SAFETY SPECTRUM COALITION

October 10, 2017

The Honorable Sam Graves
Chairman
Subcommittee on Highways and Transit
Committee on Transportation and
Infrastructure
U.S. House of Representatives
Washington, DC 20515

The Honorable Eleanor Holmes Norton
Ranking Member
Subcommittee on Highways and Transit
Committee on Transportation and
Infrastructure
U.S. House of Representatives
Washington, DC 20515

Dear Chairman Graves and Ranking Member Holmes Norton:

We write to you regarding the upcoming Highways and Transit Subcommittee hearing entitled "Building a 21st Century Infrastructure for America: Highways and Transit Stakeholders' Perspectives." The Safety Spectrum Coalition represents a broad group of industries, highway users, and transportation technology, consumer, and safety advocates that support and promote the need to deploy vehicle-to-vehicle (V2V), vehicle-to-infrastructure (V2I) and vehicle-to-everything (V2X) technologies through Dedicated Short Range Communications (DSRC). DSRC is a revolutionary transportation technology that provides a wireless connection among all vehicles and other road users to communicate in real-time with each other and the surrounding infrastructure to coordinate traffic and avoid collisions in order to save lives and reduce congestion. DSRC technology is readily available, widely deployable, and capable of providing immediate benefits. While several DSRC deployments are already demonstrating the benefits of this technology in both rural and urban environments, we urge the Subcommittee to consider further polices to incentivize greater utilization of DSRC as the Subcommittee examines future infrastructure authorizations.

DSRC is a proven technology that is ready now for mass deployment, and the need for advanced vehicle safety technology has perhaps never been higher. 2016 data from the National Safety Council estimates that as many as 40,000 people died as a result of motor vehicle crashes last year. That marks a 14% increase over 2014, the most dramatic two-year escalation since 1964. An estimated 4.6 million roadway users were injured seriously enough to require medical attention in 2016, and the estimated cost to society was $432.5 billion. According to calculations by the National Highway Traffic Safety Administration, just four V2V applications could avoid or mitigate 89% of light duty vehicle crashes and 85% of their associated costs, saving thousands of lives, avoiding millions of injuries, and yielding billions of dollars in cost savings.

DSRC technology represents the culmination of over a decade of work and millions of dollars of public-private investment to establish a robust, interoperable, and secure communications protocol that allows vehicles to securely and anonymously transmit data, and thereby enabling vehicles and infrastructure to exchange messages and coordinate traffic. DSRC-supported V2V and V2I allows vehicles to effectively see dangerous situations before they encounter them, whether it be a patch of dense fog, an icy bridge, a vehicle stopped suddenly, or moving slowly through a blind intersection, or a work zone. DSRC also allows vehicles to coordinate their movements with the infrastructure, such as traffic lights, to improve safety and efficiency, while reducing congestion. In truck platooning, DSRC communicates acceleration and braking information faster than human reaction so that two or more trucks can travel closely together at highway speeds, taking advantage of the aerodynamic efficiency to lower fuel consumption and emissions. In a conventional vehicle, DSRC provides warnings to the driver, while in an automated vehicle, DSRC can communicate directly with the automated driving system to take action.

As the Subcommittee works to modernize our infrastructure, it is critical to understand the unique role connectivity can play, on both urban and rural roadways, for both commercial and noncommercial vehicles. V2V and V2I communications can augment and support automated driving systems across all levels of automation allowing for smarter decision making within a mixed fleet – where both conventional and automated vehicles will be operating on the same roads. While automated driving systems continue to advance, it is the combination of connected and automated driving that promises the greatest opportunity to dramatically reduce traffic fatalities and injuries, and to improve throughput on the roads we already have. DSRC is the code that can connect a future transportation system where vehicles and infrastructure communicate through one interoperable, nationwide system.

There are three ways that the Subcommittee can support DSRC technology to achieve better efficiency and safety on our highways:

1. **Reauthorize FAST Act Eligibility**
   In 2015, the Fixing America's Surface Transportation Act (FAST Act) made huge strides in promoting the deployment of DSRC equipment to support V2I through explicit funding eligibility for installation of communication equipment within all major highway formula programs including the National Highway Performance Program (NHPP), Surface Transportation Block Grant Program (STP), Highway Safety Improvement Program (HSIP), and Congestion Mitigation and Air Quality (CMAQ) Improvement program. The addition of V2I to these programs underscores the technologies' ability to make our highways safer, more efficient, and cleaner. We thank the Subcommittee for

this step forward, and urge the Subcommittee to continue to provide eligibility for DSRC equipment in any future infrastructure package.

2. **Further Incentivize DSRC Deployments**
   DSRC technology provides a robust platform for innovation and our nation's infrastructure policy should support that innovation. Already, V2I applications such as Red Light Violation Warning; Curve Speed Warning; Reduced Speed/Work Zone Warning, Pedestrian in Crosswalk Warning, and location-specific Weather Impact Warnings are being deployed and evaluated across the country. Programs like the Department of Transportation (DOT) Connected Vehicle Pilots use a wide range of DSRC applications to improve safety and efficiency, such as along the freight corridor in the Wyoming Connected Vehicle Pilot Program. Additionally, the SPaT Challenge is pushing states to develop at least one connected corridor or intersection network in each state by 2020. We urge the Subcommittee to support these efforts and further promote DSRC use through apportioned programs, award programs, and federal designations of connected cities and corridors to incentivize V2X deployment.

3. **Provide Regulatory Certainty & Protect the 5.9 GHz Spectrum**
   To achieve maximum benefits and ensure widespread deployment of V2X, it is important that all vehicles use one interoperable standard, and we ask that the Subcommittee support DOT's work to establish a standard for DSRC in light-duty vehicles. Furthermore, in order to support current and future applications and deployments, DSRC operations across all channels in the 5.9 GHz band must be free from harmful interference. While the 5.9 GHz band is dedicated for the operation of intelligent transportation systems, the Federal Communications Commission (FCC) is currently testing spectrum-sharing proposals to determine if unlicensed devices can safely share the 5.9 GHz band with DSRC. The Safety Spectrum Coalition encourages the Subcommittee to actively oversee FCC and DOT during this testing to ensure that DSRC operations receive the protection they require to function properly to support V2V, V2I and additional DSRC-supported applications.

Thank you for your continued work to advance America's infrastructure as we collectively strive to develop and implement a smarter, more connected approach to transportation in the 21st century. We ask that this letter be entered into the hearing record, and we look forward to working with the Subcommittee to ensure that future infrastructure policies further promote connectivity in our transportation systems.

Sincerely,

AAA
American Highway Users Alliance
American Traffic Safety Services Association
American Trucking Associations
Association of Global Automakers
Commercial Vehicle Training Association
Intelligent Transportation Society of America
Mothers Against Drunk Driving
Motor & Equipment Manufacturers Association
NAFA Fleet Management Association
National Safety Council

cc: Members of the House Transportation and Infrastructure Highways and Transit Subcommittee