ITS AMERICA

May 14, 2019

The Honorable Mike Doyle
Chair
Communications and Technology Subcommittee
Energy and Commerce Committee
United States House of Representatives
Washington, DC 20515

The Honorable Bob Latta
Ranking Member
Communications and Technology Subcommittee
Energy and Commerce Committee
United States House of Representatives
Washington, DC 20515

Dear Chairman Doyle and Ranking Member Latta:

In anticipation of the Communications and Technology Subcommittee upcoming hearing entitled "Accountability and Oversight of the Federal Communications Commission," the Intelligent Transportation Society of America ("ITS America") writes to underscore that the Federal Communications Commission (FCC) embraced the use of spectrum in the 5.9 GHz band to promote the development of technology that saves lives and improves the safety of roadways. It is time to move past the regulatory uncertainty that has hung like a cloud for the past six years and provide automakers and road operators the environment they need to make our roads safer and save lives. It is time to accelerate the deployment of Vehicle-to-Everything (V2X) safety transportation communications technologies.

New and developing V2X technology that depends on the 5.9 GHz band is allowing us to finally address the lives lost on our nation's roads. Vehicle-to-Vehicle (V2V), Vehicle-to-Infrastructure (V2I), and Vehicle-to-Pedestrian (V2P) – collectively referred to as V2X – have incredible potential to dramatically improve the safety, accessibility, and operational performance of our roads and vehicle safety.

Safety is the top priority of the nation's transportation system. According to the U.S. Department of Transportation's National Highway Traffic Safety Administration (NHTSA), 37,133 people lost their lives in motor vehicle crashes in 2017, which roughly breaks down to just over100 fatalities per day. V2V deployments available today include systems that provide emergency braking. Another benefit of connected vehicles is their ability to be the "eyes and ears" of other vehicles. Non-Line-of-Sight awareness means that drivers and vehicles will be able to see around corners and receive information about hazards in the roadway, even if they cannot see the hazard. V2V communications help move traffic more efficiently with demand responsive traffic signaling and allow emergency response vehicles to preempt signals.

The concept of V2I is to provide the vehicle and the driver information about infrastructure operations -- weather and pavement condition, how signals are directing traffic, and even the location of potential hazards at intersections and other critical road safety hotspots. V2I applications include red light violation warnings, reduced speed zone warnings, curve speed warnings, and spot weather impact warnings. V2I soon will support other applications that will disseminate the condition of the infrastructure, such as bridge integrity, and may even collect data from cars that describe pavement condition. According to NHTSA, V2I technology helps drivers safely negotiate intersections and could help prevent 41 to 55 percent of intersection crashes. Another connected vehicle safety application that helps drivers with left turns at intersections could help prevent 36 to 62 percent of left-turn crashes, according to NHTSA. In addition to the lives saved, just these two applications alone could prevent up to 592,000 crashes and 270,000 injuries each year.

V2X will enable us to deploy safety solutions to protect vulnerable users of the system, which will be transformational. V2P is an extremely important component of communications. In Colorado, where the largest increase was in vulnerable users of the system, fatalities increased from 484 in 2014 to nearly 700

in 2017. By allowing vehicles to communicate with these users through sensors or vehicle to device communication, we can significantly reduce the number of pedestrians killed on our roadways.

Public sector agencies can also reap the benefits of V2X. Increasingly, vehicles will rely on digital formatting of roadway information to process roadway rules. ITS America member Regional Transportation Commission of Southern Nevada recently became the first in the world to put roadway information into a digital format. As connected vehicles drive over the actual roadway, they can pick up differences between the "digital" road and the actual road. This could eliminate the need for agencies to manually examine roadways for striping or automatically report potholes instead of waiting for enough drivers to incur tire damage before fixing them. These vehicles will also give an up-to-the-minute snapshot of the system – how it is performing, are there any incidents, live weather conditions, etc. Millions of dollars have already been invested in this effort, including incorporating connected vehicle technologies into infrastructure by states and cities. A majority of states and dozens of cities are deploying or planning to deploy connected vehicle technology. V2I deployments include expansions of the Safety Pilot Model Deployment in Ann Arbor (MI), large pilot deployments in New York City, Tampa (FL), and Wyoming, and the Smart City Challenge in Columbus (OH). These technologies can also enhance automated driving systems, which can provide numerous economic, environmental, and societal benefits, such as decreased congestion and fuel consumption, and increased access for older adults and people with disabilities.

However, V2X communications are by no means guaranteed. The 5.9 GHz band for V2X is being targeted by cable companies and their supporters who are seeking additional spectrum for WiFi and are aggressively pressuring the FCC to force V2X 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 him/her? Alternatively, that the car in front, around the next curve, was sliding on black ice? Or a pedestrian is around the next corner? Thanks to V2X technology, that driver would react – and avoid a crash. Deploying life-saving technologies that allow cars, buses, trucks, bicycles, pedestrians, motorcycles, streetlights, and other infrastructure to talk to each other will ensure more people arrive home safely.

ITS America supports preserving the entire 5.9 GHz band for existing, new, and developing V2X technologies. We want to make sure 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. Any unlicensed use in the band should be done without harmful interference to the incumbent technology or other intelligent transportation systems technologies. Finally, it is time to move past the regulatory uncertainty and accelerate the deployment of life saving V2X transportation technologies.

Sincerely,
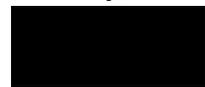
Shailen P. Bhatt
President and CEO
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Cc: House of Representatives Communications and Technology Subcommittee
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