

Responses to Written Questions Submitted by Honorable Shelley Moore Capito to Kim Zentz

*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. In order to fully realize the substantial benefits of 5G for all citizens, our work as a country on this deployment must be done in concert with all stakeholders. Central and local governments, the public sector and the private sector must join forces to ensure an equitable and resilient deployment. Failing this effort risks creating divided and socially exclusive communities across the country.

*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. Cities and communities of all sizes must be collaboratively included in the discussions that affect the oversight of their rights of way to ensure public safety, space, local spectrum management and aesthetics. The FCC must take steps to ensure that these local responsibilities are not reduced or over-ridden by actions taken to accelerate 5G deployment.

*Question 3.* How can 5G be rolled out quickly to avoid a gap where there are have and have nots?

Response. Smaller and mid-sized communities can be pilot installations. Starting in the lower population areas allows the unique challenges of smaller communities to receive deserved attention and the pilot effort allows stakeholders with roles in the installation to learn lessons at a smaller scale than might be present in an attempt to accelerate deployment in densely populated urban areas.

Logical practice dictates that taking care to get smaller-scale pilot installations done right before attempting large scale deployment will best serve all stakeholders interests in time, budget and efficiency over-all. The deployment schedule will be slower and more careful in the pilot installation, lessons learned will be cataloged and evaluated, stakeholders can weigh in before the larger scale commitments to equipment and personnel are made. With the known variables under control, the balance of the deployment can move much more smoothly and effectively – on time and on budget.

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

Response. I cannot effectively speak to the applicability of the Mobility Fund and its governing principles. However, I do believe that mobility applications will be among the first and likely most compelling use-cases for high-speed, low latency 5G equipment. Furthermore, mobility is at the very heart of every community (of all sizes) because of its fundamental enablement of economic, social and environmental equity and resiliency.

*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. Wireless communications networks are worthless without reliable backhaul networks. The allocation of spectrum must take into account all of the factors that comprise essential service to citizens as well as the effective use of spectrum – including mid-band. With the deployment of 5G, applications will distribute to the most effective segment of spectrum, thus there will be some lower and mid-band spectrum capacity that should not be ignored in the balancing of priorities for communities' spectrum needs. In other words, not all applications will suddenly demand 5G to function effectively.

*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. N/A

*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. N/A

*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. Digital connectivity is essential infrastructure and is increasingly the lynchpin for safety, health and well-being of our citizens. Thus Congress should treat relevant policy decisions with the same thoroughness as water, electricity, roads, bridges, sewers, etc.

*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. Clearly, the best decisions cannot be made absent the best information that is possible to cost-effectively obtain.

*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. N/A

*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. N/A