DEPARTMENT OF TRANSPORTATION
DISTRICT 11
7183 OPPORTUNITY RD, MS-58
CONNECTED AND AUTOMATED TECHNOLOGY PROGRAM
SAN DIEGO, CA 92111
PHONE (619) 606-3485
www.dot.ca.gov

Making Conservation a California Way of Life.

FCC Narrative Statement:

Caltrans will be studying the applications and services for the Vehicle to Vehicle (V2V) and Vehicle to Everything (V2X) market using Cellular-V2X (C-V2X) as the physical layer. The technology is based on 3GPP R14 and/or R15 and will primarily employ Mode 4 operations (PC5 Sideline Direct Communications). The technology will be deployed using 20MHz channel BW.

This technology will be tested on Transit-Only-Lane Demonstration Project that allows Bus-on-Shoulder operation along I-805 between SR-54 and SR-94. Four (4) locations are adjacent to on-ramps on NB-805 at Imperial Ave, 43rd St, 47th St and Plaza Blvd. C-V2X devices will communicate with on-ramps to hold ramp metering when the bus is on shoulder and within the conflict zone with the potential on-ramp vehicle. Also on I-8 at the Taylor Street On-ramp and Off-ramp.

Construction and installation of infrastructure is scheduled to start in January 2021 and become operational in March 2021.

San Diego Metropolitan Transit System (MTS) buses are being equipped with on-board devices that give the driver visibility to the surrounding environment when deciding to use shoulder to bypass heavy congestion. Bus drivers are provided training on the on-board devices.

Buses are allowed on the shoulder only when traffic speeds are at 35 miles per hour or below during commute times when ramp metering is on (6:00 am to 9:00 am and 3:00 pm to 6:00 pm).

The project will be using antennas from Commsignia (more vendor participation at later phases), which will be attached/mounted on Caltrans existing structures. RSUs will be attached to Changeable Message Sign (CMS) structures, Traffic Lights, Street Lighting Poles, or field element poles at the various locations.

Sincerely,

SAM AMEN
CAV Program Manager