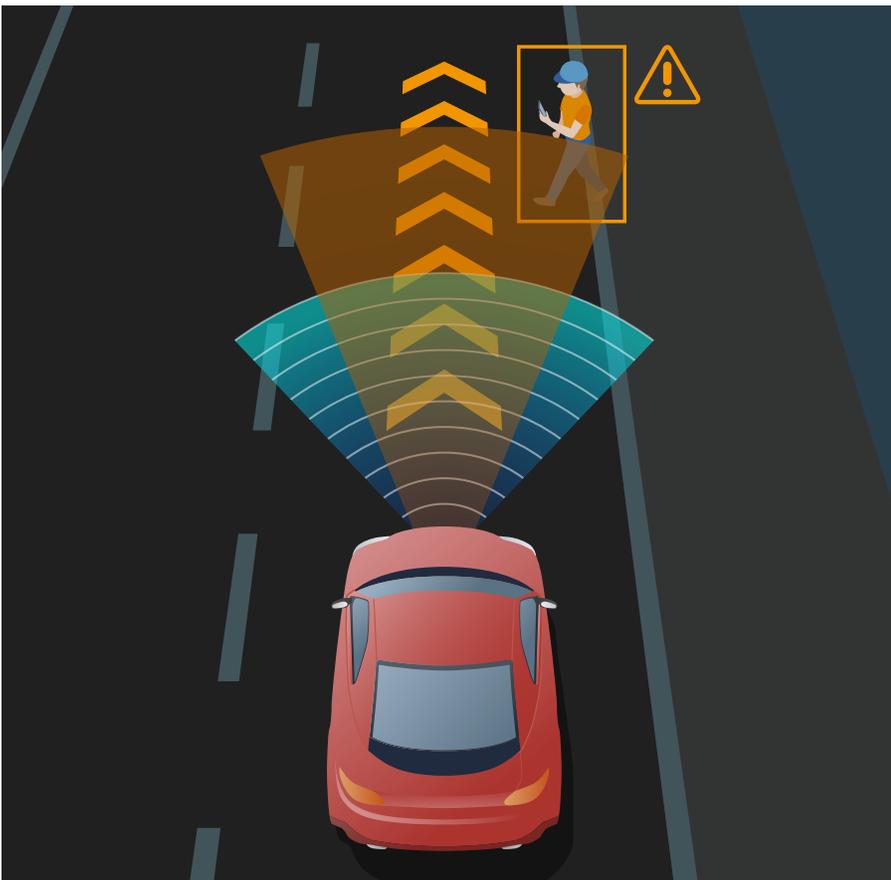


A Road Map for Self-Driving Cars

Here are five things you need to know about the new federal policy on autonomous vehicles.

BY BEN HUSCH
AND ANNE TEIGEN

Self-driving cars may be the “greatest personal transportation revolution since the popularization of the personal automobile nearly a century ago,” the National Highway and Transportation Safety Administration states in the introduction to its new policy on highly autonomous vehicles. U.S. Department of Transportation Secretary Anthony Foxx described the document, titled “Federal Automated Vehicles Policy,” as just the beginning of a process that will include public input and lead to the safe development of the vehicles. He pledged to update the policy within a year. Although the 112-page document is fairly comprehensive, these five key items stand out.



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1

Recommendations, Not Mandates

The second section of the four-part document—“Model State Policy”—is specifically directed at the states. It's clear at the beginning of the sections that none of the topics discussed are currently required. “This guidance is not mandatory,” though the agency may make “some elements of the guidance mandatory and binding through future rulemakings,” the policy states.

2

Autonomous Vehicles Defined

The policy adopts a new classification system proposed by the Society of American Engineers to describe autonomous vehicles. The six-level system assigns Level 0 to vehicles with no automation, in which a human driver is in full control at all times. Cars defined as Level 1 or 2 have some aspect of automation, though the human driver remains in primary control. Tesla's “Autopilot,” which can aid with changing speeds and lanes, is considered a Level 2 vehicle. Vehicles at Levels 3 and 4 have gradually increasing degrees of automation, with the driving systems monitoring some aspects of the driving environment. Level 5 represents vehicles capable of fully automating all aspects of driving.

3

States in the Driver's Seat

The “Model State Policy” section delineates the distinct areas of federal and state authority, noting that the federal government is responsible for setting motor vehicle safety standards, while states remain the lead regulator when it comes to licensing, registration, traffic law enforcement, safety inspections, infrastructure, and insurance and liability regulations.

4

A State Policy Road Map

The new document presents model policy for states wanting to move ahead with autonomous vehicles. Although it fails to mention the key role state legislatures play in enacting policy, it offers a series of steps a state could consider to ensure the safe testing and possible use of self-driving cars. It also identifies areas of state law that might require updating to accommodate a world full of automated vehicles.

- Law enforcement and emergency response
- Vehicle registrations
- Liability and insurance
- Education and training
- Vehicle inspections and maintenance
- Environmental impacts

5

Tune-up Time for NHTSA

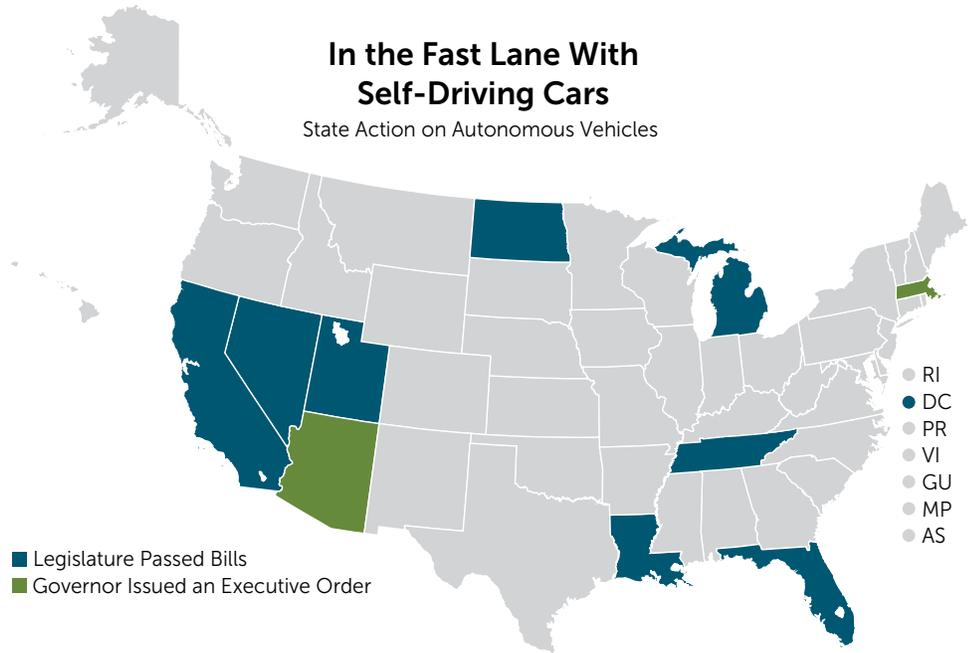
In the policy, the agency lays out some possible changes it believes could help it respond better to this new technology, including additional funding to support more research, a larger network of experts, pre-market approval and a possible involvement with upgrades after vehicles sell. The agency makes a strong case that as the pace of automated vehicle innovation increases, its current role as a regulator of conventional vehicles could stall.

States Keep Cruisin'

Although a few cities, like Pittsburgh and Austin, Texas, have allowed companies to test autonomous vehicles with no new law on the books, eight states and the District

In the Fast Lane With Self-Driving Cars

State Action on Autonomous Vehicles



Note: Cities in Pennsylvania and Texas have tested autonomous vehicles even though the states haven't passed legislation specifically addressing the issue.

Source: NCSL, as of Nov. 25

of Columbia have passed some sort of legislation. Governors in Arizona and Massachusetts have issued executive orders related to autonomous vehicles. These laws vary in scope, however.

California, Florida, Michigan and Nevada passed comprehensive regulations governing the testing of autonomous vehicles. Florida is the first state to allow anyone with a valid driver's license to operate an autonomous vehicle on public roads. Florida's law does not require that an operator be in the vehicle. And in California, the Contra Costa Transportation Authority OK'd the testing on certain public roads of the first fully autonomous vehicle not equipped with a steering wheel, brake pedal or accelerator.

Tennessee lawmakers voted to prohibit

local governments from banning the use of autonomous vehicles and established a per mile tax structure for these unique vehicles. The Louisiana Legislature defined terms like "autonomous technology," "driving mode" and "dynamic driving task." North Dakota and Utah lawmakers passed legislation to study and evaluate best practices and safety standards and report back with recommendations.

In fact, last year 19 states introduced some sort of legislation related to autonomous vehicles, and there's no sign of that number dropping in 2017.

Questions Remain

Although the policy provides some clarity on how the NHTSA plans to regulate autonomous vehicles going forward, questions remain. Will the federal government ever formally require certain safety standards for these vehicles? How will insurance handle questions of liability? Will drivers need additional licensing? Will the agency receive greater funding to upgrade the regulatory tools it needs?

Not everyone is waiting for answers. Even before the policy was released, a few automakers and technology companies began operating low-level autonomous vehicles. Still, it will likely be many years before completely self-driving vehicles are common on our roads and highways.

