

**U.S. House of Representatives
Committee on Appropriations
Subcommittee on Transportation, Housing and
Urban Development, and Related Agencies**

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Testimony of:
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Chairman Diaz-Balart, Ranking Member Price, good morning. It's an honor to appear before you today. I thank you for the subcommittee's interest in exploring the tremendous potential benefits provided by fully automated vehicles, more commonly referred to as self-driving cars. I am a Partner at Venable LLP and testifying here today as Counsel to the Self-Driving Coalition for Safer Streets. The Coalition, which was founded in April of last year by Ford Motor Company, Waymo (formerly Google's self-driving car project), Lyft, Uber, and the Volvo Car Group, is focused on enabling the development and deployment of Level 4 and Level 5 self-driving cars.

This cross section of companies demonstrates the widespread interest in developing this technology across different sectors—technology, automobile, and transportation networking. Despite their different backgrounds, the companies came together to form the Coalition because of their commitment to bring the tremendous potential safety benefits of self-driving cars to consumers in the safest and swiftest manner possible.

The Coalition believes fully autonomous vehicles have great potential to make our roads safer and more accessible. In 2015, 35,092 Americans died in motor vehicle crashes. Early estimates from the National Highway Traffic Safety Administration (NHTSA) from the first half

of 2016 suggests a 10.4 percent increase in roadway fatalities compared to the same time period last year. Since an estimated 94 percent of all crashes are the result of driver error, fully autonomous vehicles may reduce fatal traffic crashes because they remove human error from the driving process entirely. In addition, self-driving vehicles hold the promise to enhance mobility for the disabled and elderly, reduce congestion, and improve productivity.

As you are aware, in 2016 NHTSA released voluntary guidance regarding the testing and deployment of autonomous vehicles. The Coalition supports NHTSA's effort to construct a voluntary framework that would promote the "expeditious and safe introduction" of self-driving vehicles as a means of improving safety and promoting mobility. Today, I want to discuss three areas where the Coalition believes that Congress can play a key role in promoting the safe and expeditious deployment:

- 1. Update the Federal Motor Vehicle Safety Standards ("FMVSS").** NHTSA should work with industry stakeholders to amend the relevant FMVSS to reflect that Level 4 and 5 autonomous vehicles do not require human operations.
- 2. Revise NHTSA's exemption authority to allow for a greater number of vehicles to be allowed on the road for testing and deployment of HAVs.** While the current exemption limits an exempted fleet for a manufacturer to up to 2,500 vehicles for up to two years, the need to accumulate results for autonomous vehicles in an expedited timeframe would require a significant increase in the fleet size and a longer exemption period for the fleet. This flexibility would provide multiple avenues for manufacturers and innovators to safely test and deploy a number of vehicle changes that would advance autonomous vehicle safety.

3. Encourage a single voluntary national framework for HAVs focused on safety

assurance. States should be discouraged from creating a patchwork of inconsistent laws and regulations that will stifle this emerging industry. The Model State Policy articulated in NHTSA’s guidance has not, in the opinion of the Coalition, adequately achieved this objective.

I would like to address each of these items in turn.

1. Update and modernize the FMVSS.

The FMVSS act as an impediment to autonomous vehicle testing and deployment because they require the design and inclusion of elements that are not applicable to or necessary for the operation of an autonomous vehicle without a human driver, yet nonetheless must be incorporated to comply with federal law.

The Coalition strongly supports the development of updated FMVSSs to which, in the words of the Federal Automated Vehicle Policy (FAVP), “manufacturers could certify HAVs that do not have controls to permit operation by a human driver (i.e., no steering wheel, brake pedals, turn signals, etc).” We think such updated FMVSSs, which would provide for the self-certification of vehicles that would allow fully self-driving operation without the presence of, or capability to use, human operator controls in SAE Levels 4 and 5 vehicles, is an essential step to facilitate the widespread deployment of vehicles designed from the ground up to be fully self-driving. The potential safety benefits of such vehicles—which would vastly reduce crashes caused by human drivers—are enormous.

In our comments on the FAVP guidance, the Coalition called upon NHTSA to pursue narrow rulemakings to amend the FMVSS that currently mandate human operator controls in

L4-L5 HAVs. We urge NHTSA to give this rulemaking a high priority, and look to Congress to provide its necessary oversight role in ensuring that this rulemaking is timely undertaken. The Coalition will support the effort to amend and update the FMVSS by submitting to NHTSA suggestions for a new FMVSS.

2. *Grant NHTSA authority to permit motor vehicle safety innovation.*

The Coalition supports NHTSA's proposal in the FAVP to expand its statutory exemption authority. A broader exemption would enable manufacturers and technology companies to expand and improve the pathway to test and ultimately deploy.

Limitations that currently exist under law are insufficient to achieve the goal of rapid, safe deployment and to attain the real benefits to consumers described above. Current authority permits NHTSA to exempt not more than 2,500 vehicles per year for a two-year period, on the basis of equivalent safety. Existing authority concerning "general exemptions" (49 USC 30113) provides some leeway for development and field evaluation of innovative features but its limitations on duration (two years) and vehicle numbers (2,500 in any 12-month period) do not provide for full deployment. 49 USC 30114 ("special exemptions") is limited to research, investigations, demonstrations, training, competitive racing events, show, or display. The recently enacted section 49 USC 30112(b)(10) permits introduction of vehicles into commerce that do not comply with the FMVSS "solely for the purposes of testing or evaluation."

To increase the exemption cap in a significant manner, the Coalition supports eliminating or raising the exemption cap to a level that will help facilitate meaningful commercial deployment of HAVs. To achieve this, the Coalition supports NHTSA's proposal to be provided new authority to "grant incrementally increasing exemptions to the same manufacturer,

progressively relaxing the numerical limits on annual production volume and exemption duration over time, or even eliminating those limits altogether (following an incremental one-step-at-a-time approach),” with preference for the latter. To be clear, the Coalition believes expanded exemptions should be conditioned on a demonstration to NHTSA of equivalent safety for the FMVSS or FMVSSs for which an exemption or exemptions is/are sought.

We strongly believe that Congress should act to provide this authority to the agency immediately, to fully enable the potentially life-saving safety innovations of Level 4 and Level 5 systems and mitigate the safety risks of legacy controls unnecessary for such systems. This new authority would allow the deployment of innovative safety technologies that meet or exceed the level of safety required by existing federal standards, while ensuring a prompt and transparent process. The Coalition does not see expanded exemptions as a long-term replacement for industry-wide standards. Rather, we see such exemptions as a necessary measure to ensure that safety innovations do not have to await completion of rulemaking actions, which can consume several years.

If granted by Congress, NHTSA’s new exemption authority would supplement existing NHTSA authorities, to expedite the safe introduction of life-saving HAVs.

3. Promote uniformity at state and local levels.

Congress must take a strong leadership position in clearly defining the federal and state responsibilities when it comes to HAVs. The federal government’s exclusive mandate to promulgate and enforce motor vehicle safety standards has been observed for decades, and we do not believe HAVs present a reason to deviate from that well established precedent.

In the FAVP, NHTSA encourages states to focus on their traditional areas jurisdiction, such as licensing, traffic enforcement, and setting insurance requirements. However, we are concerned that the FAVP still provides leeway for states to fill in gaps and build their own regulatory framework for HAVs. Recent and ongoing legislative activity in states across the country—attempting to set forth varied and competing regulatory regimes for HAV testing and deployment, illustrates the importance and urgency of this concern. We encourage Congress and NHTSA to signal to state and local entities against rushing into legislating simply because the subject matter is new and novel.

Inconsistency at the state and local levels will harm innovation and slow the deployment of this technology that has the potential to save thousands of lives. Should states and local governments move to enact disparate regulatory frameworks, it would reduce federal policymakers' ability to ensure that this country can move forward on safety. The success of autonomous technologies depends on access to public roads; states and municipalities play a great role, and we look forward to working with them to achieve scalable solutions. To the extent states wish to act in this area, the Coalition strongly urges them to examine and address existing laws and regulations that may serve as an impediment to testing and deployment, rather than implementing restrictive requirements that may, in fact, lead to more barriers to operations.

The Coalition encourages opportunities to collaborate with local, state, and federal governments to ensure thoughtful and uniform testing and deployment, including through public-private partnerships, which will be integral to successful deployment of self-driving cars. Early engagement will ensure that the public sector's efforts are in sync with technological developments. Given the Coalition's enthusiasm for fully autonomous vehicles and our strongly

held view that self-driving vehicles have the potential to change the country for the better, we support efforts at the state level to facilitate the rapid testing and deployment of fully autonomous vehicles. Likewise, we have concerns with legislation in any state that unduly limits or impedes the advancement and public use of this technology.

The Coalition appreciates the Subcommittee's proactive approach to understanding the future of self-driving cars and their potential to help consumers across the country. As the Subcommittee continues to explore this area, the Coalition looks forward to serving as a resource concerning both technical and policy questions and working with you to make fully self-driving cars a reality.

I would be pleased to answer any questions you may have.