October 17, 2025

Michael A. Halem
Acting Assistant Secretary for Research and Technology
U.S. Department of Transportation
1200 New Jersey Avenue SE
Washington, DC 20590

Re: Request for Information-Research Ideas To Support Nationwide Automated Vehicle (AV) Deployment (DOT-OST-2025-1029)

Dear Mr. Halem,

The Autonomous Vehicle Industry Association ("AVIA") writes in response to the U.S. Department of Transportation's ("USDOT") Office of the Assistant Secretary for Research and Technology's ("OST-R") Request for Information ("RFI") on "Research Ideas To Support Nationwide Automated Vehicle (AV) Deployment."[1] As the leading organization focused on the development and deployment of autonomous vehicles ("AVs"), AVIA appreciates the USDOT's interest in coordinating research to support the nationwide deployment of automated driving system- ("ADS") equipped transportation technology. AVs are a key emerging transportation technology, and the United States continues to lead the world on AV advancement. Further research and development of AV technologies—while simultaneously accelerating safe AV deployment across the country—can help ensure the United States maintains this leadership in the years and decades to come.

AVIA is committed to bringing the tremendous safety and mobility benefits of AVs—otherwise known as SAE Levels 4- and 5-capable vehicles—to consumers in a safe, responsible, and expeditious manner. AVIA's membership is comprised of the world's leading technology, automotive, ridesharing, trucking, and transportation companies.[2] Vehicles operated by AVIA members have driven more than 145 million autonomous miles on U.S. public roads, a distance roughly equivalent to the average distance between Earth and Mars or driving around the Earth 5,600 times.[3] This figure is growing every day. AVs will play a pivotal role in addressing critical challenges facing our nation, including reducing the persistent and unacceptable level of traffic fatalities in our country, increasing transportation access, enhancing supply chain efficiency, reviving our industrial capacity, creating jobs, and expanding economic output.

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[1] Office of the Assistant Secretary for Research and Technology; Request for Information-Research Ideas To Support Nationwide Automated Vehicle (AV) Deployment, 90 Fed. Reg. 40141 (August 18, 2025).

[2] Our members include Amazon, Aurora, Bot Auto, Cavnue, Discount Tire, DoorDash Labs, Ford, Gatik, GM, International, J.D. Power, Kodiak, Lyft, Motional, NGV, Nuro, Plus, Stack, Tier IV, Torc Robotics, TaskUs, Uber, UPS, Volkswagen Group of America, Volvo Cars, Volvo Autonomous Solutions, Waabi, Waymo, and Zoox. *See Our Mission and Members*, AUTONOMOUS VEHICLE INDUS. ASS'N, https://theavindustry.org/ (last visited Oct. 17, 2025).

[3] AUTONOMOUS VEHICLE INDUS. ASS'N, STATE OF AV 2025, (May 2025), https://cdn.prod.website-files.com/67ee2ad971d86c70d02ed03f/683802d318db2c77d4ce3d43_2025_StateOfAV_AnnualReport_Web.pdf.

As explained below, AVIA encourages OST-R to take specific considerations and the overall needs of the AV industry into account as it continues to develop a research agenda to support nationwide AV deployment.

- **Federal Framework**

The continued domestic development and deployment of AVs will help ensure that the United States retains its international leadership and competitive advantage as this critical technology evolves. To ensure the continued strength of the U.S. AV industry, a supportive and uniform nationwide federal policy framework that includes support for AV-related research is essential. With this in mind, AVIA released *Securing American Leadership in Autonomous Vehicles* earlier this year,[4] which provides a comprehensive set of federal policy recommendations to both accelerate the safe deployment of AV technology and solidify the United States as the global leader in this transformational technology.

AVIA envisions a federal framework for AV policy that would promote AV safety, transparency, and accountability in several ways. This framework can also support OST-R in carrying out its transportation research and development responsibilities. For example, under a federal AV framework, the National Highway Traffic Safety Administration ("NHTSA") should establish a National AV Safety Data Repository, which would include relevant safety data about AV incidents and be available to regulators. The repository could also function as an important source of research data for USDOT agencies, such as OST-R and NHTSA, as they move to update the Federal Motor Vehicle Safety Standards and other regulations and guidance materials to better reflect the realities of AV operations.

- **Supporting Innovation**

Recently, the Federal Motor Carrier Safety Administration ("FMCSA") granted AV developers a temporary waiver that allows ADS-equipped commercial motor vehicles ("CMVs") to use new emergency warning device solutions that utilize cab-mounted beacons instead of driver-placed devices.[5] Existing regulations require warning devices (e.g., warning triangles) to be placed within 10 minutes in three locations on the roadway, complicating autonomous CMV operations where no human driver is present. By granting the waiver, FMCSA is providing AV developers the opportunity to leverage a new safety technology while providing the agency with valuable data on that technology's performance, allowing one regulatory action to support deployment and research

[4] AUTONOMOUS VEHICLE INDUS. ASS'N, SECURING AMERICAN LEADERSHIP IN AUTONOMOUS VEHICLES (2025), https://cdn.prod.website-files.com/67ee365c25e6530594bd40c2/683d8d2fa60ac22d542b1049_Securing%20American%20Leadership%20in%20Autonomous%20Vehicles1.pdf.

[5] FED. MOTOR CARRIER SAFETY ADMIN., WAIVER OF WARNING DEVICE REQUIREMENTS (Oct. 10, 2025), https://www.fmcsa.dot.gov/sites/fmcsa.dot.gov/files/2025-10/Letter%20to%20Aurora%20Operations%2C%20Inc.%20-Waiver%20of%20Warning%20Device%20Requirements%20Terms%20and%20Conditions.pdf.

at the same time. Building on this, OST-R's AV research agenda should include considerations for using regulatory waivers, pilot programs, and other exemption tools to further support new technological deployments, as FMCSA has done for warning devices.

- **Promoting U.S. AV Leadership**

OST-R's research agenda for facilitating nationwide AV deployment should also consider how to best provide federal support for growing the domestic supply chain for AV technologies. When sourcing equipment, AV developers must balance technical demands, performance requirements, costs, and production and deployment timelines. At times, domestic AV developers are required to source parts from abroad when no domestic vendor can provide components that meet performance requirements and commercially viable prices. As a result, the AV industry's supply chain is diverse and relies on global suppliers. Federal support and funding can help build a larger domestic supply chain for AVs by creating opportunities for domestic suppliers to step into the market.

Creating and funding additional opportunities to solidify U.S. leadership on AV supply chains should be an integral part of OST-R's research agenda to provide the USDOT, other Executive Branch agencies, and Congress with additional information and strategies for supporting AV innovation. As an example, USDOT, in partnership with Congress and industry, should create a pilot program to incentivize the domestic production of sensors such as through a grant program or other mechanism. Simultaneously, the USDOT should convene relevant stakeholders to discuss needed actions for domestic manufacturing of AV hardware. These discussions should be informed by existing learnings such as those from the Headwaters Tech Hub in Montana, which is focused on photonics.[6]

- **Leveraging AVs to Expand Mobility for All**

OST-R and the USDOT are well positioned to help AVs address the needs of Americans with mobility challenges or disabilities by funding further research into how to ensure AVs are as accessible as possible for all users. Today, millions of Americans have their ability to travel limited by mobility challenges or disabilities. USDOT has estimated that 25.5 million Americans face travel-limiting disabilities,[7] and roughly 560,000 people with disabilities never leave their homes due to transportation difficulties.[8] Whether personally owned, serving as on-demand taxis, or as part of local paratransit services, AVs can provide disabled Americans with greater autonomy, letting them dictate how, where, and when they move through the world.[9]

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[6] *See* HEADWATERS TECH HUB, https://headwaterstechhub.com/ (last visited Oct. 17, 2025).
[7] *ADA at DOT: Accessibility Initiatives*, U.S. DEP'T OF TRANSP. (Feb. 13, 2025) https://www.transportation.gov/accessibility.
[8] BUREAU OF TRANSP. STAT., TRANSPORTATION DIFFICULTIES KEEP OVER HALF A MILLION DISABLED AT HOME (2012), https://www.bts.gov/archive/publications/special_reports_and_issue_briefs/issue_briefs/number_03/entire.
[9] A study by the National Disability Institute found that the wider deployment of AVs could lead to an increase in 4.4 million jobs for people with disabilities, which could create a 3.8% increase in U.S. GDP (nearly $867 billion).

One area of important research on accessibility is the testing and development of the Universal Docking Interface Geometry ("UDIG") wheelchair securement standard, which helps wheelchair users automatically and safely secure their wheelchairs in a motor vehicle. At present, testing of the UDIG has generally been limited to wheelchair users backing into a fixed anchor to secure their wheelchairs in a motor vehicle. Expanding this testing would help ensure the UDIG can be used across vehicle configurations, including in ADS-equipped vehicles with nontraditional seating arrangements. To expand the use of the UDIG, testing should be widened to address vehicles in which a wheelchair user would need to secure their wheelchair by moving forward, where the anchor would need to be deployed from the vehicle floor or from a side (lateral) position. This would provide safer automated securement in side- and rear-entry wheelchair accessible vans, enable wheelchair users to employ UDIG in driving their personal wheelchair accessible vehicles, and help inform the design of future accessible AVs. As part of its wider AV research agenda, OST-R should support such testing.

AVIA is grateful for the opportunity to provide these comments and welcomes the opportunity to continue to engage with OST-R on this and other matters. If there is anything further we can do to assist you or your staff, please do not hesitate to reach out.

Sincerely,

Jeff Farrah
Chief Executive Officer
Autonomous Vehicle Industry Association

Dominic Modicamore, et al, National Disability Institute, *Economic Impacts of Removing Transportation Barriers to Employment for Individuals with Disabilities Through Autonomous Vehicle Adoption* (Dec. 30, 2022), https://www.nationaldisabilityinstitute.org/wp-content/uploads/2023/02/ndi-economicimpactsofremovingtransportationbarriers.pdf.