April 1, 2021

Steven Cliff
Acting Administrator
National Highway Traffic Safety Administration
US Department of Transportation
1200 New Jersey Avenue SE
Washington, DC 20590

Subject: "Framework for Automated Driving System Safety" (Docket No. NHTSA-2020-0106)

Dear Acting Administrator Cliff:

The American Association of State Highway and Transportation Officials (AASHTO) is pleased to provide comments on the Framework for Automated Driving System Safety, published in the Federal Register on December 3, 2020. Representing all 50 states, the District of Columbia, and Puerto Rico; AASHTO serves as a liaison between state departments of transportation (state DOTs) and the federal government. AASHTO's comments on the National Highway Traffic Safety Administration's (NHTSA) questions are included in this letter and were developed based on feedback from our members.

AASHTO and the state DOTs appreciate the U.S. Department of Transportation's (USDOT) leadership so far in supporting the research, development and deployment of connected vehicles (CV), automated vehicles (AV) and automated driving systems (ADS). While the terms and labels may change over the years, there has been, and will continue to be, a strong partnership between the state DOTs and USDOT. There is great potential that connected and automated vehicles (CAV) will improve safety, enhancing mobility and reducing the environmental impact of surface transportation systems. Most important to AASHTO and the state DOTs is the safety associated with the implementation of CAV. 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.

As your agency states in the ANPRM, NHTSA's previous regulatory notices have focused more on the design of the vehicles that may be equipped with an automated driving system (ADS)—not necessarily on the performance of the ADS itself or the role that NHTSA (or the USDOT) could have in the safe and efficient deployment of AVs. As such, our comments below focus not on the technical and engineering specifics offered in the proposed rule, but rather on clarifying our view of: 1) maintain current federal and non-federal authorities concerning motor vehicle performance; 2) ensuring a strong federal role in facilitating the deployment of connected vehicles and automated vehicles; and 3) the continued importance of future of both connected and automated vehicles.

1) Maintaining Current Federal and Non-Federal Authorities

The regulation of motor vehicle safety, which includes the design, construction and performance of a motor vehicle (in the traditional manner, as defined in Title 49 Sections 30102 and 30111) is, and should remain, a federal obligation. USDOT appears to confirm this position on page 78059, first column, where the document affirms the nexus of its authority to issue motor vehicle safety standards. However, state and local governments are the primary authority concerning operational safety, including regulating the operation of motor vehicles after such vehicles have been constructed, the operators of those motor vehicles, as well as establishing the rules of the road on how motor vehicles can be safely operated on public roadways. However, this federal authority related to the safety aspects of the design, construction, and performance of a motor vehicle does not include compliance with the traffic laws, rules of the road, or the operation of motor vehicles of a state or political subdivision of a state.

This well-established structure for state-local and federal authority was endorsed by the Senate Committee on Commerce, Science and Transportation in its written report No. 115-187 in response to passage of S. 1885, the American Vision for Safer Transportation through Advancement of Revolutionary Technologies Act or the "AV START Act." In the committee's report, it noted: "The Committee understands that since it was first enacted in 1966, the National Traffic and Motor Vehicle Safety Act (Safety Act) has always contained a provision preempting States and political subdivisions of States from adopting or enforcing a standard 'applicable to the same aspect of performance of a motor vehicle' as a FMVSS. The term 'performance' in this section is intended to be consistent with NHTSA's authority under the Safety Act as it relates to vehicle or equipment performance and is not intended to be broadened beyond NHTSA's traditional interpretation, which excludes vehicle compliance with or the enforcement of State and local traffic laws."

NHTSA specifically addresses state and local authority on page 78070, third column, noting the critical role state and local authorities have traditionally played in establishing and enforcing the rules of the road, such as speed and condition of headlights. NHTSA states that "in the future, it is reasonable to expect that such authorities may establish new rules of the road to address ADS-equipped vehicles specifically." NHTSA suggests it "could require that ADS be designed such that they must follow all applicable traffic laws in the areas of operation" but expects "that the states and localities would enforce those rules if broken, just as they would do today." Under the proper and existing federal-state-local framework, states and local governments must retain the authority not only to enforce, but to originate and establish laws and regulations governing the operation of motor vehicles on a public road (be they operated by a human driver or a vehicle decision-making system). To put it simply, the federal government can require that a vehicle be able to properly identify and observe a stop sign, but the sole authority to establish laws requiring observation of such stop sign, and the enforcement thereof, will continue to reside with state and local authorities who are best suited to respond to local needs. Were the federal government to encroach into this space, it could inadvertently create significant roadblocks for the deployment of autonomous vehicles.

2) Ensuring a Strong Federal Role in Facilitating Deployment

Question 8 of the ANPRM asks how should NHTSA determine whether regulation is actually needed versus theoretically desirable. AASHTO believes that regulation is needed now when it could lead to more widespread testing and greater public trust in the technology. For example, testing, pilots, and limited deployments of ADS-equipped vehicles are already underway on public roads across the United States. As noted in the ANPRM, current FMVSS are not always applicable to these vehicles, yet testing could go on for many years. States do not have the authority or expertise to evaluate the safety of these test vehicles, which can lead to discomfort with or outright opposition to testing and deployment of ADS-equipped vehicles. Federal minimum safety performance requirements for testing, piloting, or running limited deployments of ADS-equipped vehicles on public roads would provide the public and state and local governments with greater confidence in these new technologies and smooth the path to more widespread testing and deployment across jurisdictional divisions. AASHTO was pleased to see NHTSA's initial recognition of the leading role that state and local governments play in roadway safety with the agency's launch and then expansion of the Automated Vehicles Transparency and Engagement for Safe Testing (AV TEST) Initiative to facilitate further dialogue and transparency of the state of ADS development.

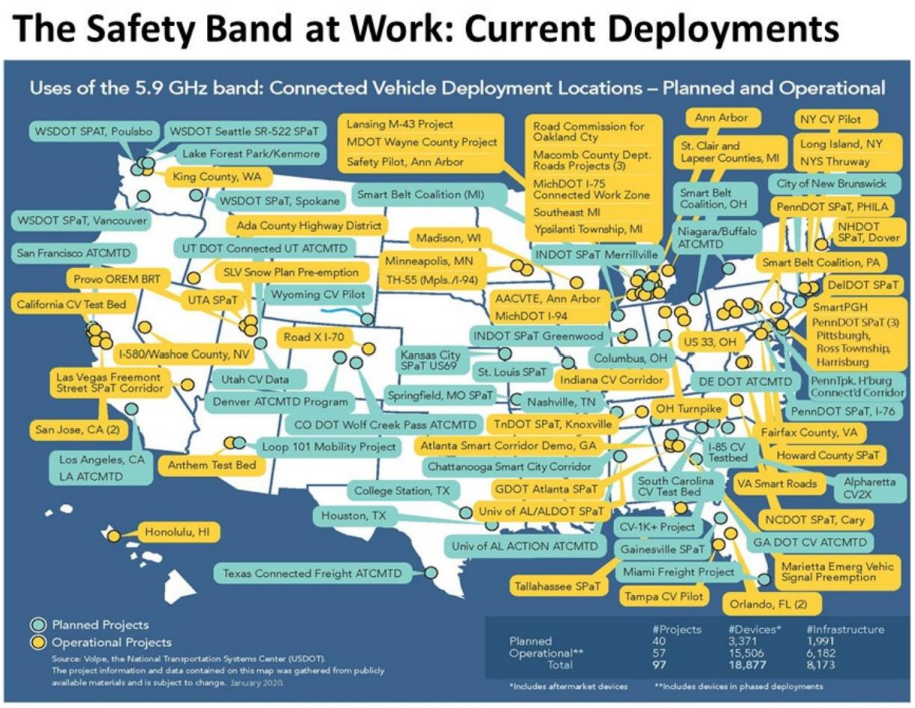
Furthermore, AASHTO strongly encourages NHTSA, and USDOT more broadly, to take a more proactive role in facilitating the deployment of automated vehicles. An overarching theme in AASHTO's response to previous notices is the need for the public and private sector to collaborate more and for USDOT to be the convener of these collaborations. Clearly, NHTSA recognizes the importance of the collaboration required among Federal, State and local governments and the private sector. AASHTO fully supports USDOT in articulating the need for collaboration among the many partners that will be involved in the deployment of AVs. AASHTO looks forward to working collaboratively with USDOT, NHTSA, local governments, and the private sector on the testing and deployment of AVs. Automated driving systems clearly represents a new paradigm in the relationship between the public and private sector and we recognize that automakers work in a very competitive environment and may be challenged to reach consensus on their needs. Similarly, road agencies range in size, capability and perspective. However, if we are to provide infrastructure that supports these new technologies, both physical (roadways, bridges, traffic signals, signs, work zones, etc.) and digital (software applications, algorithms, business intelligence, data analytics, mobile telecommunications, etc.), clearer guidance from the automaker industry would be helpful. An important role that NHTSA and USDOT can play is to bring together these two groups.

To this end, AASHTO suggests that USDOT take a more proactive role in supporting and establishing ongoing collaboration opportunities. Working with other industry partners, USDOT could greatly expand overall industry collaboration to include broader and active participation from both public and private sectors. They could also leverage existing structures in place such as the Cooperative Automated Transportation (CAT) Coalition, the Connected Vehicle Pooled Fund Study, and the Collision Avoidance Metrics Partnership that bring together state and local DOT representatives, research partners, USDOT, auto industry, original equipment manufacturers, and technology vendors.

In addition to playing the role of convener, USDOT could work with the industry to develop a stronger focus and vision on transportation automation at the national level. Currently, AASHTO is beginning the process of developing The National Strategy on Highway Automation that will lay out a multi-phase approach to deploying automation technology throughout the US on the full extent of the NHS and the top 100 metropolitan areas by 2030. The national strategy will focus attention on developing the digital highway infrastructure needed to make the deployment of automation technologies ubiquitous in the US.

3) A Future of Both Automated and Connected Vehicles

Reiterating our position made in previous comments, as infrastructure owners and operators, AASHTO's member DOTs believe that establishing a strong foundation for ADS requires ensuring robust connectedness for vehicle-to-vehicle (V2V) and vehicle-to-infrastructure (V2I) communication. The overwhelming support for the development and deployment of connected vehicle technologies is evident in the significant commitment that the states and local agencies have made to leading, supporting, and fostering the deployment and testing of connected and automated vehicle (CAV) systems. Currently, 34 states hold active statewide DSRC licenses with four additional states having DSRC licenses at the local level. As seen in the figure below, these licenses represent 57 operational projects with 15,506 vehicles equipped with DSRC radios and 6,182 roadside units. Additionally, 66 projects are being planned representing an addition 3,371 vehicles and 1,916 roadside units.



Pending Applications to the FCC for Use of the Safety Band (by State)

State	Applications
GA	124
AZ	1
CO	21
CA	6
FL	141
MI	121
NH	1
NY	52
OH	29
PA	1
TN	1
Total	**498**

Figure 1 5.9 GHz Deployments in the US[1,2]

[1] Source: https://www.transportation.gov/research-and-technology/map-current-deployments-safety-band
[2] The table does not include a total of 14 applications pending with the FCC within the State of Tennessee: 10 with the Tennessee DOT and 4 with the City of Memphis.

At the state level, there are many efforts underway. In Utah, the Utah DOT (UDOT) has invested effort and resources to plan, develop and deploy connected vehicle technology. Over the past four years, Utah has invested $2.3 million in the deployment of DSRC in the 5.9 GHz band. Importantly, these systems are producing measured, positive results. In addition UDOT has existing contracts underway, valued at $11.459 million, to develop and deploy additional connected vehicle systems and technologies. Funding is in place for further system expansions; $1.35 million in the current fiscal year, and $1.07 million in the following year. They currently have 137 intersections and 81 fleet vehicles with DSRC equipment installed and operating, and another 165 intersections and 90 vehicles slated for operation this year. These installations represent over 25% of all state-owned traffic signals in Utah. These are not pilot deployments, but are in a fully operational, permanent environment. They will also install dual-band DSRC / C-V2X roadside units in 69 non-intersection locations in late Spring 2020, accompanied by 35 fleet vehicles with either DSRC or C-V2X technology. Safety applications are being developed for these locations. More deployments, and additional applications are planned. Connected vehicle systems are a solution for UDOT, not an experiment. Saving lives with these systems is their goal.

AASHTO believes the transportation industry must use every tool we can—including Dedicated Short Range Communication (DSRC) to connect vehicles with each other and the infrastructure—to make our vehicles, highways and roads safer. The potential of CV technologies to save lives, enhance mobility, and serve as the platform of a new generation of transportation management systems is vast and any discussion about a future with automated vehicles must also include a path forward with connected vehicles.

AASHTO looks forward to continuing to work with NHTSA and the rest of the US Department of Transportation's (USDOT) modal administrations in the implementation of both automated vehicles as well as connected vehicles. Specifically, AASHTO looks forward to continuing to work with NHTSA as you continue your work to update and modernize and existing federal motor vehicle safety standards to allow for the eventual deployment of autonomous vehicles. 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 or mhardy@aashto.org.

Sincerely,

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