



April 27, 2021

The Honorable Gary Peters
Chairman
Subcommittee on Surface Transportation, Maritime, Freight, and Ports
Committee on Commerce, Science, and Transportation
United States Senate
Washington, DC 20510

The Honorable Deb Fischer
Ranking Member
Subcommittee on Surface Transportation, Maritime, Freight, and Ports
Committee on Commerce, Science, and Transportation
United States Senate
Washington, DC 20510

Dear Chairman Peters and Ranking Member Fischer:

In anticipation of the Committee on Commerce, Science, and Transportation Subcommittee on Surface Transportation, Maritime, Freight, and Ports hearing entitled “*Driving Innovation: the Future of Automotive Mobility, Safety, and Technology,*” the Intelligent Transportation Society of America (ITS America) and the American Association of State Highway and Transportation Officials (AASHTO) jointly write to you to highlight the importance of the 5.9 GHz Safety Spectrum to transportation safety and express our significant concern with efforts underway at the Federal Communications Commission (FCC) to reallocate spectrum in the 5.9 GHz band.

Reducing the amount of spectrum available to Vehicle-to-Everything (V2X) technology undermines our shared interest in reducing the number of traffic injuries and fatalities that occur each year on U.S. roadways, improving motor vehicle safety and transportation equity, and improving the operational performance of roadways as well as reducing greenhouse gas emissions by reducing congestion across the transportation system.

We ask you to use the Committee on Commerce, Science, and Transportation’s authority over the FCC to:

- 1. Direct the Commission to reconsider its proposal to give away 45 MHz of the 75 MHz in the 5.9 GHz band for use by unlicensed devices, such as Wi-Fi, cutting the spectrum available for V2X safety technologies by more than half;**
- 2. Direct the Department of Transportation, Department of Commerce, and FCC to determine whether the band can be shared with unlicensed users in the lower part**

- of the band without causing harmful interference to V2X in the upper 30 MHz before reallocation of the 45 MHz of spectrum to unlicensed devices; and**
- 3. Direct the Department of Transportation, the Department of Commerce, and the FFC to analyze spectrum requirements necessary to enable innovation in intelligent transportation systems, including autonomous vehicles and applications to protect vulnerable road users.**

As you know, the 5.9 GHz spectrum band is currently reserved for intelligent transportation systems. Commonly referred to as V2X technologies, these systems allow vehicles to communicate with other vehicles, bicycle and pedestrian road users, infrastructure, and law enforcement to avoid crashes, enhance safety, improve transportation efficiency, and reduce air pollution. The National Highway Traffic Safety Administration (NHTSA) predicts that the safety applications enabled by V2X technology could eliminate or mitigate the severity of up to 80 percent of non-impaired crashes, significantly reducing the nearly 37,000 lives lost and three million injuries that occur annually on U.S. roadways.

This is particularly important given the sharp increase in roadway fatalities and injuries that occurred in 2020, while traffic volume itself was significantly reduced. Preliminary estimates from the National Safety Council (NSC) on roadway fatalities and crashes show that 42,060 people died on U.S. roads last year – an eight percent increase from the previous year. The fatality rate increased by 24 percent, which is the highest increase in nearly 100 years. This loss of life is not only tragic – it is unnecessary and preventable. ITS America, the U.S. Department of Transportation (USDOT), and the transportation safety community have repeatedly demonstrated that V2X technologies are the best tool in our toolbox to dramatically reduce fatalities; no other presently available transportation safety improvement has the potential to so substantially reduce crashes on American roads.

Furthermore, V2X technologies have the potential to significantly improve safety for vulnerable road users such as pedestrians and bicyclists, increasing transportation equity by preventing collisions that occur in low income and minority communities in urban and rural areas.

Pedestrian traffic fatalities have increased by 51 percent from 2009 to 2019, accounting for 17.2 percent of all traffic deaths in 2019. Additionally, cyclist fatalities have increased by 36 percent since 2010. These statistics are even more disturbing in low income and minority communities. Between 2009 and 2018, pedestrian deaths rose 69 percent in urban areas, and cycling deaths increased by 48 percent. In 2019, most pedestrian traffic deaths - 82 percent - occurred in urban settings. Latino cyclists face fatality rates 23 percent higher than whites do, and for African Americans, they are 30 percent higher. Low-income, Black, and Latino communities also have higher vehicular traffic volumes, trucking routes, major arterial roads, intersections that are unsafe or impassable by foot or bike, and an overall lower level and quality of walking and cycling infrastructure.

Some of the most promising V2X applications are designed to address these problems and enhance safety for vulnerable road users. For example, V2X applications can provide a warning to a driver when someone is about to cross a crosswalk in their path and improves the operation of advanced safety features. It is important to note that analysis by ITS America's Future of V2X

Working Group suggests that advanced Vehicle-to-Pedestrian (V2P) applications will be unlikely to fit within the 30 MHz remaining under the FCC's proposed spectrum reallocation, threatening to eliminate these applications as tools to make roads safer for all users and to increase transportation equity within the United States at a time when the status quo has allowed fatalities in these groups to dramatically increase over the last decade.

V2X technology will also provide real economic savings by significantly reducing the more than \$830 billion in annual costs associated with crashes on American roads. Furthermore, this technology is uniquely capable of reducing traffic congestion through prioritized traffic signal timing, truck platooning, and crash reduction, reducing travel time and delays for commuters and commerce alike, delays that cost the nation more than \$166 billion annually according to USDOT. Non-recurring incidents are responsible for 55 percent of U.S. traffic congestion – if V2X is widely deployed and these incidents are eliminated or dramatically reduced, emission levels and congestion would dramatically decrease. Preserving the spectrum for V2X would provide greater economic and environmental benefits for the American people than reallocating the spectrum for unlicensed devices.

The United States has led the world in creating V2X technology and in developing the standards that enable and support V2X technology. The FCC's proposal would cede American leadership as countries around the world are building out their V2X networks. There is no doubt that, if implemented, the Notice of Proposed Rulemaking (NPRM) would undercut the public and private investments that have been made in the United States, stifle further innovation, and challenge American global competitiveness. This approach is in direct conflict with efforts underway in other parts of the world. At precisely the same time that other countries are reiterating their commitment to V2X technology and, in many cases, looking to increase the amount of spectrum available to support V2X technology, the FCC is poised to take action that would all but ensure that the technology would not realize its full potential in the United States.

The comments and reply comments submitted to the FCC in response to the NPRM overwhelmingly opposed repurposing spectrum away from transportation safety. In fact, more than 85 percent of the commenters opposed the FCC's proposal, including state and city departments of transportation, automakers, vehicle suppliers, technology companies, law enforcement, first responders, safety advocates, engineers, telecommunications companies, the drone industry, and many others. These groups asked the FCC to heed USDOT's warnings that this plan would not allow sufficient spectrum for V2X to function, threatening the significant safety benefits this technology provides.

ITS America is the association in which transportation and technology intersect. Our members are state, city, and county transportation agencies, public transit, automakers, technology companies, infrastructure firms, and research universities – ITS America is the only transportation organization that brings all these stakeholders together. They are focused on research, manufacturing, and the safe deployment of intelligent transportation technologies to save lives, improve mobility, increase accessibility and equity, promote sustainability, and improve efficiency and productivity.

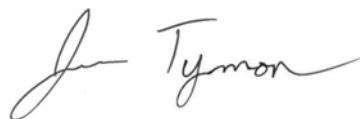
AASHTO is a nonprofit, nonpartisan association representing transportation departments in the 50 states, the District of Columbia, and Puerto Rico. AASHTO serves as a liaison between state departments of transportation and the federal government. It represents all transportation modes including: air, highways, public transportation, active transportation, rail, and water. Its primary goal is to foster the development, operation, and maintenance of an integrated national transportation system. AASHTO works to educate the public and key decision makers about the critical role that transportation plays in securing a good quality of life and sound economy for our nation.

ITS America and AASHTO stand ready to work with the Committee on Commerce, Science, and Transportation Subcommittee on Surface Transportation, Maritime, Freight, and Ports on preserving critical transportation safety communications in the 5.9 GHz band for today's transportation system, including vehicle safety communications that can reduce fatalities and injuries on our nation's roads, and tomorrow's transportation system, including transportation safety communications for autonomous vehicles.

Sincerely,



Shailen Bhatt
ITS America



Jim Tymon
AASHTO

Cc:

The Honorable Amy Klobuchar
The Honorable Richard Blumenthal
The Honorable Brian Schatz
The Honorable Ed Markey
The Honorable Tammy Baldwin
The Honorable Tammy Duckworth
The Honorable Jon Tester
The Honorable Tammy Duckworth
The Honorable Jon Tester
The Honorable Raphael Warnock
The Honorable John Thune
The Honorable Roy Blunt
The Honorable Dan Sullivan
The Honorable Todd Young
The Honorable Ron Johnson
The Honorable Shelley Moore Capito
The Honorable Rick Scott
The Honorable Cynthia Lummis

Joung H Lee, Director of Policy and Government Relations, American Association of State Highway and Transportation Officials, jlee@aashto.org

Ron Thaniel, Vice President of Public Policy and Legislative Affairs, ITS America, rthaniel@itsa.org