



CENTRAL TEXAS REGIONAL
MOBILITY AUTHORITY

APPLICATION EXHIBIT – FORM 442

Introduction

By this application, Central Texas Mobility Authority (CTRMA) seeks experimental authority to operate certain modular Cellular-V2X (C-V2X) prototype at specified locations for purposes of testing, development, and evaluation. The Commission has established the Dedicated Short Range Communications (DSRC) service in the 5.850- 5.925 GHz band for enabling vehicle-to-vehicle (V2V) and vehicle-to-infrastructure (V2I) communications. See 47 CFR §§90.371-90.377; Amendment of Parts 2 and 90 of the Commission's Rules to Allocate the 5.850-5925 GHz Band to the Mobile Service for Dedicated Short Range Communications of Intelligent Transportation Services, ET Docket No. 98-95, Report and Order, 14 FCC Rcd 18221 (1999). Recently, cellular specifications have emerged that support vehicle-to-everything (V2X) communications – V2V, V2I, vehicle-to-pedestrian (V2P), and vehicle-to-network (V2N). In recognition of the emerging C-V2X platforms, CTRMA wishes to test modular technologies that would employ C-V2X functionality as an add-on module in a manner that allows for developmental flexibility. This application is specifically to enable a collaborative effort between CTRMA and Ford Motor Company.

Deploying these units will enable improved incident detection, response times and communications with the traveling public and first responders. The RSUs will allow the Authority to broadcast messages directly to vehicles, including safety alerts and advance incident warnings, reducing the potential for secondary incidents and delays on the facilities. Additionally, the units can receive real-time information from vehicles on the roadway including their location and other diagnostic data like hard-braking events, speed, etc. This information will provide immediate feedback of operational or safety issues, can be shared in real-time with our regional partners, and can help drive public messaging and support incident response activities.