

The Honorable Chairman John Thune
Committee on Commerce, Science, and Transportation
Questions for the Record
Hearing on Removing Barriers to Wireless Broadband Deployment

Senator Sullivan's Questions for the Record

Question 1: Companies in my state that are currently trying to build much needed broadband infrastructure have been delayed by unexpected requirements in the permitting process. How can we improve transparency in the permitting process to avoid this?

Answer: State, local, and federal permitting delays often impact broadband construction projects, and all levels of government should work to increase transparency to facilitate the permitting process. At the federal level, President Obama recognized the importance of transparency when he issued Executive Order (EO) No. 13616, "Accelerating Broadband Infrastructure Deployment," to facilitate wired and wireless broadband infrastructure deployment on federal lands, buildings, and rights-of-way. While federal agencies have made significant progress in streamlining federal processes, the 2015 Broadband Opportunity Council (Council) received input from stakeholders indicating that the federal government can still do more to help service providers obtain the necessary permits and permissions to build out broadband networks on federal lands and use federal assets or cross federal rights-of-way, particularly by streamlining federal permitting processes. Building on the EO 13616 actions, the Council's report includes agency commitments to create an online inventory of data on federal assets, such as the Department of Interior (DOI) telecommunications towers, that can help support faster and more economical broadband deployments to remote areas of the country. Additionally, the Administration is committed to streamlining the applications for programs and permitting processes to facilitate broadband deployment and foster competition. The implementation of these agency actions should help to improve transparency and minimize delays in gaining access to federal assets for increased broadband investments.

Question 2: Companies in my state have explained that they try to build their infrastructure across State, private, or Alaska Native land, rather than deal with the problems associated with crossing federal land. Do you agree that it is a problem that the private sector is avoiding building broadband infrastructure on federal land, especially when more than 60 percent of Alaska is owned by the federal government?

Answer: Federal lands, buildings, and assets are important conduits for broadband deployment and should be readily accessible for deployment of broadband infrastructure. The Broadband Opportunity Council (Council) heard from multiple stakeholders urging federal agencies to take action to streamline processes and standardize timelines for the review and

processing of permitting applications and make such documentation easily accessible. One of the Council's guiding principles is that the federal government should strive for uniform definitions and common permitting and application processes to reduce the burden on local government, state government, non-profit, and private applicants applying for federal resources. The deployment of broadband requires collaboration between the public and private sectors and often cooperation across multiple levels of government. Federal agencies should work closely with the private sector and local and state governments to ensure federal policies facilitate investment in broadband services.

Question 3: I, along with some of my colleagues, sent a letter to the Co-Chairs of the Broadband Opportunity Council. In it, we asked for an analysis of current broadband initiatives. Can you point to any specific initiatives that are working particularly well? Can you point to any that are not?

Answer: NTIA was responsible for implementing the broadband grants programs established by the American Recovery and Reinvestment Act. We believe this program was a resounding success. It fully delivered on its pledges to create jobs, stimulate economic development, spur private-sector investment, and open up new opportunities in employment, education, and healthcare. NTIA's broadband grantees deployed more than 115,000 miles of new or upgraded network miles; connected more than 25,500 community anchor institutions; installed or upgraded more than 47,100 personal computers in public access centers; and prompted more than 670,000 people to subscribe to broadband services.

Through the ongoing BroadbandUSA initiative, NTIA is leveraging the expertise gained by overseeing this broad portfolio of broadband infrastructure and adoption grants to help communities expand their broadband capacity. NTIA's technical assistance ranges from workshops and webinars to more personalized one-on-one community assistance. NTIA can help communities navigate government rules and grant programs; find the best way to design and deliver a broadband adoption program; and attract broadband investment. To date, NTIA has held four regional workshops to bring community and industry stakeholders together to discuss how best to support their broadband needs. NTIA has also released field-tested guides such as our Broadband Adoption Toolkit, Public-Private Partnership Primer, and Guide to Federal Funding of Broadband Projects to inform community broadband efforts. NTIA has received very positive feedback on its broadband initiatives and plans to issue additional publications on broadband topics over the next several months.

Additionally, through the Broadband Opportunity Council (Council) all member agencies were surveyed to identify programs that could be modified to support or further support broadband. The Council then developed 36 immediate actions, with associated milestones, that the member agencies agreed to undertake. Once implemented, we believe that these recommendations will

make a meaningful difference to communities seeking new tools and resources to promote broadband investments.

Senator Fischer's Question for the Record

Question 1: Earlier this year, Senator Klobuchar and I introduced the Rural Spectrum Accessibility Act, which would incentivize wireless carriers to lease unused spectrum to smaller rural carriers. Have any of the witnesses had an opportunity to review this proposal or others to incentivize spectrum sharing? Do you believe this would help expand access?

Answer: NTIA manages federal use of spectrum while the Federal Communications Commission (FCC) manages non-federal use. Thus, the FCC may be in a better position to comment on the specifics of the proposed Rural Spectrum Accessibility Act. The Administration has not taken a position on this specific proposal. However, NTIA generally supports appropriate initiatives to expand access to spectrum and facilitate efficient use of scarce spectrum resources, which are clear objectives of the proposed measure.

Senator Daines's Questions for the Record

Question 1: Mr. Kinkoph, you talked about the FCC's recommended download speed of 25 megabits per second and how over 50 million Americans' current broadband connection does not meet that standard. But does the average consumer really need 25 megabits per second? You can stream HD video at 4 megabits per second and 10 megabits per second is considered industrial strength. So why are we focusing on upgrading download speeds for Americans who already have broadband when there are still plenty of people – many in Montana – who have no connectivity at all?

Answer: NTIA recognizes that consumers' needs for broadband speeds will vary depending upon their broadband usage or the types of applications they demand. In its February 2015 Broadband Progress Report, the Federal Communications Commission (FCC) updated its broadband benchmark speeds to 25 Mbps for downloads and 3 Mbps for uploads to reflect advances in technology, market offerings by broadband providers, and consumer demand. The FCC noted that high-speed broadband is essential to support video, telemedicine, distance learning, and other applications needed by such end users as hospitals, schools, and libraries. In many cases residential broadband connections serve multiple people as well as a variety of devices within a single household therefore increasing bandwidth needs and the demand for high-speed broadband. Additionally, consumers using broadband to stream and download HD video will require higher speeds to ensure they receive an acceptable quality of service. Still, NTIA knows that there are many areas of our country, particularly in very rural areas and tribal lands, where any broadband connection would be an improvement over what exists today.

NTIA has demonstrated a longstanding commitment to promoting broadband deployment and adoption in unserved and underserved areas, including parts of Montana. Through the Broadband Technology Opportunities Program, for example, NTIA awarded a \$13.7 million grant in 2010 to Ronan Telephone Company (RTC) to deploy a new high-speed middle-mile network to expand broadband services and promote economic development and recovery for underserved communities of Montana, including the Blackfeet and the Confederated Salish and Kootenai Tribes. As of June 2015, the project deployed 299 miles of new fiber and upgraded 106 miles of existing fiber. RTC also signed agreements with local Internet service providers to facilitate more affordable and accessible broadband service for households and businesses in the area. To date, RTC has connected 34 Community Anchor Institutions (CAIs), including educational institutions, government facilities, public safety entities, and medical facilities. RTC also partnered with Health Information Exchange of Montana to facilitate telemedicine and improved healthcare delivery for rural residents.

While much progress has been made, challenges still remain in bringing broadband to unserved areas of the country. Much of the easy work has been done – building out broadband

infrastructure where the business case is compelling or encouraging broadband adoption and use among those who are already digitally ready. NTIA is committed to tackling the hard work that needs to occur to reach those communities where geography and economics render broadband deployment, competition, and adoption difficult to fully realize. NTIA is taking action through its BroadbandUSA initiative to offer communities the technical assistance and support they need to overcome their unique challenges hindering investment in broadband infrastructure and adoption.

Question 2: Mr. Kinkoph, NTIA has several different programs and partnerships to carry out its mission with respect to broadband, as do dozens of other federal agencies. In fact, as you mentioned, the Broadband Opportunity Council report gave recommendations to over twenty federal agencies. That sounds like a lot of agencies involved in carrying out the one common goal to bring broadband connectivity to Americans. What programs and policies does NTIA have in place to ensure that there is no overlap or waste?

Answer: The President created the Broadband Opportunity Council (Council) to provide a vehicle for strategic coordination among federal agencies to promote greater broadband deployment and adoption. While there are several federal agencies involved in promoting broadband use and adoption, many of the agencies named to the Council had never viewed broadband to be part of their core missions. So an initial part of the Council's task was for each agency to look internally at their existing policies and programs to explore whether there was flexibility to do more to promote broadband. This exercise helped raise the profile of broadband as a tool that these agencies could use to fulfill their missions and further agency goals. Council members collectively became more informed about barriers and issues facing stakeholders trying to deploy broadband and promote broadband adoption.

NTIA will continue to co-chair the Council to promote coordination among federal agencies and monitor implementation of the agency actions. Additionally, interagency coordination is a key component of NTIA's BroadbandUSA initiative. BroadbandUSA regularly receives requests from other federal agencies to provide input on broadband policies, review proposed legislation and rulemaking on broadband issues, and participate in their workshops or outreach activities related to broadband. In this role, NTIA can strive to minimize any overlap or duplication in federal agencies' various broadband initiatives.

Senator Wicker's Question for the Record

Question 1: Mr. Kinkoph, given the challenges of achieving sufficient mobile broadband coverage over the Nation's vast rural areas, how will FirstNet assure that public safety personnel in smaller cities and rural communities have reasonably comparable access to the devices and coverage?

Answer: Congress created FirstNet as an independent authority within NTIA responsible for deploying a nationwide, interoperable public safety broadband network. FirstNet reports that it has taken significant steps to meet the requirements set forth in the Middle Class Tax Relief and Job Creation Act of 2012, such as substantial rural coverage milestones in each phase of the network's deployment. These steps have included holding 55 state/territory consultations and collecting over 11,000 data surveys from states and territories to learn directly from public safety where they need coverage, how many and what kinds of devices they may need, as well as their rural deployment priorities.

Additionally, FirstNet has held numerous industry days to engage with rural telecommunications providers and associations to understand their capabilities and gauge their interest in participating in the deployment of the FirstNet network. These industry days are aimed at fostering creative solutions to public safety needs and encouraging partnerships among a diverse set of organizations. FirstNet has also taken steps to ensure that partnerships with rural telecommunications providers are part of the evaluation criteria for the upcoming nationwide Request for Proposals (RFP) that will be key to deploying the nationwide network.

Senator Gardner's Questions for the Record

Question 1: Mr. Kinkoph, the Wireless Innovation Act, which Senator Rubio introduced and I'm cosponsoring, requires NTIA, in consultation with the Commission and the Director of the Office of Management and Budget, to develop a framework for determining the commercial value of each Federal spectrum band. Further, every five years, the bill requires agencies that use Federal spectrum to compare the opportunity cost of that spectrum to the projected cost of relocating – co-locating, leasing, or contracting out their spectrum use to a commercial provider. Do the agencies have the tools on hand right now that they need to do that sort of economic analysis?

Answer: While NTIA is not in a position to evaluate the resources of other agencies, it is highly unlikely that many agencies that use federal spectrum currently possess the tools, expertise, or relevant information needed to conduct the expansive economic analysis required under the proposed framework. NTIA does not currently have the expertise or resources to develop the framework required by the proposed legislation.

There are numerous challenges in even considering the development of such a framework. Besides requiring a very large commitment of resources, one of the challenges with developing and implementing the proposed framework is the lack of quantifiable data necessary to account for the value of each federal agency's congressionally-mandated mission. Under statutory changes enacted in 2012, NTIA is responsible for balancing "the best possible and most efficient use of electromagnetic spectrum resources across the Federal Government . . . with the needs and missions of Federal agencies." (*47 U.S.C. § 902(b)(2)(U), added by Pub. L. 112–96, title VI, §6410, 126 Stat. 234 (2012)*) Determining the opportunity cost of federal spectrum based on the potential commercial value of the spectrum alone would not adequately account for or incorporate the social value of the government missions or programs that rely on this spectrum. The economic and non-economic societal benefits from meeting the public interest goals that led to Congress mandating and funding an agency's spectrum-dependent missions are difficult to quantify in economic terms. Consequently, quantifying the economic value to "the highest commercial alternative use" would not provide an informative proxy for assessing the total social and economic value of a federal spectrum assignment. Additionally, since in most cases it is not a single federal agency utilizing a spectrum band, allocating economic value between the various agency uses would be challenging.

Even if a framework for determining opportunity cost is developed and implemented for a given federal band, it does not resolve whether it is possible and or practicable to make spectrum available while still ensuring no loss of mission or capability to the federal agencies. Nearly every band used by the federal government is shared among several agencies and developing a relocation or sharing plan with associated costs is difficult, time consuming, and resource intensive., Requiring the agencies to determine potential relocation or sharing costs for

every federal system in every band in which the agencies operate is not practicable and may not lead to a scenario where a comparative cost analysis is possible.

Question 2: OMB and NTIA currently, are they working with the agencies so they understand the economic value of their spectrum use?

Answer: As directed in a 2013 Presidential Memorandum, the Administration is continuing to work with the federal agencies, through the White House Spectrum Policy Team and the Office of Management and Budget (OMB), to evaluate spectrum efficiency in procurements and market-based incentives for the efficient use of federal spectrum. For years, OMB guidance in Circular A-11 has instructed federal agencies to consider the economic value of spectrum in weighing alternative proposals for deploying spectrum-based services. This guidance is intended to ensure proper stewardship of the spectrum resource and requires a certification from NTIA for the development or procurement of major spectrum-dependent systems (and all satellite systems) using congressionally appropriated funds.