

Comments of
MEMA, The Vehicle Suppliers Association
to the
U.S. Department of Transportation
on the
**Draft Saving Lives with Connectivity:
A Plan to Accelerate V2X Deployment**

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By Email: V2XDeploymentPlan@dot.gov

Introduction

MEMA, The Vehicle Suppliers Association, is the leading trade association in North America for vehicle suppliers, parts manufacturers, and remanufacturers. It has been the voice of the vehicle supplier industry since 1904.

Automotive and commercial vehicle suppliers are the largest employer of manufacturing jobs in the United States employing over 900,000 people throughout the country. Direct, indirect, and induced vehicle supplier employment accounts for over 4.8 million U.S. jobs and contributes 2.5 percent to U.S. GDP.

Suppliers lead the way in new vehicle innovations. Member companies conceive, design, and manufacture the original equipment (“OE”) systems and technologies that make up two-thirds of the value of every new vehicle and supply the automotive aftermarket with the parts that keep millions of vehicles on the road, fueling international commerce and meeting society’s transportation needs. MEMA members are committed to safety and sustainability.

Background

The industry appreciates this opportunity to once again comment on proposed requirements for vehicle-to-everything (V2X) communications technology and its employment. We share the DOT’s goal of zero traffic-related fatalities and agree V2X technology can help reach it. As we have commented numerous times in the past, vehicle suppliers are responsible for significant innovation and development of this technology, and we urge DOT to work with the U.S. Federal Communications Commission (FCC) to ensure that

the 5.9 GHz band is preserved for transportation safety. Specifically, FCC should finalize a rule to confirm the long-term availability of the 5.9 GHz frequency band for V2X and not further erode the band with other or unlicensed use. Reducing the amount of spectrum available to Vehicle-to-Everything (V2X) technologies, as FCC has recently finalized, undermines our shared interest in reducing the number of traffic fatalities and injuries that occur each year on U.S. roadways, improving motor vehicle safety, and improving the operational performance of roadways by reducing congestion across the transportation system. This decision could also harm U.S. global competitiveness with respect to next-generation automotive safety technologies. We remain concerned that opening any additional 5.9GHz spectrum channels for unlicensed use will increase risk on vehicle, system, and personal safety.

NHTSA should Lead V2X and Work in Concert with FCC and Other Entities

Given the emphasis that NHTSA and the FCC places on the crash mitigation capability of widely deployed V2X-equipped private vehicles, NHTSA must return to V2X publicly and take a leading role on the OEM side in the national V2X deployment process. Thorough national cooperation is essential to ensuring V2X technology is developed, tested, certified, and deployed with the minimum amount of time and interference. We urge all of DOT to work in concert with FCC, as well as vehicle OEMs and the supplier industry. DOT must continue to be an active partner with the FCC in ensuring the right policy framework is developed to advance the deployment of V2X technologies in the 5.9 band and that the supporting research and the necessary real-world testing, focused specifically on roadway safety, is conducted to assess the performance of DSRC, C-V2X, or other V2X technologies through a balanced, data-driven process.

While individual conversations with automakers and vehicle suppliers can be useful to learning and awareness of the technologies involved, careful coordination and having all stakeholders present is the only way to assure major portions of the national V2X deployment plan are correct and accurate. DOT must make every effort to ensure that all stakeholders are present at summits and workshops as this deployment plan comes to completion and implementation. We note with concern that at the 3rd DOT V2X summit, there was no NHTSA leadership role presented and no OEMs on the panel. Simultaneously, it is also important that DOT make routine liaison with global harmonization bodies, ex. UN WP.29, to ensure maximum harmonization of requirements to speed up global adoption and deployment of V2X.

Carefully Developed and Deployed V2X Can Help Reduce Fatalities

V2X services represent a breakthrough in auto safety, enabling vehicles to communicate in real time with other vehicles, roadway infrastructure, communications networks, and pedestrians to reduce traffic crashes, improve roadway safety and

reduce fatalities and injuries from the current, unacceptably high level. Even as automakers and infrastructure owners and operators move forward with deploying these technologies, V2X innovation continues. In recent years, we have seen the development of new applications and novel use cases that will further advance transportation safety, particularly related to advanced driver assistance systems (ADAS) and automated vehicles (AVs). V2X technologies enable applications that cannot be performed by un-connected AVs, such as communicating with vehicles that are out of line-of-sight, providing road hazard warnings from roadside infrastructure, and allowing AVs to coordinate actions rather than making decisions individually. V2X complements AV sensors by providing information that is more precise, over longer ranges, and in non-line-of-sight conditions. For these reasons, DOT has been clear that connected vehicle technology represents, “an important input to realizing the full potential benefits and broad-scale implementation of automated vehicles.”¹

DOT Must Establish Clear Incentives to Maximize V2X Participation

When it issued the draft V2X Deployment Plan DOT asked: “What resources do you feel are needed to help scale and deploy V2X technology?” Our reply: Federal financial and other incentives will more thoroughly encourage coordinated participation in the development and deployment of V2X. Importantly, regulatory certainty through well-written and timely regulations, including Federal Motor Vehicle Safety Standards (FMVSS), will serve to support and bolster V2X efforts in industry. DOT must pursue clear, useful V2X regulations with best speed. Standardization is critical to effective V2X systems and hardware interoperation. NHTSA is the appropriate agency to lead these efforts, through clear, coordinated guidance and requirements. These standards-setting efforts should begin immediately and following their creation they should be considered for the New Car Assessment Program (NCAP). Investments in V2X led by DOT will serve to encourage other investments in the technology. Visible infrastructure investment by DOT will help convince automotive OEMs and suppliers to market V2X systems.

Conclusion

Technology exists and is being further developed to reduce U.S. traffic-related fatalities. DOT must take charge and defend the 5.9GHz spectrum from opportunities for interference and firmly take the lead and guide all agencies and stakeholders to our shared nationwide goal of V2X deployment. MEMA and its members are ready to work with DOT, FCC, OEMs and other stakeholders, coordinated by DOT, to develop, enable and deploy V2X technology.

¹ Intelligent Transportation Systems Safety, Federal Highway Administration. <https://safety.fhwa.dot.gov/its/>

Thank you for considering the recommendations presented herein. Please do not hesitate to contact Alex Boesenberg, MEMA vice president of regulatory affairs at aboesenberg@mema.org with questions or for additional information.