

November 26, 2018

Ms. Heidi Renate King
Deputy Administrator
National Highway Traffic Safety Administration
U.S. Department of Transportation (DOT)
1200 New Jersey Avenue S.E.
Washington, DC 20590

Re: Advanced Notice of Proposed Rulemaking, Pilot Program for Collaborative Research on Motor Vehicles With High or Full Driving Automation, Docket Number NHTSA-2018-0092, Docket No. NHTSA-2018-0092

Dear Deputy Administrator King:

The American Association of State Highway and Transportation Officials (AASHTO) is pleased to provide comments on the National Highway Traffic Safety Administration's Advanced Notice of Proposed Rulemaking ("ANPRM") on a potential automated vehicles pilot program (83 Fed. Reg. 50872), issued on October 10, 2018.¹ Representing all 50 states, the District of Columbia, and Puerto Rico, AASHTO serves as a liaison between state departments of transportation and the federal government.

AASHTO and the state DOTs appreciate USDOT's continued leadership through the various administrations to help clear the way for the safe and timely adoption of automated vehicles. While there is tremendous potential in significantly improving transportation mobility and accessibility for people with automated vehicles, the top priority for AASHTO and the state DOTs is the safety associated with the implementation of automated vehicles. Safety has been, and will remain, at the forefront of AASHTO's policy goals as state DOTs have the primary responsibility for the safe and efficient movement of people and goods on our nation's highways and streets.

¹ AASHTO's comments on this NHTSA ANPRM complement two comment letters AASHTO provided on USDOT's "Preparing for the Future of Transportation: Automated Vehicles 3.0 (AV 3.0)" Notice of Request for Comments (Docket Number DOT-OST-2018-0149): a joint comment letter with our sister organizations and a stand-alone AASHTO comment letter were submitted to the docket.

Background

As NHTSA explains in the ANPRM, the pilot program would allow NHTSA to issue exemptions from the Federal Motor Vehicle Safety Standards (“FMVSS”) for light-duty motor vehicles with high and full driving automation that do not have traditional designs and thus may not comply with the FMVSS - for example, vehicles that lack steering wheels and brake pedals. (83 Fed. Reg. at 50877). NHTSA acknowledges that vehicles with traditional designs that comply with the FMVSS would not require exemptions, even if they are designed to be operated (and in fact are operated) with high and full driving automation. (Id.) Thus, the purpose of the potential pilot program is to enable the testing and deployment of vehicles that do not comply with the FMVSS, including vehicles that cannot be operated at all by a traditional human driver sitting in the driver’s seat of a traditional vehicle with a steering wheel and pedals.

We note that even in the absence of this pilot program, automated vehicles that do not comply with the FMVSS can be tested on public roads, without NHTSA approval, provided that the testing is done by an existing auto manufacturer.² But the proposed pilot program would go further, providing exemptions that could allow not only testing but also full deployment, and would not be limited to existing auto manufacturers. In this way, the pilot program would likely accelerate the widespread testing and deployment of highly and fully automated motor vehicles.

If the pilot program is implemented, it would become even more urgent for States and local governments to develop appropriate laws regulating the use of automated vehicles, including fully driverless vehicles. For that reason, AASHTO’s comments focus on how federal, state and local authorities should work together to ensure that automated vehicles are operated safely.

General Comments

We commend NHTSA for acknowledging the importance of preserving the traditional roles played by state and local governments in regulating the use of motor vehicles on public roads. As stated in the ANPRM, “State and local governments have traditionally played important roles in motor vehicle and road safety, through enforcement, traffic management and planning, research, and much more. It is critical to NHTSA to partner effectively with State and local governments to permit them to continue these important functions while the Agency works collaboratively to facilitate the safe and efficient deployment of ADS technology.” (83 Fed. Reg. at 50877). We agree wholeheartedly with the need for a close partnership between NHTSA and state and local governments in regulating automated vehicles.

In addition, we support this pilot program as means of encouraging traditional and non-traditional manufacturers to engage in testing under federal and state oversight. Under existing law as noted above, auto manufacturers can test automated vehicles that do not comply with the

² See 83 Fed. Reg. at 50877. The ANPRM cites 49 U.S.C. 30112(b)(10), which allows “the introduction of a motor vehicle in interstate commerce solely for purposes of testing or evaluation by a manufacturer that agrees not to sell or offer for sale the motor vehicle at the conclusion of the testing or evaluation.” This exception only applies to auto manufacturers that produced FMVSS-compliant motor vehicles as of December 2015, when this provision was enacted as part of the FAST Act.

FMVSS *without* obtaining NHTSA approval and without necessarily complying with the types of conditions that could be imposed under this pilot program.³ Public safety - and public confidence in automated vehicles - will be enhanced if these new technologies are first deployed with appropriate governmental oversight, which this pilot program could provide. To that end, we encourage NHTSA to design and implement the pilot program in a manner that incentivizes broad participation by traditional and non-traditional manufacturers and facilitates innovation and competition.

Further, we see this pilot program as an opportunity to advance not only the development of automated vehicle technologies, but also the development of appropriate State and local legal frameworks for regulating the use of automated vehicles. As NHTSA notes in the ANPRM, there is an interplay between the vehicles' technological capabilities and the types of State and local laws that may apply to the operation of those vehicles. State and local laws will need to be updated to reflect vehicle automation, and that process will need to be informed by real-world experience. This pilot program can be one tool for helping to develop a body of experience that will inform the development of new State and local laws tailored to automated vehicles. With that in mind, we urge NHTSA to develop the pilot program with the goal of promoting collaboration and information sharing among manufacturers and governments as well as to inform other industries, such as insurance companies, that will be more directly involved with future wide-scale deployments.

Despite these broad areas of agreement with the potential pilot program, we also believe it is critically important to clarify the distinction between federal and state regulatory roles in a world where some vehicles are operated without any human driver. As the distinction between a "driver" and a "vehicle" becomes blurred or disappears, there may be confusion about the dividing line between federal and state roles. To ensure clarity, we urge NHTSA to re-affirm state and local government's roles by incorporating the following principles into the program:

- **Preemption.** NHTSA has exclusive authority to adopt vehicle safety standards (the FMVSS), which means that States and local governments are preempted from adopting requirements that conflict with those standards. But federal law does not establish "field preemption" with regard to the issue of motor vehicle safety.⁴ We urge NHTSA to acknowledge this important distinction. We also urge NHTSA to acknowledge that any federal standard governing the "performance" of automated vehicles is limited to the vehicle's internal capabilities to engage in safe operation.
- **Rules of the Road.** State and local governments' authority to establish "rules of the road" includes not only the authority to apply existing rules to automated vehicles, but also to develop new rules specifically tailored to automated vehicles. On this point, we welcome NHTSA's acknowledgment that "it is reasonable to expect that these authorities may establish new rules of the road to address ADS vehicles specifically" and the statement that NHTSA may require manufacturers to design vehicles "so that their

³ 49 U.S.C. 301122(b)(10).

⁴ See, e.g., *Harris v. Great Dane Trailers, Inc.*, 234 F.3d 398, 400 (8th Cir. 2000) ("Congress in the Safety Act plainly did not intend to occupy the field of motor vehicle safety.")

vehicles know the State and locality in which they are operating and what the rules of the road are for that location and so that they observe those rules.” (83 Fed. Reg. 50879). These principles should be included in any future NHTSA regulations or policy statements regarding automated vehicles.⁵

- **Vehicle Registration.** State and local governments can and do establish vehicle-related requirements that must be met in order for the vehicle to be registered. State laws require motor vehicles to have a license plate and registration stickers; require motor vehicles to be in good working condition so that they can be safely operated (e.g., turn signals are functioning); and require certain vehicles to identify themselves with decals, lights, or other means (e.g., taxis). These examples illustrate that, while the federal role is broad, it does not preclude States from imposing requirements that apply specifically to vehicles, as long as those requirements do not conflict with the FMVSS.
- **Licensing and For-Hire Vehicle Regulation.** State and local governments are responsible for licensing human drivers. When there is no human driver in the vehicle, as would be the case with some vehicles allowed under the pilot program, the State still has a potential licensing role with respect to the individuals or entities responsible for setting that vehicle in motion (whether for use by themselves or others). States may choose to exercise this authority in various ways, including imposing conditions that licensees must meet before operating vehicles on public roads, as well as ongoing requirements that must be met as long as the license remains in effect (e.g., regarding submittal of operational data, crash reports, etc.).
- **Law Enforcement and Incident Response.** State and local governments are responsible for enforcing traffic laws and other laws related to vehicle operation. State and local governments also are responsible for providing emergency services when vehicles are involved in crashes. When a human driver is in the vehicle, these State and local laws place certain responsibilities on that human driver: for example, to pull over when approached by law enforcement, or to hand over one’s license and insurance card. When there is no driver in the vehicle, State and local governments are still responsible for performing these public safety functions. Inherent in that role is the authority to establish certain requirements - not in conflict with the FMVSS - about how the vehicle must respond when approached by law enforcement or emergency response personnel.

⁵ The same principles apply to “low-speed vehicles” (with a maximum speed of 20-25 miles per hour): NHTSA establishes the FMVSS (49 CFR § 571.500), but State and local governments decide where those vehicles can be used. See <https://www.iihs.org/iihs/topics/laws/low-speed-vehicles>.

Specific Comments

We have reviewed the full list of questions posed in the ANPRM, but given the limited time available to prepare these comments, we have addressed only a subset of the questions. We may have additional comments to some of the questions at a later date, and if so, we hope that NHTSA will take any additional responses into consideration to the extent feasible.

Question 8: This question asks, in part, how federal, state, and local authorities should work together to ensure Operational Design Domains are observed.

Response:

- NHTSA should ensure that any vehicles covered by an exemption can only be operated in the Operational Design Domains for which the manufacturer has certified the vehicle for use in its application for the exemption.
- NHTSA should ensure that any vehicles covered by an exemption can only be operated when all sensors and other systems required for safe operation of the vehicle are properly functioning.
- NHTSA should ensure that any vehicles covered by an exemption have the capability of determining the applicable State and local “rules of the road” in the jurisdiction in which the vehicle is operating and are programmed to comply with all such laws.

Question 13: This question asks what information a party seeking to participate in the pilot program should be required to address in its application.

Response:

- NHTSA should require the applicant to identify all States in which the applicant has conducted testing or deployment of automated vehicles and to provide crash data and other relevant data indicating its safety record for those vehicles in those States, and to notify those States when the application is submitted.
- NHTSA should require the applicant to identify any States in which the applicant proposes to test, sell, or otherwise deploy automated vehicles pursuant to the exemption, and to notify those States when the application is submitted. Once an application is received, NHTSA should consult with appropriate state officials in the state where the applicant plans to test, sell, or otherwise deploy automated vehicles to better understand any concerns or issues that state officials may have. Finally, NHTSA should notify the appropriate state officials in the state(s) where the applicant proposes to test, sell, or otherwise deploy automated vehicles once an application is approved.
- NHTSA should require the applicant to identify the Operational Design Domains in which the vehicle is capable of operating, and certify that the vehicle is programmed

so that it can only be operated in those conditions.

- NHTSA should require the applicant to certify that vehicles have the capability of determining the applicable State and local “rules of the road” in the jurisdiction in which the vehicle is operating and are programmed to comply with all such laws.
- NHTSA should require the applicant to certify in its application that incident data (e.g., regarding crashes) will be submitted within 24 hours not only to NHTSA, but also to the applicable State within which the incident occurred. (Question #13 asked only whether such reports should be submitted to NHTSA.)

Question 14: This question asks what types of terms and conditions NHTSA should consider attaching to exemptions to enhance public safety and facilitate the Agency’s monitoring and learning from the testing and deployment.

Response:

- NHTSA should require exemption holders, as a condition of maintaining the exemption, to ensure that vehicles maintain all of the capabilities required as the basis for issuance of the exemption, including but not limited to the ability to determine the applicable State and local “rules of the road” in the jurisdiction in which the vehicle is operating and comply with all such laws.
- NHTSA should require exemption holders to ensure that vehicles operating pursuant to an exemption have technological capabilities sufficient to enable State and local officials to carry out their responsibilities for law enforcement and public safety. These conditions should include, for example, requiring such vehicles to:
 - be readily identifiable to first-responders as automated vehicles and be properly registered with the State;
 - have the capability to interact in a safe and predictable manner with law enforcement - e.g., when a vehicle is pulled over by the police; and
 - have the capability to be disabled by first-responders when approaching the scene of a crash.
- NHTSA should require exemption holders, as a condition of the exemption, to participate in collaborative discussions with federal, state, and local officials regarding the development of new State and local “rules of the road” applicable to automated vehicles, in particular the novel issues associated with fully driverless vehicles. AASHTO stands ready, in partnership with NHTSA and other organizations, to facilitate those collaborative efforts.

We appreciate the opportunity to provide these comments and look forward to working with NHTSA on the development of the potential pilot program. AASHTO encourages NHTSA to review AASHTO’s comments on this ANPRM, as well as AASHTO’s separate comments on the AV 3.0 document for further information in the development of the proposed rule. If you would

like to discuss the issues raised in this letter, please contact Matthew Hardy, Ph.D., AASHTO's Program Director for Planning and Performance Management at (202) 624-3625.

Sincerely,

A handwritten signature in blue ink that reads "Carlos M. Braceras". The signature is written in a cursive style and is contained within a thin black rectangular border.

Carlos M. Braceras
President, American Association of State Highway and Transportation Officials
Director, Utah Department of Transportation