U.S. HOUSE OF REPRESENTATIVES COMMITTEE ON



SCIENCE, SPACE, & TECHNOLOGY

Opening Statement

Chairwoman Haley Stevens (D-MI) of the Subcommittee on Research and Technology

Subcommittee on Research and Technology Hearing:

Bumper to Bumper: The Need for a National Surface Transportation Research

Agenda

July 11, 2019

Good afternoon and welcome to this hearing to review surface transportation research. We appreciate our expert witnesses for being here and we look forward to your testimony. The name of this hearing is "Bumper to Bumper" because it adequately describes the commute so many Americans experience on a daily basis, making their way on deteriorating roads and bridges.

The U.S. population has nearly doubled since construction of our National Highway System began in 1956 – including the nation's first border-to-border interstate highway in Michigan! This has led to immense congestion, which cost the U.S. \$305 billion dollars in 2017 alone from lost productivity, increased shipping costs, and wasted fuel. The American Society of Civil Engineers gave our nation a D+ in its most recent infrastructure report card.

Transportation in other countries serves as a beacon of the future and contributes to their productivity and economic success. Conversely, America's transportation system is contributing to the demise of human and climate health. Traffic fatalities have been steadily rising since 2011, after many years of declining. The Fourth National Climate Assessment reported that in 2016, transportation became the top contributor to greenhouse gas emissions.

In short, our current transportation infrastructure is in dire straits, and despite that, it is shockingly underfunded. It is not surprising that research may not be the highest priority for transportation managers who are just trying to keep their bridges from collapsing. However, investing in research and development is critical to developing smart, resilient, and cost-effective transportation infrastructure for the future. Where would our auto industry be if DARPA hadn't funded the grand challenge that catalyzed today's connected and automated vehicle technologies?

Unfortunately, the public sector investment in transportation research has been declining. For example, the Federal Highway Administration's Exploratory Advanced Research program, which focuses on longer-term, higher risk research, has been funded at only \$6 million per year out of an overall R&D budget of \$600 million. This research is critical to inform the policies of transportation agencies at all levels of government to make infrastructure investments that will

help to grown innovative transportation technologies while keeping people safe and reducing traffic congestion.

We have a witness today from southeastern Michigan, Dr. Henry Liu, who is a Director at the University of Michigan Transportation Research Institute, which has been doing critical work for traffic control, driver safety and future technology in my district and across the country. University Transportation Centers, such as the one at the University of Michigan, support excellent research, but they also struggle in balancing long-term research goals with short-term, lower-risk research projects to meet the more immediate needs of cities and states. We want to ensure that transportation researchers with good ideas are able to get funding from the Department of Transportation to pursue those ideas. We must also ensure that federally-funded research that does lead to promising innovations finds its way into practice.

In the meantime, the private sector is investing heavily in autonomous vehicles and other forms of smart transportation technologies. While these companies partner with local and state governments as well as the Department of Transportation to test their technologies in the real world, there is no national guiding vision for the smart infrastructure of the future. There is also a lack of certainty in the regulatory environment, slowing innovation in these companies.

I am proud to represent a district that is home to many of the small and medium manufacturers that are leaders in the supply chain of the U.S. auto industry, driving their success in innovative safety, green, and autonomous technologies. The private sector excels at innovating when the market drivers are there. But companies will continue to be focused on short-term innovation cycles to do what is best for their workers and their bottom lines.

We know that research feeds the pipeline of innovation and innovators. The Federal government must redouble our efforts on mid to long-term research, while continuing to partner with the private sector and states on shorter-term needs.

The most recent surface transportation law, the FAST Act, expires in September 2020. The Science Committee is looking forward to engaging with the transportation research community on recommendations for the impending reauthorization. I look forward to exploring a long-term vision for transportation research focused on finding solutions to existing challenges and ensuring adequate planning and connectivity for the future.

Thank you.