The Autonomous Vehicle Industry Association’s (AVIA) mission is to advocate for the safe and timely deployment of autonomous driving technology. AVIA is the unified voice of the diverse companies working toward a world where safe and trusted AVs increase road safety, boost supply chains, and improve mobility opportunities for all.
Autonomous vehicles (AVs) will revolutionize the way people and goods move. For years, the question was when AVs would be here. The answer is they are here now, with autonomous technology being applied to passenger cars, trucks, shuttles, zero occupancy delivery vehicles, and more. AVs are operating in states as diverse as Arizona, Arkansas, California, Florida, Michigan, and Texas.

The benefits of AVs are inspiring. Most importantly, AVs will make our roads safer. The U.S. Department of Transportation has affirmed that human behavior is the overwhelming factor in motor vehicle crashes, resulting in over 100 fatalities per day. Unlike human drivers, AVs do not drive drunk, distracted, or drowsy. Furthermore, AVs will provide new mobility opportunities to seniors and disability communities. By more efficiently moving goods and freight, AVs can boost the supply chain, creating economic growth and thousands of new American jobs.

But to achieve these benefits, the U.S. must put in place a federal policy framework that is focused on deployment and commercialization of the technology. Now is the time to push ahead, as countries around the world want to lead on this transformational technology.

To solidify American leadership, AVIA convened its members to identify a comprehensive set of solutions to public policy challenges that are holding back the AV industry. The objective of these recommendations is to maximize deployment of safe autonomous technology in the United States.

AVIA is committed to working with policymakers to advance autonomous technology in the U.S. Our country can be the global leader on AVs, but policymakers must prioritize this transformational technology. By taking action on the policy recommendations detailed below, Americans will see the full vision of autonomous driving – the next great technological advancement for the world.

Jeff Farrah
Executive Director
Autonomous Vehicle Industry Association
Pass Federal Legislation to Unlock Autonomous Vehicles

AVs have bipartisan champions on Capitol Hill who recognize the many safety, mobility and economic benefits of the technology. In the 115th Congress, the House passed the **SELF DRIVE Act** (H.R. 3388) from Representatives Bob Latta (R-OH) and Jan Schakowsky (D-IL). In the Senate, the **AV START Act** has attracted strong bipartisan support under the leadership of Senators John Thune (R-SD) and Gary Peters (D-MI).

AVIA is committed to working with lawmakers to introduce and pass AV legislation this Congress. To open a path for the safe deployment and commercialization of AVs, Congress should enact Federal legislation that:

- **Supports U.S. Innovation in AVs** with a clear federal framework that outlines necessary statutory and regulatory elements critical to the AV industry.
- **Recognizes the Importance of Positive AV Policy** in maintaining the United States’ position as an innovation policy leader in the world.
Reforms and Expands the Vehicle Exemption Process: AV legislation should modernize the vehicle exemption process (49 USC 30113; 49 CFR Part 555) to enable the AV industry to deploy innovative vehicle designs and scale the technology while the National Highway Traffic Safety Administration (NHTSA) continues to develop permanent rules. Expanding exemptions for vehicles demonstrating at least equivalent safety to traditional motor vehicles would enhance roadway safety by increasing the availability of AVs’ safety advantages to more communities. Legislation should include specific provisions that:

▷ Raise exemption caps from the current 2,500 per year for each company to a significantly larger number per year for each company and extend the authorized time period from a maximum of two years to a period lasting until the effective date of a final NHTSA rule(s) amending standards applicable to Automated Driving System (ADS equipped vehicles).

▷ Create predictable processing timelines for disposition of exemption petitions submitted to NHTSA and ensure transparency throughout the exemption process.

Encompasses All Vehicle Types: AV legislation as finally enacted (through action from multiple committees of jurisdiction, as necessary) should address AV technology holistically, and apply to all vehicle classes and types. This is consistent with traditional practice, as the Federal Motor Vehicle Safety Standards (FMVSS) already apply to all motor vehicles, regardless of type, including commercial motor vehicles.
Directs NHTSA to Complete FMVSS Rulemakings: AV legislation should direct NHTSA to complete a rulemaking or series of rulemakings to modernize the FMVSS to support the deployment of AV technology.

Codifies FMCSA Interpretation that FMCSRs do not Require a Human Driver: AV legislation should codify the existing interpretation that the Federal Motor Carrier Safety Regulations (FMCSRs) do not require a human driver to operate or be present in a Commercial Motor Vehicle (CMV) operated by a Level 4 or Level 5 ADS.

Expands AV Testing and Evaluation: AV legislation should expand eligibility for the testing and evaluation exception in the FAST Act to level the playing field among all stakeholders in the AV and ADS development ecosystem.

Codifies Preclusion of “Make-Inoperative” Provision for Dual Use Vehicles: AV legislation should clarify that making a vehicle's manual controls inaccessible or altering their functionality for safety reasons during autonomous operation does not run afoul of the make inoperative provision of the Motor Vehicle Safety Act (49 USC 30122). This would allow for important technical developments that retain the same level of vehicle safety.

Codifies FMCSA Interpretation that FMCSRs do not Require a Human Driver: AV legislation should codify the existing interpretation that the Federal Motor Carrier Safety Regulations (FMCSRs) do not require a human driver to operate or be present in a Commercial Motor Vehicle (CMV) operated by a Level 4 or Level 5 ADS.
Expands Access to Mobility: AV legislation should ensure that no government policy, legislation, or regulation would require people who are unable to obtain a driver’s license to obtain a license to be a passenger in a fully autonomous vehicle. People without a driver’s license should not be precluded from obtaining the mobility benefits of AVs.

Preserves the Federal Role in Regulating Motor Vehicles and Interstate Motor Carrier Activity. AV legislation should preserve the federal government’s authority over vehicle design, construction, and performance.

AV legislation should provide sufficient guidance to state governments to ensure that AV regulations are uniform nationwide.

AV legislation, as finally enacted (through action from multiple committees of jurisdiction, as necessary), should preserve the traditional federal role in vehicle operation, licensing, inspection, repair, and maintenance for commercial vehicles transporting property or passengers in interstate commerce.

Focuses on the Safe Development of AV Technology in the U.S. and Avoid Unrelated Policy Objectives: AV legislation should not be delayed or jeopardized by issues unrelated to AV deployment.

Protects Confidential Information: AV legislation should ensure that confidential and proprietary information belonging to AV developers and manufacturers is protected from disclosure.
Studies the Economic, Access, and Equity Impacts of AVs: AV legislation should include provisions requiring further study on the economic, accessibility, and equity impacts of AV deployment at scale, including:

- Requiring a Joint Economic Committee study on the economic impact of the AV industry in the U.S. and the impact of the AV industry on other economies.

Studies and Encourages the Development of the AV Industry Workforce: Congress should ensure that any commissioned research about the job-related impacts of AVs be driven by actual AV industry experience, and that job quality should be central to any policy and industry conversation.
Taking Action on Autonomous Vehicles at the Department of Transportation

The Department of Transportation (DOT) has a critical role in the advancement of safe autonomous vehicles. DOT has recognized that human behavior is responsible for the overwhelming number of traffic motor vehicle crashes, and AVs should be part of a comprehensive national strategy for roadway safety. AVs are a critical part of the solution to this tragic problem. To advance AVs, the Department should:

**Update Regulations to Support AV Deployment:** The Administration should direct NHTSA to complete a rulemaking or series of rulemakings that support the deployment of AV technology within the next two years. While not required for AVs to flourish, such rulemakings would provide a helpful tool to both AV developers and manufacturers of traditional vehicles looking to incorporate new technologies.

- NHTSA could start by finalizing implementation of rules from prior years and then develop new enabling rules that support the deployment of ADS-equipped vehicles, including those with novel designs.

- Rulemakings related to AV deployment would also contribute to increased consumer confidence and cross-sectoral business and commercial interest in AVs.

**Promote AV Safety:** The Administration should support ongoing work to develop technical standards, conduct research, convene the industry to establish common approaches, and fully leverage existing data collections to inform future regulatory approaches to AV safety.
Accelerate the Path for Novel Design Vehicles: As an additional pathway, NHTSA should implement a national demonstration and deployment program for AV developers to evaluate the commercialization of AVs, including those that do not conform to all of the FMVSS. In doing so NHTSA should:

▷ Design the program to provide participants with a streamlined and highly functional process from application to deployment.

▷ Ensure that development of the demonstration program does not come at the expense of maintaining and improving existing exemption processes, self-certification, or rulemaking.

▷ Clarify that some traditional on board equipment is unnecessary for AVs, especially for occupant-less vehicles or purpose-built AVs that are designed without driver controls.

▷ Codify the interpretation that telltale and indicator requirements could be satisfied by communication directly to the ADS, rather than to an in-cabin display.
**Complete the Final Rule on Safe Integration of ADS in Commercial Motor Vehicles:** The Administration should direct FMCSA to swiftly complete a rule or series of rules that will encourage AV truck developers to safely expand operations and commercialization, specifically by:

▷ Codifying the 2018 interpretation that the FMCSRds do not require a human driver to operate or be present in a CMV being operated by a Level 4 or Level 5 ADS, including updates to existing hours of service rules.

▷ Supporting a consensus approach to autonomous truck inspection protocols, in conjunction with state law enforcement officials, industry, and FMCSA, that are informed by real-world experience.

▷ Leveraging existing mechanisms and pathways for motor carriers to submit relevant operational data to federal agencies.

**Preserve Foreign Market Access:** As the American AV industry commercializes, it is important that foreign markets remain open. To that end, it is imperative that federal agencies are actively engaged with other governments (e.g. European Union) and international bodies (e.g. UNECE) about AV policymaking. This engagement will help ensure the U.S. remains the global leader on AVs and that the laws and regulations of other jurisdictions are not informed by the views of the strategic competitors.