

Responses to Written Questions Submitted by Honorable John Thune to Shailen Bhatt

*Question.* In your testimony you state that ITS America “strongly supports preserving the entire 5.9 gigahertz band for Vehicle-to-Everything.” I agree that safety is a paramount consideration, but I’ve said for years that it would be a positive public policy outcome if engineers could find a reliable way for both Wi-Fi and connected vehicle technology to co-exist in the 5.9 gigahertz band. Along those lines, the FCC has talked about a new Notice of Proposed Rulemaking to reexamine this band. Would ITS America support the Commission moving forward with this action to see what may be achievable?

*Response.* Since the Federal Communications Commission (FCC) commenced its ET Docket 13-49 in 2013, Intelligent Transportation Society of America (“ITS America”) has supported sharing of the 5.9 GHz band between ITS and unlicensed devices provided that such sharing does not cause harmful interference to life-saving ITS services. ITS America supported the consensus on a three-phase testing methodology to be overseen by the FCC’s Office of Engineering and Technology (OET) arrived at with the U.S. Senate Committee on Commerce, Science and Transportation’s support (See September 9, 2015 letter). OET accepted public comments on its Phase 1 Test Report in late 2018. ITS America continues its support of the consensus plan for testing and the completion of testing by OET to determine whether sharing of the 5.9 GHz band is viable. Initiation by the FCC of an ancillary and collateral rulemaking bypassing the completion of testing is not in the best interests of the public as it will further complicate an already uncertain regulatory environment into which many public and private parties are investing their scarce resources to develop and deploy lifesaving services, unduly tax those resources and delay the introduction of those services. We urge instead that OET be provided all support necessary to promptly complete its testing of band sharing.

Responses to Written Questions Submitted by Honorable Jerry Moran to Shailen Bhatt

*Question.* The FCC completed testing that showed that it could segment the 5.9 gigahertz band and provide spectrum for both transportation and unlicensed technologies. But your testimony calls for the FCC and DOT to engage in years of additional testing that, in the opinion of Commissioner O’Rielly, is no longer needed. Why would we need to spend more years testing a kind of sharing no one wants, instead of moving ahead with a process of segmenting the band, so both automotive companies and Wi-Fi consumers each have spectrum?

*Response.* ITS America agrees with National Highway Traffic Safety Administration’s (NHTSA) assessment, that the three-phase testing must continue to ensure that this lifesaving technology is deployed and that the driving public can have confidence in the results. “The three phases of the test plan are interdependent and ongoing, and the testing will show whether unlicensed devices can safely operate in the 5.9 GHz band.” (U.S. Department of Transportation’s National Highway Traffic Safety Administration issues statement on safety value of 5.9 GHz spectrum, October 24, 2018)

Responses to Written Questions Submitted by Honorable Shelley Moore Capito to Shailen Bhatt

*Question 1.* In your testimonies, many of you discuss the framework for 5G. While I understand the importance of innovation and support faster speeds, I have concerns that rural locations will not be adequately addressed:

What ways exist to ensure 5G develops in combination with rural broadband connectivity?

Response. ITS America represents state and city departments of transportation, metropolitan planning organizations, automotive manufacturers, technology companies, engineering firms, automotive suppliers, insurance companies, and research universities that are researching and deploying intelligent transportation technologies. While ITS America includes among our members wireless communications companies, we are not a trade association representing the wireless communications industry, and as such, we do not have a policy specific to how that industry is planning to deploy 5G in rural and urban areas. ITS America is an intelligent transportation association. Our mission is the research and deployment of advanced transportation technologies. As such, ITS America does not have a specific policy on ways to ensure 5G develops in combination with rural broadband connectivity.

Ubiquitous access to high-speed broadband is key to intelligent transportation technologies that are saving lives; reducing crashes; extending the life of transportation infrastructure; improving capacity; reducing the rate and growth in congestion; moving more people in fewer vehicles; improving travel times and reducing greenhouse gas emissions.

Our members believe that it should be a federal priority to close the digital divide in rural areas (as well as economically disadvantaged urban areas). To do so, we believe the goal should be broadband in any, all forms, to help address rural broadband connectivity. For rural communities, ITS America supports increasing grants that are currently eligible under the U.S. Department of Agriculture. We recommend including in an infrastructure bill funding to further expedite broadband in rural areas. Also, we support expanding broadband grant programs to enable grant recipients to use grants to deploy various types of infrastructure capable of offering middle-mile, last-mile wired, and wireless broadband access.

*Question 2.* What are some steps the FCC can make to continue to streamline the deployment of 5G while ensuring rural areas continue to receive broadband and internet support?

Response. ITS America does not have a specific policy on steps the FCC can make to continue to streamline the deployment of 5G while ensuring rural areas continue to receive broadband and internet support.

ITS America is considering dig once policy in the reauthorization of Fixing America's Surface Transportation (FAST) Act that would establish a new federal funding (non- Highway Trust Fund) to assist states and localities to (1) identify a broadband utility coordinator to facilitate the broadband infrastructure right-of-way efforts within the state; (2) register broadband infrastructure entities that seek to be included in those facilitation efforts; (3) establish a process to electronically notify such entities of the state transportation improvement program on an annual basis; (4) coordinate statewide telecommunication and broadband plans and state and

local transportation and land use plans, including strategies to minimize repeated excavations that involve the installation of broadband infrastructure in a right-of-way; and (5) ensure that any existing broadband infrastructure entities are not disadvantaged.

Funding under this new FAST Act reauthorization program would assist states and localities with recovering costs associated with conduit installation, maintenance of conduit, and conduit inventory. We believe this program would benefit rural communities by combining broadband conduit installation with highway construction, including expansion, resulting in a decreased frequency of construction on highways, decrease broadband installation costs, increase access to and reliability of broadband networks, increased public and economic benefits, and decrease time needed to deploy fiber.

Please note that this policy does not establish a mandate or requirement that a state or locality install broadband infrastructure in a highway right-of-way.

*Question 3.* How can 5G be rolled out quickly to avoid a gap where there are have and have not?

Response. See answer to question 1 above.

*Question 4.* How does the Mobility Fund play a role in 5G deployment?

Response. ITS America does not have a specific policy on how the Mobility Fund can play a role in 5G deployment. While ITS America does not have a specific policy on the Mobility Fund, we support federal grants to expand mobile broadband networks to areas that are unserved and underserved.

*Question 5.* 5G wireless services will require the deployment of a vast network of small cells. However, these networks will also need fiber-based wireline networks for their backhaul network. Could you explain to me the importance of a fiber backhaul and the allocation of spectrum in deploying these small cells?

Response. In Vehicle-to-Infrastructure (V2I) applications, backhaul is the fiber- optic or wireless connection between the roadside unit (RSU) and traffic management center or other operational centers that allows data to be exchanged and enables supervisory control of the system.

*Question 6.* Fortunately, every school and library in my state of West Virginia has a fiber connection, but this not the case when kids go home from school. Many of them cannot do their homework assignments. This digital divide cannot continue to be overlooked.

How will 5G help our students at home? How long will it take for these students to see the benefits of 5G at their homes?

Response. See answer to question 1 above.

*Question 7.* Despite significant investment, the vast majority of my state lacks competitive

access to a fiber network. How can internet providers ensure rural internet access remains competitive as 5G gains more prevalence?

Response. ITS America does not have a specific policy on how internet providers can ensure rural internet access remains competitive as 5G gains more prevalence.

*Question 8.* How can Congress ensure the regulatory conditions are in place in order to ensure states like mine can participate in the 5G economy?

Response. See answer to question 1 above.

*Question 9.* Each member of this Committee has today or previously mentioned the importance of having accurate data and noted the flawed information that our current maps provide. Last year, I visited Flying W Plastics, a local polyethylene pipe products manufacturer in Gilmer County, West Virginia. According to a recent FCC Broadband Progress report, Gilmer County, WV is 100% served with 25 Mbps/3Mbps service. While visiting, I found this to be inaccurate. They do not have adequate broadband and unfortunately, this is not the only example like this in my state. So my question is: When there are communities in my state who are still struggling to achieve 3 or even 4G, how do you suggest we measure the accuracy of their broadband availability?

Response. ITS America does not have a specific policy on how to best measure the accuracy of broadband availability.

*Question 10.* Last Congress, I introduced the Gigabit Opportunity (GO) Act and I plan to reintroduce it this Congress. This legislation would seek expedited deployment of broadband services in low-income rural and urban communities. The GO Act gives states flexibility, streamlines existing regulations, and eliminates barriers to investment so we can connect our low-income and rural communities.

How can tax proposals like the GO Act make a measurable difference in promoting rural broadband deployment? Could similar proposals help in 5G deployment?

Response. ITS America did not take a policy position on the Gigabit Opportunity (GO) Act.

*Question 11.* Congress has made several steps towards improving the deployment and accessibility of broadband to rural and tribal communities. For example, the AIRWAVES Act introduced by my Senate colleagues – Senator Gardner and Senator Hassan – included a “rural dividend” that would have dedicated 10 percent of any future spectrum auction funds to support the deployment of wireless infrastructure in unserved and underserved communities.

How will rural set asides like this be used differently than federal support already being distributed through programs like USF and RUS?

Response. ITS America does not have a specific policy position on how rural set- asides can be used differently than federal support already being distributed through programs like the

Universal Service Fund and Rural Utilities Service.