



## Senate Transportation Committee

### Public Hearing: Reforms and Investments to Advance Transportation Innovations in Pennsylvania

June 4, 2021

The Pennsylvania Department of Transportation and its leader, Secretary Gramian, are impassioned supporters of innovative technology in transportation. PennDOT has a significant number of initiatives related to transformational technology and has been proud to partner with the General Assembly on many of them.

We appreciate the opportunity to submit written testimony to offer some highlights of our work related to the technologies that are being showcased. Our efforts range from our nationally renowned automated vehicles testing guidance to our efforts engaging Pennsylvania municipalities about micromobility devices. We believe these emerging technologies, if implemented correctly, have the potential to make transportation cleaner, more accessible, safer, and more equitable.

#### Automated Vehicles

As a commonwealth that has always been at the forefront of innovation and industry, it should come as no surprise that Pennsylvania is an epicenter for automated vehicle research and development. What started with Carnegie Mellon University has expanded to eight automated vehicle testers, including one company that is also testing platooning. On any given day, approximately 30 automated vehicles are on roads throughout the state. For the past 10 years, PennDOT has taken a proactive approach to ensure this technology can develop without jeopardizing public safety.

To meet public and industry expectations and ensure Pennsylvania achieves the safety and mobility benefits that automated vehicles promise, it is critical that transportation stakeholders work together. Through the Pennsylvania Highly Automated Vehicle Advisory Committee (HAVAC) – created through Act 117 of 2018 – and Pennsylvania Automated Vehicle Task Force, PennDOT works with a diverse set of stakeholders, including representatives from various levels of government, law enforcement, original equipment manufacturers (OEMs), technology companies, academic research institutions, and advocacy groups, to gain various perspectives and identify previously unknown implications.

It is through this collaboration that PennDOT developed the Automated Vehicle Testing Guidance and Vehicle Platooning Policy. Both documents are nationally recognized and the National Transportation Safety Board (NTSB) identified the testing guidance as a national best practice for its unique approach of focusing on the human safety driver, training, and safety culture of a tester rather than the technical aspects of the vehicle. In addition, PennDOT is working with HAVAC members to develop highly automated vehicle guiding principles, examine the feasibility of platooning transit vehicles, educate Pennsylvanians, and better understand workforce considerations.

PennDOT has also been active in regional, national, and global efforts to develop uniform standards and practices for automated vehicles including partnering with Ohio and Michigan to examine administrative barriers for interstate automated truck travel, leading a team of public and private stakeholders to examine the safe integration of automated vehicles in work zones, and sitting on standards committees such as UL 4600. With the pace of automated vehicle innovation accelerating, Secretary Gramian is challenging

PennDOT to take action to sustain Pennsylvania's leadership in automated vehicle research, while simultaneously ensuring that public safety remains the top priority.

## Electric Vehicles

As of last month, the department has embarked statewide Electric Vehicle Mobility Plan which will build on the information and strategies presented in the Department of Environmental Protection's 2019 Vehicle Roadmap and 2021 Roadmap Update. The plan will evaluate the current state of transportation electrification in Pennsylvania, identify mobility challenges experienced by electric vehicle owners, scan upcoming technology, and propose strategies. We look forward to engaging a wide variety of stakeholders in the EV Mobility Plan outreach, including members of the General Assembly.

Additionally, PennDOT just completed an FHWA Alternative Fuels Corridor Deployment Plan Report. The report analyzes the DC fast charging infrastructure along the I-78/I-81 corridor and proposes three new exit locations for additional fast charging deployment. In developing the report over the past year, PennDOT partnered with planning partners, charging companies, and electric distribution companies.

PennDOT's commitment to the safe and convenient mobility of electric vehicles is longstanding. In 2016, PennDOT was one of the agencies that formed the Drive Electric PA coalition. Today, PennDOT co-facilitates the coalition alongside the Department of Environmental Protection. The coalition's quarterly meetings bring together stakeholders including original equipment manufacturers, charging infrastructure companies, to electric distribution companies for insightful discussion and information sharing.

## Micromobility

Similarly, PennDOT has been tracking micromobility trends for many years. Our multimodal and legislative staff worked closely with the House Transportation Committee last session to propose commonsense amendments to House Bill 631. Our recommendations centered on offering municipalities the necessary control to ensure they can appropriately address their jurisdiction's unique mobility needs. Micromobility devices appear to have increased in popularity over the pandemic. In response, we led a meeting last week with municipalities from across the state to hear about their experiences with micromobility. We look forward to reporting the results of those conversations to committee leadership so as to translate the needs of our communities into policy.

## Conclusion

Again, thank you for the opportunity to submit written testimony and thank you for showcasing transportation technologies in use and in development within the commonwealth. We hope to continue to partner with the General Assembly in supporting the safe expansion or deployment of these technologies across the commonwealth to benefit Pennsylvanians' mobility options. We look forward to additional idea sharing as we continue our conversation with thought leaders across the state and country.