



January 31, 2024

U.S. Department of Transportation
1200 New Jersey Avenue SE
Washington, D.C. 20590

RE: Saving Lives with Connectivity: A Plan to Accelerate V2X Deployment

To Whom It May Concern:

The Alliance for Automotive Innovation (“Auto Innovators”) appreciates the opportunity to provide additional input to the U.S. Department of Transportation (“Department”) on the draft *Saving Lives with Connectivity: A Plan to Accelerate V2X Deployment* (“Deployment Plan”). Auto Innovators strongly supports the development of a national V2X strategy and appreciates the substantial effort that the Department has undertaken to develop this Deployment Plan to help accelerate the deployment of V2X technology in the U.S.

Auto Innovators represents the manufacturers that produce most of the cars and light trucks sold in the U.S., original equipment suppliers, battery makers, technology companies, and other value chain partners within the automotive ecosystem. Representing approximately 5 percent of the country’s GDP, responsible for supporting 10 million jobs, and driving \$1 trillion in annual economic growth, the automotive industry is the nation’s largest manufacturing sector.

The release of this Deployment Plan is a significant milestone. In 2022, Auto Innovators released a [V2X Policy Agenda](#) that reiterated the industry’s commitment to V2X technology and expressed an eagerness to work with policymakers and other stakeholders to bring the technology to the U.S. market. The V2X Policy Agenda laid out several policy recommendations to foster a policy and regulatory environment that supports the wide-scale deployment of V2X technology. Among the key recommendations was the development of a comprehensive national V2X vision and strategy for the future.

We are pleased that the Deployment Plan identifies specific actions across various stakeholder groups. This type of specificity is precisely what is required to advance the deployment of this technology in a meaningful way. However, there is some ambiguity with respect to certain terms used in the Deployment Plan that may contribute to some confusion and cause potential misalignment in implementation.

For example, the term “interoperability” should be better defined on multiple levels (i.e., message, unit, system, security, and deployment). The standard and related certification required for interoperability, including for interoperability for technologies that utilize spectrum beyond 5.9 GHz, under the Deployment Plan should be clearly identified.

There is also ambiguity with respect to the definition of V2X. The Department should specifically clarify whether, for purposes of the Deployment Plan, V2X is defined as cellular V2X (C-V2X), V2X at 5.9 GHz which uses C-V2X technology, or any technology that allows a vehicle to communicate with other vehicles, roadside infrastructure, or other road users (including, for example, cloud-based solutions that rely on mobile networks). With respect to C-V2X technology, there is also ambiguity about whether both device-to-device communication enabled by short-range (PC5 using 5.9 GHz) and long-range (e.g., Uu using cellular spectrum) modes are anticipated. Clarity is important for stakeholders, including vehicle manufacturers, that may consider taking steps to be responsive to the vehicle goals identified in the Deployment Plan.

The inclusion of specific timeframes for identified stakeholder actions and the decision to delineate those actions into the short-term, mid-term, and long-term will certainly help focus stakeholder action. However, we are concerned that the timeframes identified for the short-term actions may not provide sufficient time to accommodate product planning, system engineering, and production cycles for vehicle manufacturers and suppliers. Perhaps most importantly, the short-term timeframe does not account for the critical need for the Federal Communications Commission to finalize technical rules for C-V2X and resolve concerns about harmful interference to V2X operations from the U-NII-4 and U-NII-5 bands. These actions will be necessary for many, if not most, vehicle manufacturers before decisions can be made to proceed with wide-scale 5.9 GHz-enabled V2X deployment in production vehicles. We suggest that the short-term deployment targets for vehicles initiate no sooner than three years after final technical rules are established by the Federal Communications Commission.

In terms of additional elements that the Department can integrate into the Deployment Plan, we offer the following suggestions:

- The Department should ensure that the National Highway Traffic Safety Administration (“NHTSA”) is a full and committed partner to the Federal Highway Administration and the Intelligent Transportation Systems Joint Program Office in the final Deployment Plan. The Deployment Plan should include specific actions that NHTSA will take as the primary vehicle safety regulator to accelerate V2X deployment.
- The Department should obtain the Federal Communications Commission’s endorsement of the final Deployment Plan. The successful implementation of the Deployment Plan will depend not only on the essential ongoing work of the Department, but also on the commitment of the Federal Communications Commission to supporting the deployment of V2X technology. An endorsement by the Federal Communications Commission will help clearly establish that commitment.
- The Department should identify additional funding resources to support the ambitious V2X infrastructure deployment targets contained in the Deployment Plan. This could include additional V2X-focused grant resources, such as the funding opportunity

announced in October of 2023, or the prioritization of V2X within other funding programs.

- The Department should consider focusing on freight and fleet-operated vehicles for the short-term vehicle production goals. For example, the Department could specifically identify government-operated and/or federally-subsidized fleets as early candidates for the deployment of in-vehicle V2X solutions.
- To promote alignment, the Department should consider identifying “day one” priority use cases or applications for V2X deployment in the Deployment Plan. There are existing resources, such as the 5GAA US Day 1 Deployment Guide, that the Department can leverage in this effort.
- The Department should consider establishing and maintaining a V2X clearinghouse that includes a list of V2X deployments, including the status and scope of any infrastructure deployments and the V2X applications that are available at those identified infrastructure sites. Such a clearinghouse can help support product planning and business strategy decisions by vehicle manufacturers and help the Department and other stakeholders track progress towards the Deployment Plan’s goals.
- The Department should analyze real-world data from relevant deployments to prove and quantify the safety benefits. The quantification of safety benefits in the short- and mid-term can help advance the long-term goals.

We appreciate the Department’s commitment to V2X technology and its work to develop this draft Deployment Plan. We look forward to continuing to work with the Department and other stakeholders to advance our shared goal of accelerating V2X deployment.

Sincerely,

A handwritten signature in black ink, appearing to be 'Hilary M. Cain', with a long horizontal line extending to the right.

Hilary M. Cain
Senior Vice President, Policy