



April 15, 2026

Jonathan Morrison
Administrator
National Highway Traffic Safety Administration
US Department of Transportation
1200 New Jersey Avenue SE
Washington, DC 20590

RE: DOCKET No. NHTSA-2026-0629

Dear Administrator Morrison,

The Alliance for Automotive Innovation (“Auto Innovators”) appreciates the opportunity to provide input on NHTSA’s proposal to revise Federal Motor Vehicle Safety Standard (FMVSS) 103 and 104 to except vehicles equipped with Automated Driving Systems (ADS) and lacking manually operated driving controls from windshield wiping, washing, defrosting and defogging requirements.

Auto Innovators represents the full automotive industry, including the manufacturers producing most vehicles sold in the U.S., equipment suppliers, battery producers, semiconductor makers, technology companies, and autonomous vehicle developers. Our mission is to work with policymakers to realize a cleaner, safer, and smarter transportation future and to ensure a healthy and competitive automotive industry that supports U.S. economic and national security. Representing over 5 percent of the country’s GDP, responsible for supporting nearly 11 million jobs, and driving almost \$1.5 trillion in annual economic activity, the automotive industry is the nation’s largest manufacturing sector.

The automotive industry continues to invest billions of dollars in the development of ADS technology. This technology has the potential to improve roadway safety, increase access to mobility and support innovative design approaches. ADS technology represents a transformation of the auto industry, and it is essential that the US regulatory framework keep pace. We appreciate NHTSA’s acknowledgement that some FMVSS contain language and requirements that may limit the application of current regulations to innovative technologies that are already being deployed. We commend NHTSA for its consistent acknowledgement that certain regulatory approaches may be creating barriers to advancement by referencing human drivers, manual controls, telltales, and other items.

We also appreciate NHTSA’s commitment to modernizing the FMVSSs for ADS equipped vehicles because it is essential to American competitiveness that there be clear and uniform standards. This includes objective and practicable FMVSS for ADS equipped vehicles. One set of federal rules for the

design, construction and performance of such vehicles will provide consumers and manufacturers with the certainty they need. This NPRM is another step towards common sense federal rules that will facilitate deployment and commercialization of vehicles with ADS.

Modernization of FMVSS 103 and 104 for ADS Equipped Vehicles

Auto Innovators supports the proposed amendments to FMVSS 103 and 104 for ADS equipped vehicles. NHTSA's proposal appropriately recognizes that some existing safety standards were developed for vehicles designed to be driven by a human operator and may not always translate directly to vehicles operated exclusively by an ADS. The provisions of FMVSS 103 and 104 were developed to ensure that human drivers can safely monitor the driving environment in various types of weather. In vehicles designed without manually operated driving controls, however, a human driver is not responsible for such tasks because these functions are performed entirely by the ADS. This proposal recognizes that ADS equipped vehicles may have unconventional (or non-existent) seating positions and windshields. Sensor based perception systems are likely to be located throughout the vehicle, rather than in a traditional windshield space. For example, ADS equipped vehicles may have systems that are designed to remove rain or snow from essential sensors rather than the windshield. As such, the proposal allows such vehicles to meet equivalent safety objectives.

Harmonization of FMVSS 103 and 104 Test Procedures with SAE Recommendations

NHTSA proposes to update FMVSS 103 and FMVSS 104 for ADS equipped vehicles. and incorporate by reference several SAE Recommended Practices. We have significant concerns with the 180-day effective date proposal and disagree with NHTSA's assertion that SAE recommended practices are currently ubiquitous in OEM processes.

The SAE Recommended Practices have important technical differences from prior versions. For example, the latest SAE eye-ellipse Recommended Practice, the modified pattern will significantly alter design criteria, which in turn will affect compliance for vehicles. For windshield wiper systems and windshield washing tests, the performance requirements (windshield washing, wiper cycles, and minimum wash area) and defrost test conditions (more severe temperature requirements) are significant. If the intent of this proposal is not to change the washing area performance requirement, we request that, in the revised S4.2.1, the 75% threshold be added and the required number of wiper cycles for the washer performance evaluation be set to within 10 wiper cycles. As written, these substantial changes may make it difficult to meet requirements current vehicles and may drive additional cost into future designs. J902 and J903 were adopted in October of 2024 and June of 2025, respectively. As such, even if members began making changes to production facilities the day after these were adopted, they would still need time to upgrade facilities.

Changes in regulations or process require OEMs to update production facilities. For example, to change a climate chamber to reach -28°C as required by J902, a company with a facility that required an upgrade would need to develop cost estimates, receive internal approvals, select a vendor to build the new chamber, and allow time for the vendor to complete the task. The OEM

would also need to assess whether vehicle sub-systems require changes to meet the standard and if so, source new components which must also be tested and validated. These things each take time.

Auto Innovators requests that NHTSA complete a cost-benefit analysis before deciding whether or not to incorporate the revised SAE Recommended Practices into FMVSS 103 and 104. If, after that analysis, NHTSA determines that the safety benefits outweigh the costs, OEMs will need sufficient lead time to comply. Auto Innovators recommends a five-year phase-in period for the SAE recommended practices only, with adaptive credits included. Auto Innovators supports immediate updates, as outlined in the NPRM, to implement the ADS modernization components of the proposal. This timeline allows sufficient time for OEMs to adjust vehicle design criteria to meet the updated compliance requirements.

Vehicles Without Windshields

As indicated above, certain ADS equipped vehicles may have unconventional (or non-existent) windshields that do not lend themselves to the same treatment as conventional vehicles. Auto Innovators notes that these particular FMVSS—103 and 104—should not apply to vehicles without a windshield. Auto Innovators requests that NHTSA exempts such vehicles from compliance with both FMVSS 103 and 104. Similar to an ADS equipped vehicle without a human driver, a vehicle without a windshield does not require the visibility that this standard was designed to ensure. European regulation (2021/535) already allows such an exemption for vehicles without windshields.

We appreciate NHTSA's continued work to update FMVSS to accommodate ADS equipped vehicles.

Sincerely,

A handwritten signature in black ink, appearing to read 'SP' with a stylized flourish.

Sarah Puro

Vice President, Safety and Technology Policy