



August 24, 2026

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

Re: Notice of Proposed Rulemaking; Federal Motor Vehicle Safety Standards; Modernization of FMVSS No. 135 To Accommodate ADS-Equipped Vehicles (Docket No. NHTSA-2026-0728)

Dear Administrator Morrison,

The Autonomous Vehicle Industry Association (“AVIA”) writes to provide an expanded response to the National Highway Traffic Safety Administration’s (“NHTSA”) Notice of Proposed Rulemaking (“NPRM”) on modernizing Federal Motor Vehicle Safety Standard (“FMVSS”) No. 135, “Light vehicle brake systems,” to accommodate vehicles equipped with Automated Driving Systems (“ADS”) that do not have manually operated driving controls.¹ AVIA supports NHTSA’s proposed updates to FMVSS No. 135, and commends the agency for continuing its efforts to remove regulatory impediments to the wider deployment of autonomous vehicles (“AVs”) and help bring the benefits of AV technologies to all Americans.

AVIA is the unified voice of the AV industry, and we represent the world’s leading technology, rideshare, automotive, trucking, and transportation companies.² Our mission is to bring 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. Vehicles operated by AVIA members have driven over 360 million autonomous miles on U.S. public roads, a distance roughly equivalent to driving around the Earth more than 14,000 times.³

AVIA has long called for federal regulators to modernize the FMVSS to reflect the realities of ADS-equipped and ADS-dedicated vehicles, as detailed in AVIA’s policy framework, *Securing American Leadership in Autonomous Vehicles*.⁴ The updates proposed in the NPRM, together with NHTSA’s recent rulemakings addressing FMVSS Nos. 102, 103, 104, and 110, reflect meaningful

¹ Federal Motor Vehicle Safety Standards; Modernization of FMVSS No. 135 To Accommodate ADS-Equipped Vehicles, 91 Fed. Reg. 38593 (June 26, 2026).

² AVIA members include Amazon, Aon, Aurora, AVRS, Avride, Bot Auto, Discount Tire, Doordash, FedEx, Ford, Gatik, General Motors, Honda, International, Isuzu, Kodiak, Moia, Lockton, Lyft, Motional, NGV, Nuro, PlusAI, Stack, Rivian, Tier IV, Torc Robotics, TaskUs, Terawatt, Uber, UPS, U.S. Venture, Volvo Cars, Volvo Autonomous Solutions, Waabi, Waymo, Valgo, and Zoox. See *About Us*, AUTONOMOUS VEHICLE INDUS. ASS’N, <https://www.theavindustry.org/about> (last visited August 24, 2026).

³ AUTONOMOUS VEHICLE INDUS. ASS’N, STATE OF AV (May 20, 2026), <https://www.theavindustry.org/state-of-av>.

⁴ See AUTONOMOUS VEHICLE INDUS. ASS’N, SECURING AMERICAN LEADERSHIP IN AUTONOMOUS VEHICLES (2025).



progress toward that goal.⁵ AVIA encourages NHTSA to continue this work across the FMVSS, and especially to apply changes similar to those proposed here to FMVSS No. 105, which applies to heavy-duty vehicles,⁶ to allow for further innovation in vehicle design and ADS-integration.

I. Brake Controls and Test Specifications

AVIA supports NHTSA's proposal to amend S5.3.1 to clarify that the requirements for a foot-operated service brake pedal and a separate hand- or foot-operated parking brake control apply only to vehicles equipped with manually operated driving controls. For a vehicle designed to be operated exclusively by an ADS, a brake pedal serves no operational purpose and, as NHTSA correctly recognizes, its presence can create a safety risk if a passenger inadvertently or even intentionally hits the pedal at the wrong moment.

AVIA also supports the proposed definitions of "service brake control" and "stopping distance," which appropriately account for vehicles that translate an electronic braking command into mechanical input rather than muscular force applied to a pedal. NHTSA is correct that these definitions are functionally equivalent to the existing pedal-based definitions in evaluating the physical braking capability of the vehicle, and that no change to the underlying stopping distance performance requirements is necessary.

AVIA would encourage NHTSA to reconsider its proposed edit to S5.1.3, governing regenerative braking systems ("RBS"). In the NPRM, NHTSA suggests, without further context, that ADS-equipped vehicles must automatically consider the RBS to be part of the service brakes. To avoid imposing further design constraints, we would recommend that the requirement be retained in its current state, while clarifying in S5.1.3(a) that "driver" should instead refer to "driver or ADS."

With respect to NHTSA's request for comment on the proposed definition of "service brake control," AVIA recommends that the agency adopt the alternative formulation identified in the preamble, defining the term as a vehicle "component or subsystem," rather than component alone. This modest change would provide additional clarity for vehicles using a distributed brake-by-wire architecture or a regenerative braking system, in which more than one component may participate in translating an electronic command into mechanical braking input, without altering the substance of the requirement.

II. Telltales and Indicators

AVIA further supports NHTSA's proposal to exempt vehicles without manually operated driving controls from the requirement to activate the telltale upon application of the parking brake, a condition that is relevant only where a human driver is responsible for control of that system.

⁵ See Federal Motor Vehicle Safety Standards; Modernization of FMVSS No. 102 To Accommodate ADS-Equipped Vehicles, 91 Fed. Reg. 12532 (Mar. 16, 2026); Federal Motor Vehicle Safety Standards; Modernization of FMVSS No. 103 and FMVSS No. 104 To Accommodate ADS-Equipped Vehicles; Incorporation by Reference, 91 Fed. Reg. 12537 (Mar. 16, 2026); Federal Motor Vehicle Safety Standards; Modernization of FMVSS No. 110 To Accommodate ADS-Equipped Vehicles, 91 Fed. Reg. 16172 (Apr. 1, 2026).

⁶ 49 C.F.R. § 571.105.



On the question of how the brake system warning telltale should be communicated to occupants of a vehicle without manually operated driving controls, AVIA agrees that this safety-critical information should reach all occupants of the vehicle, regardless of where they are located in the vehicle. AVIA encourages NHTSA to adopt a performance-based, design-neutral requirement rather than mandating a specific physical telltale be visible from every designated seating position.⁷ Manufacturers are developing a range of interior configurations and occupant-notification approaches, including in-vehicle displays, audible alerts, and mobile application notifications, that can convey the same safety-critical information as a fixed visual telltale, and NHTSA should provide flexibility for future innovation.

NHTSA should also consider the applicability of telltale visibility provisions in the case of autonomous light-duty trucks and vehicles that are used only for goods transport, which will have no seating positions or occupants. The proposed requirement that telltales be "in clear view of all designated seating positions" is ambiguous for occupantless goods-carrying vehicles. Building on the NPRM's described scenarios, telltale information for these types of ADS vehicles would be more relevant to fleet operators/maintainers and handlers for "pre-trip decision making."

III. Effective Date

AVIA agrees with NHTSA's suggestion that this rule should be made effective immediately upon publication of a final rule. As the proposed changes clarify existing requirements and remove design barriers without imposing any new compliance obligation, there is no need for lead time to adjust vehicle production, making a delay in implementation unnecessary. AVIA appreciates NHTSA's continued leadership in modernizing the FMVSS to reflect the realities of AV technology, and we urge the agency to finalize this rule promptly. AVIA and its members stand ready to serve as a resource to NHTSA as it continues this important work.

Sincerely,

Jeff Farrah
Chief Executive Officer
Autonomous Vehicle Industry Association

⁷ NHTSA should also consider this type of change as it develops the Advanced Notice of Proposed Rulemaking on consideration for telltales for ADS-equipped vehicles. See *Considerations for Telltales, Indicators and Warnings for Automated Driving Systems*, REGINFO.GOV, <https://www.reginfo.gov/public/do/eAgendaViewRule?pubId=201810&RIN=2127-AM07> (last visited August 24, 2026).