

## Background and Context

Autonomous vehicles (AVs) present an opportunity to transform our transportation sector on a scale unseen since the invention of the car itself. Beyond the significant societal benefits such as dramatic improvements in roadway safety and greater mobility for all Americans, AV technology can serve our economic and national security goals by enabling fuel efficiency gains and serving as a market-driven accelerator for alternative fuel platforms such as electric and hybrid vehicles. AVs can precipitate a shift away from the transportation sector's outsized dependence on oil and provide new options to power our vehicle fleet.

In September 2016, the Obama administration published a federal automated vehicle policy (FAVP) via NHTSA that took initial steps towards a unified regulatory framework for AVs. However, the current policy lacks the legal stature and clarity needed to properly advance this technology. As a result, states have moved to fill the void, creating a patchwork of AV regulations that threatens to hinder development and allow other countries to close the gap on American AV leadership.

While the Trump administration announced that it would reevaluate the FAVP in February 2017, Congress has stepped in to introduce comprehensive, bipartisan legislation to advance self-driving technology.

## A. Analysis of Key Provision of Introduced Legislation

### Pre-emption

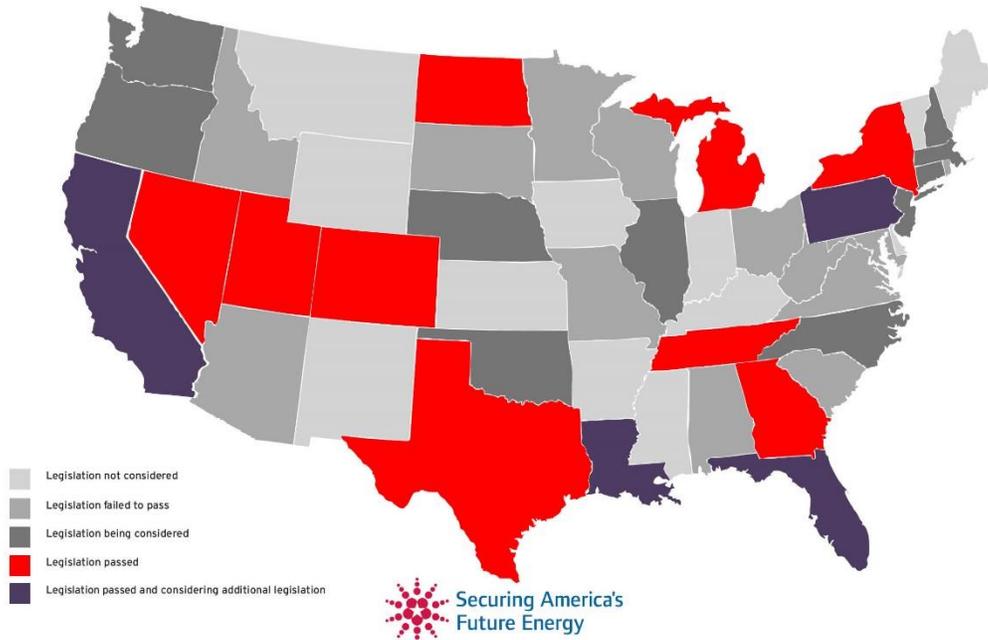
#### Section 2

The legislation enjoins states or localities from regulating the design, construction, mechanical systems, software systems or communications systems of Highly Autonomous Vehicles. The ability for states to regulate licensing and liability, among other areas traditionally regulated by states, is preserved.

A bipartisan approach to preemption will mitigate a patchwork of state regulations that would needlessly burden AV introduction. SAFE has been active at the state and federal level in advocating for a single, unified national framework to foster AVs, which is not possible if states can create their own set of regulations.

However, the legislation potentially allows states to license AV "drivers" as a way of placing obstacles to innovation, including by preventing shared, on-demand business models that are critical to reduced oil consumption, or by impeding the potential for autonomous transportation for people with disabilities, older Americans, and other underserved populations. To remove ambiguity, we recommend including language to prevent licensing authority from being misused by states to prevent mobility access for the disability community, particularly in higher levels of autonomous vehicles, "L4s" and "L5s." AVs fundamentally conflate the distinction between vehicle and driver, requiring a modern regulatory approach to licensing that prevents licensing rules from dictating vehicle design.

Thirty-seven states have considered legislation regulating autonomous vehicle (AV) technologies, and 13 states have passed such measures—the provisions of which vary widely. In the absence of a uniform federal framework, a jumble of state legislation impedes AV testing and deployment.



## Federal Safety Standard

### Section 3

This section would instruct NHTSA to issue a final rule regulating AVs within 2.5 years of enactment and requires periodic updates to the rules. In the interim, the legislation requires the mandatory submission of the Safety Assessment Letters introduced by the FAVP.

This provision fills the vacuum created by the absence of a federal standard for AVs. The absence of such a standard creates uncertainty for developers and contributes to reduced public confidence in AV safety. By instructing NHTSA to rapidly create a standard, and using the Safety Assessment Letter (SAL) as an interim regulation, Congress is beginning to fill out the regulatory framework for AVs.

The greater need is for a modern AV regulatory framework that is based on performance standards. The use of the SAL as an interim tool is appropriate so long as it does not create an undue burden on AV developers. We look forward to working with NHTSA, Congress, and stakeholders to ensure that the results of this aggressive rulemaking timeline provide a clear pathway to AV deployment.

## Exemptions

### Section 5

The bill would allow NHTSA to grant AV developers exemptions from FMVSS for up to 100,000 vehicles per year, up from the current cap of 2,500, as a means to enable AV deployment and data gathering capabilities as the technology is perfected. The section also extends the duration of exemptions from 2 to 5 years. While positive, **the provision needlessly excludes exemptions sought for low emissions vehicles**, leaving in place the existing low cap and short duration period and creating unnecessary policy space between AVs and alternative fuel vehicles, [despite research that demonstrates their natural market-driven connection](#).

Beyond these elements, the section requires that crashes involving exempted vehicles be reported and a database of exempted vehicles be maintained. NHTSA must issue guidance streamlining the exemption application process.

Expanding the grounds for exemptions to include the development of AVs is an important step and will allow developers to create novel vehicle designs to promote innovation, increase energy efficiency and enable fuel choice, and improve disability accessibility. SAFE has advocated for a more flexible exemption process, including [promoting](#) the nexus between AVs and improved transportation independence for people with disabilities, seniors and others.

The expansion of exemptions to cover AVs represents important progress. However, excluding low-emission vehicles from the categories that will benefit from this provision lacks justification. In fact, an earlier draft of the bill would have created an additional category for exemptions – increasing mobility access for the disability community. That category should remain in the bill.

Finally, SAFE recommends additional steps to further improve the exemption system and suggests that NHTSA commit to an accelerated timeline of six months to process exemption requests.

## Leveling the Playing Field

### Section 6

This measure would expand AV testing authority – without an FMVSS exemption requirement – to non-OEMs, creating a more level playing field between established automakers and technology companies.

Facilitating innovation requires a level playing field with respect to different levels of automation, different business models, and companies from different sectors. The FAST Act authorized this testing ability for OEMs, and this section would expand that allowance to other entities. It is impossible to predict where innovation will come from so it makes sense for Chairman Latta and the committee to put all companies on a level playing field when it comes to AV testing.

## Advisory Committee

### Section 8

In this section, Federal Advisory Committees would be established to advise the Secretary of Transportation on issues of importance to the deployment of AVs, including: advancing the transportation independence of people with disabilities, senior citizens or other underserved populations; creating a framework to allow the anonymized sharing of data (“situational information”) between OEMs and others to expedite testing, deployment and fleet learning; the impact of AVs on labor and employment, and the fuel usage impacts of AVs.

Creating industry consensus on these issues will be crucial for continuing to develop the AV regulatory framework. SAFE has been [deeply involved](#) in identifying and promoting the potential benefits of AVs to the disability community and [supports Congress](#) establishing formal mechanisms to afford these critical communities a voice in the policymaking process.

Additionally, fleet learning is a critical element in quickly maximizing the safety benefits that AVs can offer. Whereas human drivers must learn to drive safely from individual experiences or mistakes, data sharing between AVs would allow an experience had by one vehicle to be immediately “learned” by all. The recommendation to create an anonymized data sharing consortium to share information while protecting proprietary information featured prominently in the recommendations of SAFE’s [AV Safety Commission](#).

## B. Additional Legislative Ideas

In addition to the ideas put forth by the House legislation other, complementary, policy recommendations could further accelerate the adoption of AVs and maximize their social value.

### 1. AV Liability

**Background:** Without a clearly defined standard of care, AV developers run the risk of letting the “perfect be the enemy of the good” – or even great. Given the growing number of fatalities and injuries on U.S. roadways, the vast majority of which caused by human error, expediting the safe testing and deployment of AVs is in the national interest.

To combat this possibility, the AV industry could be incorporated into an alternative liability structure, with various models existing in the pharmaceutical, nuclear and aviation industries. While there are risks to such an approach, a targeted solution could be crafted that respects the role of the tort system to ensure responsible behavior.

**Recommendation:** Congress should create a “safe harbor” for developers that can demonstrate that their AV is as safe as the average human driver (or other standard set by Congress, e.g. twice as safe as the average human driver). Under this proposal, which could be implemented on a limited or trial basis (see recommendation #3), if a company is sued for an accident involving an AV, punitive damages could be capped or limited if the company is able to demonstrate, to a reasonable burden of proof, that the AV performed at the level of the standard.

## 2. Deployment Communities

**Background:** A number of underserved communities could strongly benefit from access to AV technology, but are not today a focus during development, testing or deployment. This includes the seniors community, people with disabilities, low-income Americans and rural communities.

Currently, major AV developers are “forum shopping,” working with states or localities offering the most supportive, and regulatory favorable, environment. Public policy, however, has a vested interest in expanding the base of potential deployment communities by encouraging developers to consider specific social-use cases, such as reaching specific populations or testing “first mile-last mile” solutions for underserved areas dependent on public transportation.

**Recommendation:** Congress should authorize deployment communities on a voluntarily, opt-in basis. For self-selecting communities, Congress could grant AV developers flexibility on either regulatory or liability rules within its boundaries, with the consent of the local community.

These communities would not only serve as a testing ground for AV deployment to benefit the social good, but improve transportation options for the local community and serve as nation-leading laboratory for technological and policy innovation.