



COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF TRANSPORTATION
HARRISBURG, PENNSYLVANIA 17120

OFFICE OF
SECRETARY OF TRANSPORTATION

December 3, 2018

Mr. Finch Fulton
Deputy Assistant Secretary for Transportation Policy
Office of the Secretary
United States Department of Transportation
1200 New Jersey Avenue SE
Washington, DC 20590

Re: Request for comment regarding *Automated Vehicles 3.0: Preparing for the Future of Transportation*. Docket # DOT-OST-2018-0149

Dear Mr. Fulton:

The Pennsylvania Department of Transportation (PennDOT) is pleased to offer the following comments regarding *Automated Vehicles 3.0: Preparing for the Future of Transportation*. As the birthplace of many groundbreaking innovations in vehicle automation and an active testbed where the state of the art is continuously tested and improved, Pennsylvania is keenly engaged in the work of advancing the future of transportation.

PennDOT commends Secretary Chao and USDOT for the progress that is reflected in "AV-3.0." We are pleased to see the Department's emphasis on a multi-modal approach that enlists all the modal administrations, as this will assist in identifying the many modal-specific use-cases for automation, as well as understanding potentially diverse effects that some applications may have on different modes.

Like all state DOTs, whose primary mission is to ensure the safe movement of people and goods on our transportation network, PennDOT subscribes to the Secretary's view that the prospect of significantly safer transportation is the single greatest benefit vehicle automation offers to society. We also commend her for underscoring the possibilities for enhanced mobility options, with the greater opportunities and independence they can mean for millions of Americans, as a key factor in supporting automated transportation. We further encourage the Department to recognize other important societal benefits, including: better management of our capacity-constrained infrastructure; congestion mitigation; energy and environmental sustainability; and strengthened US economic competitiveness.

Additionally, we ask the Department to consider the following specific comments:

- **3rd Party Validation.** PennDOT supports the development of an independent validation process to ensure the safety of Automated Driving Systems (ADS) and testing protocols. We believe the Department is uniquely positioned to support this approach to ensure safe roadway testing of highly automated vehicles and to marshal the resources necessary to foster the development of validation capabilities.

- **The Pivotal Role of the States.** PennDOT applauds the Department's commitment to achieve regulatory and operational consistency but cautions against prematurely fixing a regulatory regime or operational standards while these technologies are still emerging, and both their capabilities and complexities remain incompletely understood. We strongly agree with other state DOTs that have commented that the states, working individually, sectionally, or through other cooperative arrangements, represent an unmatched resource for responsibly and safely working to explore and advance a wide range of regulatory and operational approaches that will ultimately serve the public interest by generating better long-term outcomes.
- **Social Equity & Workforce.** As a state that has experienced considerable economic disruption growing out of the transition from a manufacturing to an information-based economy, Pennsylvania is alert to issues of the social equity and workforce impacts of technological change. PennDOT has made a core tenet of our AV initiatives that the changes ahead must work for all populations: rural, as well as urban and suburban; poor, as well as middle class and affluent. We strongly endorse the perspective that emerging job opportunities will far outweigh job losses both in numbers and job quality. But we also foresee that the demand for skilled technical workers could well outstrip supply, thereby diluting the positive effects of vehicle automation. We call on USDOT to spearhead a federal effort to ensure that the training and skill levels needed for tomorrow's transportation workforce are in ample supply and reflect the gender and ethnic diversity that is our country.
- **The Safety Case for Connected Vehicles.** While vehicle autonomy has captured much of the public's imagination and attention, PennDOT firmly believes that connected vehicle and infrastructure technologies are of equal value and importance in order to realize the benefits of vehicle automation – in particular those benefits related to safety. Indeed, we think that the connected environment will provide automated vehicles with the essential layer of additional safety that will be invaluable for the safe testing of highly automated vehicles. PennDOT urges the Department to substantially increase its funding and technical support and overall commitment to pilots and deployments.

Essential to a robust connectivity environment is the ongoing preservation of the 5.9 GHz spectrum for transportation safety purposes. Therefore, PennDOT urges the Department to be a forceful advocate among its sister agencies to ensure this vital communications asset remains dedicated to its stated purpose.

In addition to the comments above from PennDOT, please also see the attached letter from my colleague Commissioner Jessica K. Altman of the Pennsylvania Department of Insurance regarding their views of the importance of resolving uncertainties pertaining to AV liability. We encourage you to give their views your careful consideration.

Mr. Finch Fulton
December 3, 2018
Page 3

I hope the foregoing observations are useful to you and the Department as you further develop your thinking and activities related to vehicle automation. PennDOT stands ready as ever to be a constructive partner in advancing the development of these transformative technologies.

Sincerely,

A handwritten signature in blue ink, appearing to read "Leslie S. Richards". The signature is fluid and cursive, with the first name "Leslie" written in a larger, more prominent script than the last name "Richards".

Leslie S. Richards
Secretary of Transportation