FACT SHEET: AV POLICY SECTION IV: MODERN REGULATORY TOOLS

This section identifies potential new tools, authorities and resources that could aid the safe deployment of new automated technologies by enabling DOT to be more nimble and flexible. Some of the identified tools could be created under current law while others would require Congressional action.

Today's governing statutes and regulations were developed before HAVs were even a remote notion. Current authorities and tools alone may be insufficient to ensure that HAVs are introduced safely, and to realize the full safety promise of new technologies. This challenge requires DOT and NHTSA to examine whether the ways in which the Agency has addressed safety for the last several decades should be expanded to realize the safety potential of HAVs over the decades to come.

Considered New Authorities

- <u>Safety Assurance</u>: Methods and tools for vehicle manufacturers and other organizations to provide pre-market testing, data and analyses to DOT to demonstrate that organization's design, manufacturing and testing processes apply NHTSA's vehicle performance guidance.
- <u>Pre-Market Approval</u>: Pre-market approval authority, in which the government inspects and affirmatively approves new technologies, would be a departure from NHTSA's current self-certification system. The merits and challenges of implementing some form of a pre-market approval are discussed.
- <u>Cease and Desist</u>: Authority to require manufacturers to take immediate action to mitigate safety risks that are so serious and immediate that they constitute "imminent hazards."
- <u>Expanded Exemptions</u>: Raising the cap on the number of vehicles subject to exemption and/or the length of time of exemptions, to facilitate the safe testing and introduction of HAVs.
- <u>Post-sale Regulation of Software Changes</u>: This authority would clarify the Agency's ability to regulate post-sale software changes in HAVs.

Considered New Tools

- <u>Variable Test Procedures</u>: Expand vehicle testing methods to create test environments more representative of real-world environments.
- <u>Functional and System Safety</u>: Make mandatory the 15-point Safety Assessment envisioned in the Vehicle Performance Guidance for Automated Vehicles.
- <u>Regular Reviews</u>: Regular reviews of standards and testing protocols to keep current with the development of technology.
- <u>Additional Recordkeeping and Reporting</u>: Require additional reporting about HAV testing and deployment.
- <u>Enhanced Data Collection</u>: Enhance data recorders and greater reporting requirements about the performance of HAVs.

Considered New Resources

- <u>Network of Experts</u>: Establish a network of experts to broaden the NHTSA's existing expertise and knowledge.
- <u>Special Hiring Tools</u>: Special hiring tools—including direct hiring authority, term appointments, and greater compensation flexibility—to hire qualified applicants with specialized skills.