July 11, 2019

The Honorable Haley Stevens
Chairwoman
Subcommittee on Research and Technology
Committee on Science, Space, and Technology
United States House of Representatives
Washington, DC 20515

The Honorable Jim Baird
Ranking Member
Subcommittee on Research and Technology
Committee on Science, Space, and Technology
United States House of Representatives
Washington, DC 20515

Dear Chairwoman Stevens and Ranking Member Baird:

In anticipation of the Subcommittee on Research and Technology upcoming hearing entitled “Bumper to Bumper: The Need for a National Surface Transportation Research Agenda,” the Intelligent Transportation Society of America (ITS America) writes to underscore our support for a Fixing America’s Surface Transportation (FAST) Act reauthorization that recognizes the added value of integrating technology into transportation infrastructure and services and provides funding for research and the rapid deployment of intelligent transportation technologies quickly and uniformly to transportation agencies and providers across the entire country.

Over the years since the FAST Act was signed into law, automated and connected vehicle technologies have advanced, the collection and use of big data has become an increasingly valuable tool for decision makers, electrification of vehicles of every type from human scale to large-scale continues, and Mobility on Demand services are transforming how we get around. These technologies allow additional freedom of movement for those who have limited mobility access, such as people with disabilities, older adults, and those living in transit deserts. Technology advancements will also help begin to reduce the epidemic of fatalities on our roadways.

Given the title and focus of this hearing, this letter summarizes ITS America’s FAST Act reauthorization platform: Moving People, Data, and Freight: Safer. Greener. Smarter—with a focus on policy and recommendations under the jurisdiction of the Committee on Science, Space, and Technology. Moving People, Data, and Freight bridges new and existing infrastructure technologies and new modes of mobility that we see across the country with the utmost importance of investments to bring our infrastructure to a state of good repair and integrate technology to maximize efficiencies and safety and secure the United States’ global leadership in the development and deployment of advanced transportation technologies. ITS America’s Moving People, Data, and Freight: Safer. Greener. Smarter. policy and recommendations include the following:

**INCREASE INVESTMENT IN RESEARCH AND DEPLOYMENT OF INTELLIGENT TRANSPORTATION TECHNOLOGIES.**

ITS America supports increased funding for research, development, and demonstration of intelligent transportation systems technology. ITS America strongly supports the Advanced Transportation and Congestion Management Technologies Deployment (ATCMTD) program. The association supports increasing funding and federal share to 80%. It recommends increasing the federal share to 100% for safety critical connected vehicle technologies including Vehicle-to-Vehicle (V2V), Vehicle-to-Infrastructure (V2I), and Vehicle-to-Pedestrian (V2P) under ATCMTD.

The association also supports policy that makes V2P technologies an eligible activity under ATCMTD. Pedestrian deaths increased by an estimated 4 percent and “pedalcyclist” deaths increased by an estimated 10 percent in 2018, according to NHTSA’s preliminary statistics. V2X will enable deployment of safety
solutions to protect these vulnerable users of the system. By allowing vehicles to communicate with users through sensors or vehicle-to-device communication, we can significantly reduce the number of people killed on our roadways. V2P encompasses a broad set of road users - people walking, children being pushed in strollers, people using wheelchairs or other mobility devices, passengers embarking and disembarking buses and trains, and people riding bicycles and scooters.

ITS America recommends that the FAST Act reauthorization authorize and dedicate separate funding for ATCMTD. Under the FAST Act, the ATCMTD program has been funded through a set-aside from the Highway Research and Development, Technology and Innovation Deployment, and Intelligent Transportation System Research programs and has resulted in a reduction of transportation research and development that has historically propelled United States leadership in areas such as connected and automated vehicle development as well as the emerging area of artificial intelligence in mobility management.

PIRIORITIZE THE 5.9 GHZ SPECTRUM FOR VEHICLE-TO-EVERYTHING (V2X) PUBLIC SAFETY TRANSPORTATION COMMUNICATIONS

ITS America supports policy that makes clear the 5.9 GHz band is prioritized for existing, new, and developing vehicle-to-everything (V2X) technologies that send hazard alerts to infrastructure, motorists, pedestrians, and other transportation system users and hold the promise to enhance automated driving systems. ITS America supports a policy that ensures all three phases of testing for the 5.9 GHz band are complete before the FCC rules on whether the spectrum can be shared between V2X operations and unlicensed devices like WiFi.

The U.S. Department of Transportation is working with industry, safety, and public sector stakeholders to develop and evaluate cooperative technologies, equipment, and applications known as Connected Vehicle (CV) technologies that operate in the 5.9 GHz band, inclusive of V2V, V2I, and V2P – collectively referred to as Vehicle-to-Everything (V2X). This includes all V2X technologies – Dedicated Short Range Communications (DSRC) as well as Cellular vehicle-to-everything (C-V2X) – because the band can be configured to enable real-time crash-avoidance alerts and warnings—offering a significant opportunity to achieve a transformation in transportation safety.

Cable companies and their supporters are seeking additional spectrum for enhanced WiFi experiences and are aggressively pressuring the Federal Communications Commission (FCC) to force public safety transportation communications operating in the 5.9 GHz band to share that spectrum with unlicensed consumer broadband devices. Speed matters when safety information is involved. Sharing the band could compromise the speed and put lives at risk. What if a driver knew, in fractions of a second, that an airbag deployed in a car in front of them? Alternatively, that the car in front, around the next curve, was sliding on black ice? Or a person is walking just around the next corner? Thanks to V2X, that driver would react – and avoid a crash. Deploying V2X that allow cars, trucks, bicycles, motorcycles, streetlights and other infrastructure to talk to each other will ensure more people travel safely. Safety is the top priority of the nation’s transportation system.

SAFE GUARD TRANSPORTATION INFRASTRUCTURE FROM CYBERSECURITY THREATS

ITS America supports policy that would provide states and localities funding and technical assistance under the ATCMTD to safeguard critical transportation systems that are more reliant than ever on connectivity to communicate and exchange data from cybersecurity threats. As vehicles and infrastructure
become more connected, our nation’s transportation system faces increasing cybersecurity risks. Given the ability to cause loss of life and inflict significant economic damage in a highly visible manner, cybersecurity attacks directed at those producing or operating technologies travelling over or connected to U.S. roadways will intensify.

STRENGTHEN THE UNIVERSITY TRANSPORTATION CENTERS PROGRAM

ITS America supports reforms in the University Transportation Centers program that directs grants to universities with research and technical expertise; encourages leading edge as well as near-term practical applied research (reduce the time period from research concept to completion); encourages broader inclusion of ITS-related curriculum, degrees, and professional development programs for current and future workforce; and increases opportunities for private sector funding contributions.

Just as transportation infrastructure was critical to the development of our economy in the 20th century, maintenance of infrastructure, research, and deployment of intelligent mobility and smart infrastructure will be critical for our global competitiveness in this century. Advances in robotics, artificial intelligence, and wireless communications will define the way people, goods, services, and information move in the 21st century - and most importantly, finally help begin to reduce the fatalities on our roadways. With vision and leadership, the Committee on Science, Space, and Technology increased investment in transportation research in the FAST Act. Only with investment certainty will the nation finally see and benefit from the research and the large-scale transformational deployments of intelligent transportation technologies.

ITS America stands ready to continue to work with the Subcommittee on Research and Technology of the Committee on Science, Space, and Technology on a reauthorization that increases research in intelligent transportation technologies that advance transportation safety and mobility, reduce congestion, improve air quality, and enhance American productivity. ITS America’s full FAST Act reauthorization platform: Moving People, Data, and Freight: Safer. Greener. Smarter. is available at www.itsa.org/policy-infrastructure.

Sincerely,

Shailen P. Bhatt
President and CEO
Intelligent Transportation Society of America

Cc: House Subcommittee on Research and Technology
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