
Picking Up Speed: DOT Releases Guidance on Automated Vehicles

By Jennifer E. Trock, Sheila McCafferty Harvey, Kenneth P. Quinn and Christopher K. Leuchten

New NHTSA guidance represents the federal government's first attempt to develop a comprehensive regulatory structure for automated vehicles. This transformative technology offers vast promises and significant concerns regarding the future of this "inevitable" new form of transportation.

In September, the National Highway Transportation Safety Administration ("NHTSA"), an agency within the U.S. Department of Transportation ("DOT"), released guidance [\[linked here\]](#) summarizing the regulatory requirements for that will be applied to highly automated vehicles ("HAVs" or "driverless cars"). This comprehensive NHTSA policy outlines a variety of issues, including the application of current law to HAVs, the states' roles in regulation, privacy, cybersecurity, and safety concerns, and even the ethical quandaries raised by this new technology.

DOT Secretary Anthony Foxx referred to driverless cars as an "inevitable" technological advancement. In fact, many of these vehicles are already being tested in the United States and even operated in some states. For example, [Google](#) is testing self-driving cars in four Western states, [Uber](#) offers driverless car services in Pittsburgh, and [Volvo](#) and [Ford](#) recently announced their plan to put driverless cars on the roads by 2021. Understanding the federal government's regulatory requirements will be crucial as more stakeholders enter the HAV field.

The guidance takes effect immediately and is open to public comment through November 22, 2016.

NHTSA's Safety Regulations Apply to HAVs

All current regulations applicable to vehicles with human drivers also apply to HAVs, specifically Federal Motor Vehicle Safety Standards ("FVMSS"). Currently, NHTSA does not prohibit the introduction of new vehicles into the market, and relies on manufacturers to self-certify their compliance with all the necessary FVMSS. Even though NHTSA has not developed HAV-specific FVMSS, the guidance document makes clear that the agency has the authority to issue a recall for vehicles or equipment that pose an unreasonable risk to safety. NHTSA highlights the importance of a HAV meeting crashworthiness standards to protect the occupants if the crash avoidance system fails or another vehicle collides with the HAV.

NHTSA outlines the four major tools it uses to regulate this sector: letters of interpretation; exemptions from existing standards; rulemakings to amend existing standards or create new standards; and enforcement authority to address defects.

To ease the application of the current regulations to HAVs, NHTSA announced that it will streamline the review process for both interpretations (to be issued within 60 days) and regulatory exemptions (to be issued within six months).

Future Regulation: Using the Aviation Industry as an Example for HAV Regulation

The guidance also includes some new regulatory authorities NHTSA believes will improve its ability to effectively regulate this sector, including:

- Pre-market approval of vehicles and components;
- Cease-and-desist authority to require manufacturers to take immediate action;
- Expanded exemption authority—current authority permits NHTSA to exempt not more than 2,500 vehicles per year; and
- Authority to regulate post-sale software changes.

The most groundbreaking of these new authorities requested by NHTSA is pre-market approval. Pre-market approval is a regulatory power currently utilized by the Federal Aviation Administration (“FAA”) (e.g. type certifications), to balance the interests of safety and the rapid pace of technological innovation. Pre-market approval would overhaul the current self-certification regime and would instead require manufacturers to undergo rigorous government certification and safety testing before a product can be sold. In the FAA context, the type certification and production certification requirements for new aircraft often take three to five years to meet—the pre-market approval for Boeing’s 787 Dreamliner took eight years. NHTSA may also benefit from the FAA’s development of regulations for unmanned aerial vehicles (“UAS” or “drones”) and their integration into national airspace.

In response to NHTSA’s request for pre-market approval authority, a number of industry groups and auto manufacturers have highlighted their concerns that pre-market approval will hinder the development of HAV technology by being time-consuming, difficult to navigate and costly.

State Regulation of HAVs

States traditionally play a large role in motor vehicle regulation, including registration, inspection, traffic control, driver licensing, law enforcement, and highway design and maintenance. NHTSA’s guidance document encourages states to update and amend their laws to remove unnecessary impediments to HAVs. Particularly, NHTSA is concerned about the potential for a patchwork of inconsistent regulations which could negatively impact vehicle development and prevent HAV owners from traveling from state to state.

Based on these considerations, NHTSA offered recommendations for states, including creating administrative bodies responsible for reviewing and amending current laws, implementing an application

process for HAVs on public roadways, altering insurance law to consider HAVs, and adjusting law enforcement and emergency response protocols to interact with HAVs.

HAVs Offer Incredible Promise and Significant Concerns

The DOT guidance offered an ambitious embrace of HAVs, particularly from a safety perspective. According to NHTSA, over 35,000 people died in road accidents in 2015 and human choice or error can be tied to 94 percent of vehicle crashes. HAVs, once incorporated into the transportation system, can significantly lower these statistics. HAVs also offer transportation options for people with disabilities, the elderly, and those for whom car ownership is prohibitively expensive.

At the same time, NHTSA did not ignore the sobering concerns that accompany this technology, including the potential for vehicles to be hacked, for cybersecurity breaches, the misappropriation of private information, and for vehicles to make ethical decisions, such as whether to prioritize the protection of the passengers or other individuals.

Regarding cybersecurity and privacy concerns, driverless cars implicate data-flow issues, specifically personal and data privacy, private and intellectual property rights. Constant communications between users, the car, and the environment involve data and information (geo localization, driving habits, human-machine interface and preferences, business information) collection, analysis, and potentially sharing. The technology used on self-driving cars enables almost unlimited access to personal and commercial data and information. For example, Mobileye's detectors on the [BMW's self-driving cars](#) would include sensors to detect cars and pedestrians, but also real-time road mapping and automated decision-making features.

NHTSA guidance attempts to address these concerns by requesting reports from manufacturers. These safety assessments would cover, among other items, data recording and sharing, and privacy. The NHTSA's policy and practices on privacy issues aims at ensuring transparency, choice regarding the collection and storage of data, respect for context on the use of data collected, minimization and de-identification of data, data security to protect unauthorized use of data, integrity and access, and accountability.

What's Coming Down the Road?

The NHTSA guidance document is a first attempt for the agency to provide some clarity regarding the current and future regulatory regime for a revolutionary technology. Accordingly, the agency states that it expects to update the guidance annually, while simultaneously undertaking numerous rulemakings on a variety of topics, conducting an external expert peer review of its guidance, holding public workshops, and gathering and sharing data on HAVs to and from stakeholders.

If you have any questions about the content of this Alert, please contact the Pillsbury attorney with whom you regularly work, or the authors below.

Jennifer E. Trock **(bio)**
Washington, DC
+1.202.663.9179
jennifer.trock@pillsburylaw.com

Kenneth P. Quinn **(bio)**
Washington, DC
+1.202.663.8898
kenneth.quinn@pillsburylaw.com

Sheila McCafferty Harvey **(bio)**
Washington, DC
+1.202.663.8224
sheila.harvey@pillsburylaw.com

Christopher K. Leuchten **(bio)**
Washington, DC
+1.202.663.8176
christopher.leuchten@pillsburylaw.com

This publication is issued periodically to keep Pillsbury Winthrop Shaw Pittman LLP clients and other interested parties informed of current legal developments that may affect or otherwise be of interest to them. The comments contained herein do not constitute legal opinion and should not be regarded as a substitute for legal advice.

© 2016 Pillsbury Winthrop Shaw Pittman LLP. All Rights Reserved.