



**OFFICE OF THE SECRETARY
U.S. DEPARTMENT OF TRANSPORTATION
DOCKET NO. DOT-OST-2019-0179**

**Notice of Request for Comments:
Ensuring American Leadership in Automated Vehicle Technologies: Automated Vehicles 4.0 (AV 4.0)**

**SUBMITTED BY:
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The American Trucking Associations, Inc., (ATA) submits these comments to the U.S. Department of Transportation (DOT) in response to the Department's request for comment on *Ensuring American Leadership in Automated Vehicle Technologies: Automated Vehicles 4.0 (AV 4.0)*.¹

As the national representative of the trucking industry, ATA has a strong interest in matters affecting our nation's transportation system and is committed to advancing connected and automated vehicle (AV) technology in ways that benefit the common good, including improving highway safety for all motorists, reducing traffic congestion and vehicle emissions, as well as facilitating the efficient movement of freight. Directly and through our affiliated organizations, ATA's united federation of motor carrier and allied members, state trucking associations, and national trucking conferences and councils represent nearly 40,000 industry stakeholders in the United States – encompassing every type and class of motor carrier operation. Our diverse membership also includes original equipment manufacturers, supply chain and logistics companies, retail corporations, and new technology firms engaged in the testing and development of AV technologies.

Highways are the motor carriers' and drivers' workplace. Employing more than 7.8 million people and moving 10.8 billion tons of freight annually,² trucking is the industry most responsible for moving America's economy. The trucking industry moves more than 80 percent of our nation's domestic freight and is a critical player in the safety of our nation's roadways – spending approximately \$10 billion per year on safety training, technology, equipment, and management. As these statistics demonstrate,

¹ 85 Fed. Reg. 7011, February 6, 2020.

² 3 ATA. (2019). ATA American Trucking Trends 2019. Arlington, VA. American Trucking Associations.

trucking is an integral component of our nation's transportation system and economy, and the industry has a substantial stake in the success of connected and AV technology to improve safety, reduce traffic congestion and decrease vehicle emissions.

ATA commends DOT for its leadership in establishing a framework for the safe testing and integration of automated driving systems (ADS), starting with the first *Federal Automated Vehicles Policy* in 2016, followed by *Automated Driving Systems 2.0: A Vision for Safety (ADS 2.0)* released in 2017 and the 2018 release of *Preparing for the Future of Transportation: Automated Vehicles 3.0 (AV 3.0)*, with each update reflecting stakeholder input and the rapid development of ADS technology. ATA supports the multi-modal approach that DOT has taken in developing the Department's automated vehicle policy and is pleased to see the expansion of this work, in coordination with the National Science & Technology Council, to include and unify the efforts in AVs across the Federal Government with the release of *AV 4.0*. ATA also supports the 10 U.S. Government principles established in AV 4.0 to protect users, promote efficient markets, and facilitate coordinated efforts.³ These 10 principles build on the *U.S. DOT Automation Principles* presented in AV 3.0⁴ and appropriately expand them to address the broader responsibilities of the Federal Government.

As stated in AV 4.0, "Realizing the full potential of AVs will require collaboration and information sharing among stakeholders from industry, State, local, tribal, and territorial governments, academia, not-for-profit organizations, standards development organizations (SDO), and the Federal Government."⁵ ATA agrees that collaboration among stakeholders, with leadership and guidance from DOT, is an important element to encourage and support the development of a unified national framework of laws and regulations that will facilitate the development, testing, deployment and operation of commercialized AVs. The trucking industry relies on an interstate highway system that facilitates the free flow of goods between the states. As automated truck technology is developed, tested, and commercialized, it is critical that federal, state and local laws do not create disparities that limit commerce and obstruct the successful adoption of these potentially safety- and productivity-boosting technologies. ATA reiterates the support expressed in our comments on AV 3.0 for the flexible approach taken by DOT of issuing voluntary guidance to developers of ADSs and technical assistance to States. AV 3.0 provides a pathway for testing and deployment of AV technologies that sets clear roles and expectations for all stakeholders.⁶ This clarity will support the collection of more on-road data, which will lead to a better understanding of how these technologies may benefit the public, along with consideration of how regulations may need to change to take advantage of the capabilities that this new technology provides.

AV 4.0 presents a summary of the many initiatives of the Federal Government to support AV technology growth and U.S. leadership. ATA is appreciative of and supports the work being done in several Federal agencies to study issues of particular relevance to the testing and deployment of

³ AV 4.0, pages 4-5.

⁴ Automated Vehicles 3.0: Preparing for the Future of Transportation, pages iv-v, U.S. DOT, October 2018, <https://www.transportation.gov/av>.

⁵ AV 4.0, page 1.

⁶ ATA comments to USDOT re: Automated Vehicles 3.0: Preparing for the Future of Transportation, December 3, 2018.

automated trucks, including: research by FMSCA in the areas of human factors and the performance of sensors, brakes, and tires in automated trucks, as well as truck platooning, emergency response, and roadside inspections; work underway by several departments, including the U.S. DOT, Health and Human Services, and the Departments of Labor and Commerce seeking to explore how AV technology will impact the professional driving workforce; the addition of AVs and related mobility technologies to DOE's 21st Century Truck Partnership's freight operational efficiency and safety teams; the inclusion of automation and connectivity (including truck platooning) as technologies being considered by the *SuperTruck II* Program for developing innovative and cost-effective technologies that can double the freight efficiency of Class 8 trucks; and the proof of concept program by the U.S. Postal Service in operating automated tractor-trailers between distribution centers in the southwest U.S. region.

While there is much constructive work being done across the 38 Federal Departments, independent agencies, commissions, and Executive Offices of The President as described in AV 4.0, ATA is concerned at the lack of collaboration between the DOT and the FCC on spectrum policy regarding the 5.9 GHz Safety Spectrum. Although not a precondition to the deployment of AVs, vehicle communications technology (V2X) utilizing the Safety Spectrum nonetheless would provide an important complementary technology that is expected to enhance the benefits of automation at all levels, as well as improve safety for other road users including non-AVs, motorcycles, pedestrians, and bicyclists. Despite significant investments by DOT, state and local governments and industry to develop, test, and deploy V2X technology, the FCC recently proposed changing spectrum rules to take over half of the Safety Spectrum away so that it can be used instead for unlicensed services (e.g. Wi-Fi) to connect consumer devices.⁷ The proposal not only upends the significant work and investment by industry and all levels of government under existing FCC rules to develop and deploy technology to improve the safety and efficiency of our transportation system, it also abandons the work that was being performed jointly by the FCC and DOT to test concepts that would retain the 5.9 GHz band for vehicle communications while allowing for sharing with unlicensed devices, even though this testing has shown promising results.⁸ The FCC's NPRM, which focuses heavily on improving the performance of Wi-Fi and the fact that Wi-Fi devices could be deployed in this spectrum much more quickly than V2X can be deployed in vehicles and roadside infrastructure seems to miss the mark on proper evaluation of the potential safety, mobility and emissions benefits that V2X could bring to the nation's transportation system. The FCC's NPRM also shows a lack of understanding of the complexity of developing and deploying technology to allow cars and trucks from different manufacturers to communicate critical safety information with each other as well as with pedestrians, cyclists, traffic signals, work zones, and other roadway infrastructure while traveling at highway speeds and in traffic jams, which is a much more complex process with less tolerance for error relative to the development and deployment of connected consumer devices. ATA reiterates the comments⁹ we filed with the FCC regarding this NPRM, calling for continuation of the FCC's joint work with DOT to evaluate spectrum sharing concepts. Such collaboration could provide additional spectrum for Wi-Fi and other unlicensed use and retain the important safety benefits of V2X communications. ATA also recommends that the FCC coordinate more closely with the DOT to better understand and account for the implications that changes to the existing

⁷ 85 Federal Register 6841, February 6, 2020.

⁸ In the Matter of Use of the 5.850-5.925 GHz Band, FCC 19-129, page 7, ET-Docket 19-138 (proposed Dec. 17, 2019), available at <https://docs.fee.gov/public/attachments/FCC-19-129A1.pdf>.

⁹ ATA Comments to FCC re: Use of the 5.850-5.925 GHz Band, ET Docket No. 19-138, March 9, 2020.

rules in 5.9 GHz band would have for transportation safety before taking further action regarding the NPRM.

Automated driving system technology is the next step in the evolution of safety technologies currently available and will help to further improve driver safety and productivity, as well as the safety of other motorists and vulnerable road users. ATA commends DOT for its initiatives across all of the modal administrations in establishing a framework for the safe testing and integration of ADS throughout the nation's transportation system. And, for its activity in coordination with the National Science & Technology Council to develop AV 4.0 to unify AV-related efforts throughout the Federal Government and establish U.S. Government principles that will protect users, promote efficient markets, and facilitate coordinated efforts among all levels of government and with other stakeholders. ATA supports the development of AV technology for all vehicle types and is committed to working with DOT and other stakeholders to bring the benefits of AV technology to freight transportation.

Thank you for the opportunity to submit these comments. If you have any questions, please contact Ross Froat at (703) 838-7980 or rfroat@trucking.org.