



August 28, 2019

By regulations.gov

National Highway Traffic Safety Administration (NHTSA)
Docket Management Facility
West Building, Ground Floor, Room W12-140
1200 New Jersey Avenue SE, Washington, DC 20590-0001

Re: Removing Regulatory Barriers for Vehicles With Automated Driving Systems (ADS); 49 CFR Part 571; NHTSA-2019-0036-0001

Ladies and Gentlemen:

The National Automobile Dealers Association (NADA) represents more than 16,000 franchised automobile and truck dealers who sell new and used motor vehicles and engage in service, repair and parts sales. Together they employ over 1,100,000 people nationwide, yet the majority are small businesses as defined by the Small Business Administration.

I. Background

Last May, NHTSA issued requested comment on potential regulatory barriers to the ability of an Automated Driving System-Dedicated Vehicle (ADS-DV) to verify compliance with the Federal Motor Vehicle Safety Standards (FMVSS).¹ NHTSA describes an ADS-DV as lacking traditional manual controls but having traditional seating configurations. The May ANPRM is the latest of several NHTSA notices addressing the removal of regulatory barriers to accommodate ADS-equipped vehicles.² In response, NADA offers the following comments and suggestions.

Franchised dealerships sell new and used Class 1-8 on-road motor vehicles help maintain the safety performance of the in-use fleet by servicing and repairing vehicles in their mechanical and auto body shops. They also sell motor vehicle parts and, at times, engage in “final stage manufacturing”, “alterations”, and “modifications” as those terms are defined and used in NHTSA’s regulations. When motor vehicles are recalled for safety defect or noncompliance purposes, franchised dealerships perform the critical work necessary to remedy underlying safety concerns. Importantly, NADA’s dealer members are experts at understanding what retail and wholesale customers desire and are willing to pay for when it comes to new and used motor vehicles, and motor vehicle parts, service, and repair.

¹ 84 Fed. Reg. 24433, *et seq.* (May 28, 2019).

² 83 Fed. Reg. 2607 (January 18, 2018); 83 Fed. Reg. 6148 (February 13, 2018)

The motoring public overwhelmingly believes that NHTSA and its FMVSS, are responsible for helping to ensure that new motor vehicles are designed and built to be reasonably safe when operated in compliance with federal and state motor vehicle laws and codes. This includes a recognition that NHTSA's mandates are directly related to the crash avoidance and crash worthiness features of the motor vehicles they own and the new motor vehicles they may be considering for purchase. Year after year, consumer polls consistently show vehicle safety to rank high up on new vehicle purchase criteria lists. To be acceptable in the marketplace, new motor vehicles must be viewed as "safe" and the motoring public expects the federal government to help ensure that they are.

I. Terminology

Given the importance that the public assigns to motor vehicle safety, NADA urges NHTSA to carefully consider the language it uses when it proposes amendments to its FMVSS to accommodate ADS-DVs. For example, the FMVSS and the safety benefits they provide do not present "barriers" to ADS vehicle operation, dedicated or otherwise, which require removal. Instead, the FMVSS offer important safety benefits that should be preserved to the greatest extent possible when amendments are proposed to accommodate ADS operations.

II. A New Safety Performance Standard For ADS-DVs

NHTSA correctly suggests that its existing FMVSS neither prohibit ADS vehicle operation nor address the capabilities of ADS, in dedicated vehicles or otherwise.³ An ADS will always be the driver/operator of an ADS-DV as there is no provision for human operation. It is expected that most state vehicle registration, titling, and licensing laws will require ADS-DV owners to certify that they are designed, manufactured, and tested to perform in compliance with applicable federal state and local law and to describe in detail the nature and extent of their ODDs. But it is not enough for ADS-DVs to be regulated solely by state registration and licensing laws.

As the federal agency with the motor vehicle safety authority and expertise, NHTSA should, pursuant to 49 USC §30111, propose performance standards aimed at setting a safety floor ADS must meet before they are introduced into commerce. Such performance standards should aim at assuring that all ADS-equipped vehicles, including ADS-DVs, are capable of being operated in compliance with applicable motor vehicle laws and appropriate cybersecurity standards. In addition, they should target a level of vehicle operation that is at least as safe as a well-trained and experienced human driver operating the same vehicle equipped with the latest advanced driver assist systems (ADAS). As measured on a per mile basis, human drivers have proven to be remarkably good at operating vehicles without crashes involving serious injuries or fatalities, a record that will only improve as ADAS become more prevalent over time.

³ These comments are focused on SAE Level 4 and 5 ADS-DVs, the use cases for which are relatively limited for the foreseeable future, except for low-speed SAE Level 4 vehicles with limited Operational Design Domains (ODDs).

NADA expects most ADS-equipped SAE Level 4 and 5 vehicles to allow also for human control. The manufacturers of such vehicles will continue to meet existing human driver-oriented testing and certification protocols when verifying and validating compliance with applicable FMVSS. New certification protocols will be necessary to allow manufacturers to verify and validate compliance with applicable FMVSS under ADS operation and to verify and validate compliance with new performance standards aimed at the ADS itself.

III. Test Approaches for ADS-DVs

Neither NADA nor its members supply or build new motor vehicles or vehicle parts, let alone test and verify their compliance with the FMVSS. Nonetheless, NADA urges NHTSA to propose test approaches suitable for determining ADS-DV compliance with applicable FMVSS. NADA also suggests the following with an eye toward promoting consumer trust in ADS-DVs:

- **NHTSA Should Prioritize Normal ADS-DV Operation:** NHTSA should propose compliance protocols that focus on normal ADS-DV operations. An ADS-DV that cannot demonstrate compliance with applicable FMVSS, including a robust new ADS performance standard during normal operating conditions and ODD, should not be eligible for certification.
- **Changes to Test Procedures Should Highlight the Safety Goals of the FMVSS:** Proposed changes to various FMVSS to accommodate ADS-DVs should preserve the safety purpose of those FMVSS. For example, while an ADS-DV with fully automated steering may not need a steering wheel to safely navigate the roads, the ADS-DV should be able to maintain at least the same level of steering performance as an experienced and well-trained human driver operating a vehicle with a steering wheel.
- **Surrogate Vehicles Must Not Make Changes to Safety Performance:** NHTSA should propose that the use of a surrogate vehicle to demonstrate compliance may be appropriate, so long as it can be shown that the surrogate vehicle's design and operation is functionally similar to that of the ADS-DV being certified.
- **Programming to the Test and Simulation:** NHTSA should propose that, in certain situations, certification through pre-programmed routines or simulation may be appropriate. To the extent that ADS-DV FMVSS compliance requires specific maneuvers, NHTSA should recognize that an ADS-DV can be programmed or "taught" to focus on completing compliance maneuvers at the expense of operating safely across a varied dynamic environment. Clearly, simulation can offer the advantage of generating large amounts of compliance validation and verification data in a zero-risk environment. But it is incumbent upon NHTSA to propose appropriate uniform criteria for simulation testing in order to set a level playing field for all ADS providers.

On behalf of NADA, I thank NHTSA for the opportunity to comment on this matter.

Respectfully submitted,

A handwritten signature in black ink that reads "Douglas I. Greenhaus". The signature is written in a cursive style with a large initial 'D'.

Douglas I. Greenhaus
Chief Regulatory Counsel,
Environment, Health and Safety