,300; Truck ADT=9,438 (26\%); LOS=B
I-15 - Weekday Southbound Only
2024 No Build Alternative: ADT=18,700; Truck ADT=4,862 (26\%); LOS=B
2024 Build Alternative: ADT=18,700; Truck ADT=4,862 (26\%); LOS=B

I-15 - Weekend Mainline
2024 No Build Alternative: ADT=52,800; Truck ADT=13,728 (26\%); LOS=E
2024 Build Alternative: ADT=52,800; Truck ADT=13,728 (26\%); LOS=C
I-15 - Weekend Southbound Only
2024 No Build Alternative: ADT=26,300; Truck ADT=6,838 (26\%); LOS=E
2024 Build Alternative: ADT=26,300; Truck ADT=6,838 (26\%); LOS=C

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

I-15 - Weekday Mainline
2029 No Build Alternative: ADT=31,900; Truck ADT=8,294 (26\%); LOS=C
2029 Build Alternative: ADT=31,900; Truck ADT=8,294 (26\%); LOS=C
I-15 - Weekday Southbound Only
2029 No Build Alternative: ADT=20,200; Truck ADT=5,252 (26\%); LOS=C
2029 Build Alternative: ADT=20,200; Truck ADT=5,252 (26\%); LOS=C

I-15 - Weekend Mainline
2029 No Build Alternative: ADT=56,900; Truck ADT=14,794 (26\%); LOS=E
2029 Build Alternative: ADT=56,900; Truck ADT=14,794 (26\%); LOS=C
I-15 - Weekend Southbound Only
2029 No Build Alternative: ADT=28,400; Truck ADT=7,384 (26\%); LOS=E
2029 Build Alternative: ADT=28,400; Truck ADT=7,384 (26\%); LOS=C

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 crossstreet AADT, \% and \# trucks, truck AADT

N/A
Describe potential traffic redistribution effects of congestion relief (impact on other facilities) See attached analysis

Comments/Explanation/Details (attach additional sheets as necessary)
See attached analysis

## PM ${ }_{2.5} /$ PM $_{10}$ Hot-Spot Analysis

The I-15 Part-Time Shoulder Project is located within a nonattainment area for the federal $\mathrm{PM}_{10}$ standards. Therefore, per 40 CFR Part 93 hot-spot analyses 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 $93.123(\mathrm{~b})(1)$ as an air quality concern.

According to 40 CFR Part 93.123(b)(1), the following are Projects of Air Quality Concern (POAQC):
i. New highway projects have a significant number of diesel vehicles, and expanded highway projects that have a significant increase in the number of diesel vehicles;
ii. Projects affecting intersections that are at 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. Projects in or affecting locations, areas or categories of sites which are identified in the $\mathrm{PM}_{2.5}$ and $\mathrm{PM}_{10}$ applicable implementation plan or implementation plan submission, as appropriate, as sites of violation or possible violation.

The project does not qualify as a POAQC because of the following reasons:
i) The build alternative proposed as part of the project will allow for parttime travel on the shoulder on I-15 southbound between PMs 180.2 and 186.2 during weekend and major events (crashes, weather, and special event congestion) that cause significant disruption to operations along the freeway, crippling traffic for extended periods. As there are no alternate or parallel highway facilities in the project area, the build alternative is not expected to increase the total ADT or truck ADT along I-15. Therefore, the project would not significantly increase the number of diesel vehicles operating within the project study area.
ii) As discussed above, the proposed project would not significantly increase the number of diesel vehicles operating within the project study area. In addition, when in use, the project is expected to improve the Level of Service along I-15 from E to C in both the opening year and horizon year. Therefore, the proposed Project would not affect intersections that are at a Level of Service D, E, or F with a significant number of diesel vehicles.
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 alternatives are not in or affecting locations, areas, or categories of sites that are identified in the $\mathrm{PM}_{2.5}$ and $\mathrm{PM}_{10}$ applicable implementation plan or implementation plan submission, as appropriate, as sites of violation or possible violation.

Therefore, the proposed I-15 Part-Time Shoulder Project meets the CAA requirements and 40 CFR 93.116 without any explicit hot-spot analysis and would not create a new, or worsen an existing, $\mathrm{PM}_{10}$ violation.


Figure 1

## PROJECT LOCATION MAP

IN SAN BERNARDINO COUNTY
AT O.5 MILE SOUTH OF
YATES WELL ROAD OVERCROSSING TO 0.7 MILE SOUTH OF NEVADA STATE LINE


Learnd

- shoulder use lane


Existing ROUTE 15 TRAFFIC LANES (FOR NO-BUILT CONDITION)


ROUTE 15 TRAFFIC LANES FOR BUILT CONDITION

