

Responses to Written Questions Submitted by Chairman Roger F. Wicker to Honorable Ajit Pai

*Question 1.* In her letter to you dated May 13, 2019, Sen. Cantwell references “an internal U.S. Navy action office-level working document.” Was that document submitted to the FCC by the Department of Defense? If so, when and by whom? Does the document’s analysis of “interference to weather satellites permitted by future commercial broadband uses at 24 GHz operating at the FCC’s emission levels” contain sufficient information for the Commission to determine if its conclusions are reasonable and supported by sound analysis? If not, why not? Is it your understanding that the conclusions of this “an internal U.S. Navy action office-level working document” constitute an official position of the Department of Defense?

Response. Although we are aware of the referenced working-level document, it does not constitute an official position of the Department of Defense to our knowledge and has never been submitted by the Department of Defense to the Commission. Notably, that document contained no analysis of interference whatsoever; it instead analyzed potential operational impacts based on assumed harmful interference. Because a sound analysis of harmful interference in this band shows that the United States can both lead in 5G and protect our weather satellites (a position consistent with the views developed through the Interdepartment Radio Advisory Committee), the document’s conclusions are quite mistaken.

*Question 2.* Senator Cantwell mentioned a number of issues in her opening statement characterized as “wireless and broadband companies already appear[ing] to be testing ways to undermine the free and open internet.” Specifically, she mentioned: 1) “Comcast [being ordered] to pay \$9.1 million in fines for deceptive practices that affected 50,000 Washingtonians since the repeal of net neutrality,” 2) “CenturyLink temporarily blocking access to the internet in Utah to force consumers to watch ads,” and 3) “Sprint allegedly interfered with competitive Skype services using wireless networks.” To the extent you are aware of these issues, is there reason to believe they would have been likely to have constituted a violation of the FCC’s Open Internet rules in effect before the Restoring Internet Freedom order?

Response. The FCC investigated and resolved the allegations regarding Comcast in 2016 under a different set of regulations (47 CFR § 76.981). I do not believe anyone understood Comcast’s conduct to violate the Title II Order’s rules at the time.

My understanding is that the allegations against CenturyLink were the result of CenturyLink’s attempt to comply with a Utah law requiring ISPs to offer content filtering for material harmful to minors and to notify customers in a conspicuous manner regarding the availability of such filtering. It is also my understanding that CenturyLink ended this particular method of notification due to customer dissatisfaction, and it has not been an ongoing problem. Thus, we have not analyzed whether its action would have violated the Title II Order’s rules. Additionally, with respect to the allegations against Sprint, we do not have sufficient evidence to determine that Sprint engaged in conduct violating the Title II Order’s rules. Moreover, my understanding is that Sprint has denied the allegations and that the researchers of the study alleging that Sprint discriminated against Skype acknowledged they themselves could not replicate the alleged conduct in the lab.

*Question 3.* In December 2018, you launched an investigation into whether carriers violated the Mobility Fund Phase II rules by submitting inaccurate coverage maps. What is the status of that investigation? At the conclusion of the investigation, will the Commission release an updated map of areas eligible for Mobility Fund Phase II support, or will a new data collection be necessary?

Response. Staff is actively wrapping up this investigation, and I hope that we will be able to report the results of that investigation soon. The Commission's next steps will depend on those results.

*Question 4.* Mid-band spectrum is critical to the U.S. winning the race to 5G. I know the Commission recently sought public comment on its authority to employ various clearing mechanisms to make C-band spectrum available for 5G. How soon do you expect the FCC will take action to make C-band spectrum available for 5G in an efficient and equitable manner? How will the Commission ensure that rural providers have access to C-band spectrum when it becomes available?

Response. I hope to move forward with an item addressing the C-band this fall. As part of our review process, Commission staff are specifically looking at how to ensure that rural providers have access to C-band spectrum when it becomes available, an issue we sought comment on in the Notice of Proposed Rulemaking.

*Question 5.* On January 1, 2017, a 32-day-blackout occurred between Cable One and Northwest Broadcasting. The blackout affected northern Mississippi where all four network channels for 21 counties were blacked out and another 16 counties only had access to ABC affiliate WABG. To the extent that you are aware of these issues, what, if any, oversight activity did the Commission engage in during this blackout?

Response. Under Section 325(b) of the Communications Act, parties to a retransmission consent negotiation are required to negotiate in good faith. The Commission implemented specific rules to outline what constitutes "good faith" negotiations and those rules are enforced through complaints. We generally encourage parties to come to an agreement as quickly as possible to mitigate the impact on consumers. Commission staff monitored this specific situation at the time it happened, but there was not a formal complaint filed with the Commission by either party.

*Question 6.* In December 2018, I wrote you a letter regarding SSR Communications Inc.'s 2013 petition for rulemaking to the FCC to create a new commercial FM class, referred to as the "Class C4 FM allocation." I appreciated your response to my letter in February. Please provide a status update on the FCC Media Bureau's efforts to review the comments submitted as part of the FCC's notice of inquiry and when we can expect further action.

Response: I agree with you that local radio stations provide essential service to their communities, and as Chairman I have worked to help bolster this important industry. As you know, I circulated a Notice of Proposed Rulemaking on this issue, but it was changed to a Notice of Inquiry as a result of input from my colleagues. Commission staff continue to review the record developed in this proceeding, which includes balancing the benefits of the proposed

power increases for some stations with the potential for increased harmful interference to others. My ability to move forward on this issue will also depend on whether a majority of Commissioners is willing to support such action.

Responses to Written Questions Submitted by Senator John Thune to Honorable Ajit Pai

*Question.* The 6 GHz band has a lot of potential for fulfilling the requirements under the MOBILE NOW Act, which was signed into law last year. How soon can the Committee expect the Commission to issue rules for this particular band?

Response: I agree that the 6 GHz band shows great promise in fulfilling the MOBILE NOW Act's directives. As you are aware, the Commission's October 2018 Notice of Proposed Rulemaking proposed allowing unlicensed use of the 6 GHz band while ensuring that the licensed services operating in the spectrum would continue to thrive. Now that the comment period has closed, we are reviewing the lengthy and complex record to determine the best method for minimizing potential harmful interference to the incumbents. At the same time, stakeholders continue to provide ex parte briefings concerning the issues raised.

I want to ensure that we have properly considered the outstanding issues and that the final rules are supported by a comprehensive and solid engineering analysis. We will proceed as expeditiously as possible toward a final resolution in this matter, and keep your office apprised of our progress.

Responses to Written Questions Submitted by Honorable Dan Sullivan to Honorable Ajit Pai

*Question 1.* As I've observed the Commission's work in my role as Senator for Alaska, I'm continually struck by what appears to be a lack of transparent, fair, due process for petitioners. I appreciated the Chairman's commitment during the hearing to circulate an order regarding GCI's Application for Review of the WCB's October 2018 determination of "rural rates." As you know, we have other highly consequential, outstanding items before the Commission. Please provide a status update on the following petitions, including a commitment on timeline for circulating the related orders –

- Maniilaq Association's appeal of USAC's denial of FY2017 FRNs
- Copper Valley Telephone Cooperative's Request for Review of USAC's denial of "Incorrect Treatment of Substantial Rent Expense Paid to an Affiliate"

Response. The Commission makes every effort to conclude its review of Universal Service support appeals as quickly as possible and in a fair and transparent manner. I have asked Commission staff to review promptly (while still thoroughly) both the Maniilaq Association appeal of its FY2017 USF Rural Health Care funding requests (filed on July 2, 2019) and the Copper Valley Telephone Cooperative's Request for Review of USAC's denial of support for certain of its expenses under the universal service high-cost program (filed on May 24, 2019). I can assure you that we will take into consideration the issues and concerns presented by all stakeholders in reaching a decision consistent with the Commission's rules and policies.

*Question 2.* As you are aware, Alaskan carriers rely heavily on the 3.7-4.2 GHz Band, referred to as the C Band. Last year, the Commission imposed a freeze on the filing of new license applications in the 3.7-4.2 GHz band, while the Commission considers potential reallocation of this spectrum for 5G use. The freeze is creating significant hardships for Alaskan schools, health care providers, businesses including telecoms that rely on C band satellite services for connectivity. Some applications to license C band satellite earth station sites in Alaska have been pending at the Commission for as long as a year. As you know, "construction season" in Alaska is short and limited to the summer months. We are now well into our second construction season without clarity or resolution.

What timeline can you commit to for processing these pending applications?

If the answer depends on the conclusion of the larger C Band proceeding ongoing at the FCC, when will that be complete?

Response. A number of carriers have asked the Commission to waive its temporary freeze on the filing of new earth station applications in the 3.7-4.2 GHz band to enable the construction and operation of new earth stations. As you note, the freeze was adopted to preserve the current landscape of authorized operations in that band pending Commission action on permitting terrestrial broadband use. At the same time, the Commission understands the critical role of C-band operations in Alaska, as well as the unique challenges presented by building and operating there. Thus, while future terrestrial use is one consideration in the review of the waiver applications, the answer does not depend on conclusion of the larger C-band proceeding; rather,

Commission staff is carefully reviewing the record in each of these cases and weighing these considerations under the waiver standard specified in our rules. We seek to resolve the waiver requests expeditiously and are considering the issues and concerns presented by the applicants, as well as the Commission's goal to expand flexible use of mid-band spectrum.

*Question 3.* On February 28, 2018, the Commission's Wireline Competition Bureau and Wireless Telecommunications Bureau released an order requiring Alaska Plan participants to submit highly detailed network maps. The Bureaus required that all of the network elements on these maps be certified as geospatially accurate to within 7.6 meters 95 percent of the time. Please provide in full and with appropriate citations: (1) the Bureaus' stated justification for requiring this level of accuracy as opposed to some lower level of accuracy, (2) the cost-benefit analysis the Bureaus relied on for requiring this level of accuracy as opposed to some lower level of accuracy, and (3) specific examples of other contexts in which the Commission has imposed such stringent mapping requirements.

As you know, the Alaska Plan participants did not object to the obligation to submit network maps. Certain Alaska Plan participants, however, did seek a waiver of the 7.6 meter accuracy standard for certain network elements, including buried fiber that may be dozens of miles or more from the nearest customer or wireless antenna. The Bureaus denied the waiver request and an application for review has been filed. Please commit to a date certain by when you will circulate to the full Commission a draft order proposing to address the pending Application for Review.

*Response.* The Wireline Competition Bureau and Wireless Telecommunications Bureau affirmed the 7.6-meter accuracy standard in the February 28, 2018 Order on Reconsideration, finding that the 7.6-meter standard "provides an important backstop to ensure carriers maximize their commitments and service" and is "necessary for the Bureaus to maintain compatibility with the census boundary and road data for the census-block based Alaska Plan." The Bureaus concluded the standard "is critical for obtaining a complete picture of facilities' locations in relation to other existing data" and to identify duplicative facilities. Notably, no carriers sought review of the February 28, 2018 Order on Reconsideration; in fact, most carriers subject to the requirement have already fully certified to the 7.6-meter accuracy standard.

Additionally, the 7.6-meter standard is fairly widely used; for instance, the Commission has used it in the context of its high-cost data to account for inherent error in census block measurements, and the Census Bureau also uses the same standard.

To be sure, one Alaska Plan recipient has a remaining objection relating to this requirement. That recipient, GCI, receives more than \$58 million every year under that Plan, an amount that is substantially larger than that received by any other participant in the Alaska Plan (most of whom, again, have already apparently complied with the requirement). What is more, GCI's remaining application for review extends from a waiver request that came more than a year after the Order on Reconsideration. GCI did not provide a cost estimate regarding how much more it would cost to comply with the mapping data requirement or explain why it did not adequately document the location of fiber it deployed in 2018 after it was made aware of the 7.6-meter standard. The

Commission is analyzing the arguments raised in GCI's Application for Review of the Waiver Denial Order, and the relevant record is being studied by staff. I expect they will present me a recommendation on how to proceed in the coming months.

Responses to Written Questions Submitted by Senator Mike Lee to Honorable Ajit Pai

*Question 1.* During the hearing, we began a conversation regarding a definition of the term “digital divide.” During this exchange, you noted that such a definition would include any type of application that broadband would allow, including “access to entertainment.”

A. If the term “digital divide” is determined by such continually evolving categories like “entertainment” or “any type of application that broadband would allow” is it possible to ever close the “digital divide”?

Response. Although precisely defining the term “digital divide” is no doubt a difficult task, I believe closing it must be our priority. To me, that means helping to make high-speed broadband available to every American who wants access to the Internet. I have seen for myself in 45 states, including Utah, and the territories of Puerto Rico and the U.S. Virgin Islands what affordable high-speed Internet access can do for a community—for its families, its schools, its hospitals, its farms, its businesses—as well as the impact of its absence. High-speed Internet access is critical to economic opportunity, job-creation, education, and civic engagement. That’s why we have encouraged carriers to replace aging copper with fiber on an expedited basis, modernized our rules to reduce barriers to infrastructure investment, and held our nation’s first reverse auction for fixed broadband support, among many other things. The results of these actions will be felt throughout America, and especially in rural America, where the case for building out broadband is already challenging for many businesses.

*Question 2.* As you know, Section 706 requires the FCC to determine whether “advanced telecommunications capabilities” are being deployed in a timely and reasonable fashion. The metrics used, like the setting of the broadband speed, are important because such determinations can trigger substantial FCC authority.

A. Can you identify any limits as to how the FCC establishes the metrics used to make Section 706 determinations?

Response. Under the prior Administration’s interpretation, there were no limits to the statutory language in section 706, and thus to the FCC’s authority under that statute. The previous FCC not only set an impossibly high bar for determining whether “advanced telecommunications” were being deployed, it then found section 706 to be an authority-granting statute that imbued the Commission with vast regulatory powers.

We have rejected an interpretation of section 706 that is so elastic as to render limits meaningless. First, we have recognized that the words of the statute mean what they say: We must assess progress in broadband deployment (whether advanced telecommunications capability “is being deployed to all Americans in a reasonable and timely fashion” (emphasis added))—not that every single American across the country has broadband at this very moment. Second, we have recognized that people use the Internet in various ways, so we have adopted a holistic approach under which we examine progress in multiple speed tiers and types of services. Third, we have re-established the proper understanding of section 706—it is not an authority-granting statute but a hortatory statute that, should the Commission make a negative finding on



the deployment of advanced telecommunications, simply exhorts the Commission to use its preexisting authority to deregulate (not heavily regulate) and spur competition.

*Question 3.* The Connect America Fund (CAF) is a federal program that gives subsidies to companies to build networks in high cost areas. You've made a number of recent changes to the CAF program, including increasing the target speeds to 25/3 Mbps.

A. Does increasing target speeds under CAF affect the overall cost for a carrier to deploy a network? If so, what would those costs be?

B. How would increased carrier costs affect the overall CAF budget as well as the larger Universal Service Fund (USF) budget? Will these requirements necessitate increases to the CAF budget and the overall fees for consumers?

C. The USF is funded by fees placed on Americans. These fees are generally regressive and affect lower- and middle-income Americans more than higher earners. Could these requirements increase USF costs to American consumers?

Response. Increasing speed targets under the CAF doesn't necessarily increase meaningfully the overall costs to deploy a network. For example, fiber networks are generally capable of providing service at various speed tiers for negligible marginal-cost differences—so increasing speed requirements for such builds generally benefits the consumer without significantly increasing the cost to the recipient or the taxpayer.

The Connect America Fund Phase II reverse auction, part of our broader effort to close the digital divide in rural America, is a great example of targeting finite USF funds to connect unserved areas with high-quality services in an efficient manner. Through this novel approach, we're now awarding about \$1.5 billion to connect over 713,000 unserved homes and businesses nationwide. The Commission distributed funding much more efficiently thanks in part to intermodal, competitive bidding, saving \$3.5 billion from the \$5 billion price we initially thought would be required to connect these unserved areas. And consumers will receive high-quality broadband—99.7% of the winning bids are to provide consumers with service of at least 25/3 Mbps, and over half are receiving service of 100/20 Mbps or better.

*Question 4.* The FCC is currently working on a rule related to reforms of Section 621 or the regulations governing the issues of franchises for cable operators.

A. Can you share an update on the timing for the rulemaking as well as any particular findings on how the current cable franchise framework affects cable operators, including the overall costs for broadband deployment?

Response. The Commission is scheduled to vote on a Third Report and Order in this proceeding to resolve the pending rulemaking at its August open meeting. A draft of this item was made public last week and is currently available for review on our website. The pending proceeding is a direct result of a 2017 remand by the U.S. Court of Appeals for the Sixth Circuit in *Montgomery County, Md., et al v. FCC*. The item, if adopted, would reach the following conclusions. First, we would conclude that cable-related, "in-kind" contributions required by a

cable franchising agreement are franchise fees subject to the statutory five percent cap on franchise fees set forth in section 622 of the Communications Act, with limited exceptions, including an exemption for certain capital costs related to public, educational, and governmental access (PEG) channels. Second, we would find that under the Communications Act, local franchise authorities (LFAs) may not regulate the provision of most non-cable services, including broadband Internet access service, offered over a cable system by an incumbent cable operator. Third, we find that the Communications Act preempts any state or local regulation of a cable operator's non-cable services that would impose obligations on franchised cable operators beyond what Title VI of the Act allows. Finally, we would conclude that Commission requirements that concern LFA regulation of cable operators should apply to state-level franchising actions and state regulations that impose requirements on local franchising. I believe the Third Report and Order not only faithfully interprets the Communications Act but will also curtail practices of LFAs and other state and local entities to circumvent the franchise fee restrictions of the Communications Act. For example, the record shows that some entities are requiring cable operators to pay additional fees for the provision of non-cable services, a practice which is prohibited by the Communications Act. I expect that ending this practice will result in lower costs for consumers and additional investment in broadband networks, which will serve the public interest.

## Responses to Written Questions Submitted by Senator Ron Johnson to Honorable Ajit Pai

*Question 1.* As you know, I, along with my colleagues in the Wisconsin delegation, sent you a letter regarding the importance of accurate broadband maps for our state. I appreciate your quick response to that letter and am glad to hear this is a shared priority of ours. At the hearing, you made two great announcements –1) plans for a \$20 billion investment in rural broadband, known as the Rural Digital Opportunity Fund, and 2) plans to move forward with a broadband mapping proposal in August.

- a. Do you agree that the FCC must first improve its broadband maps to ensure that this valuable funding goes to the places that need it most?
- b. Will your mapping proposal ensure that the maps will be promptly updated so that the new program is not delayed?

Response. I agree that using updated and accurate broadband deployment data is critical to accomplishing the goal of making broadband available to all Americans, regardless of where they live. We need to understand where broadband is available and where it is not to target our efforts and direct funding to areas that are most in need. That is why the Commission began a top-to-bottom review of our deployment data collection to ensure that broadband data will be more precise, granular, and ultimately useful to the Commission and the public. I have circulated a Report and Order for the FCC’s upcoming monthly meeting on August 1. That Report and Order would yield more granular and more accurate broadband maps. It also would provide for regular updates of the filed data to ensure that the maps we rely on are current. These updated maps would be used to focus funding to expand broadband through future initiatives such as the second phase of the proposed Rural Digital Opportunity Fund (RDOF). Once implemented, the RDOF would provide over \$20 billion over the next decade to connect millions of rural homes and businesses to high-speed broadband, representing the FCC’s single biggest step yet to close the digital divide.

*Question 2.* I understand there are a few proposals to fix this problem, including having providers submit “shapefiles” showing their actual service areas. This is not a new idea. In fact, some states and the Rural Utilities Service have already been using “shapefiles” showing providers’ actual service areas to produce more accurate maps. Additionally, I understand USTelecom is currently piloting another method for collecting mapping information called “broadband serviceable location fabric.”

- a. Is the FCC considering these ideas as part of its Report and Order?
- b. Is Congressional action needed to support the FCC’s mapping goals?

Response. The item that I circulated for the August Open Meeting, if adopted, would require broadband providers to report where they actually offer service below the census block level, including by submitting broadband coverage polygons (similar to shapefiles). The item also provides for incorporating public feedback into our mapping efforts. Lastly, the draft item I circulated seeks comment on how we could incorporate the fabric or similar location data into

the new maps. I welcome your support for this project and look forward to continuing to work with you on our shared goal of improving the Commission's broadband coverage maps.

## Responses to Written Questions Submitted by Senator Todd Young to Honorable Ajit Pai

*Question 1.* Chairman Pai, I want to first ask a couple of questions about the 24 GHz auction and the process that has undertaken.

Please describe what you believe to be the flaws in the Department of Commerce's study that claims 5G services in the 24 GHz band would cause harmful interference to weather sensors.

Interagency disagreements like this on the 24 GHz auction could send a message abroad that the U.S. government isn't speaking with one voice when it comes to spectrum policy. What risks do we face at the World Radiocommunication Conference later this year if the U.S. doesn't speak with a unified voice on spectrum policy?

Response. Unfortunately, the emission limits most recently advanced by the Department of Commerce's National Oceanic and Atmospheric Administration (NOAA) and the National Aeronautics and Space Administration (NASA) are based on an unvalidated and badly flawed study. As just one example, international guidance from the ITU suggests that analyses should be based on the adaptive array antennas (beamforming) expected to be used in this spectrum. (To roughly describe the concept, think of beamforming as a laser sending a single discrete pulse of light, instead of a regular light bulb sending streams of light everywhere.) These adaptive array antennas are one of the innovations that make mobile 5G in millimeter-wave bands possible. They significantly reduce the impact of commercial 5G operations on passive weather satellites. And yet, NOAA did not use such antennas in its study.

There are many other problems with the study. It assumes base stations and respective user equipment are transmitting at the same time, which is impossible under Time Division Duplex (TDD) systems that will be used for 5G services. It overestimates both the quantity of and power from base stations and user equipment. It does not adequately take into account "clutter," that is, the effects of buildings and trees that would block potentially interfering signals. And the wireless deployment scenarios the study uses are not consistent with any reasonable expectation of how 24 GHz band spectrum will actually be used. These and other flaws exist despite international guidance that any study methodology should include appropriate and reasonable input parameters.

Just as importantly, the most recent study has not been vetted through any public process, including through the ITU processes other studies have gone through. Indeed, the FCC staff was prevented from conducting a thorough review until May 10, 2019, when NASA finally provided the code for review after repeated requests by NTIA and FCC for the underlying study simulation. Only then, two months ago, could the FCC undertake an informed and detailed analysis of the study for the first time.

Such input from stakeholders, including the technical experts with the Commission, is critical for a study to be validated. FCC review has already revealed the substantial impact of the study's known flaws. And this review process is especially important since NOAA's prior study on this issue was withdrawn and abandoned by NTIA earlier this year due to flaws uncovered by the FCC and industry participants.

I strongly agree that the U.S. must speak with a unified voice internationally. If we do not, there are several risks. First, we raise the chances that the WRC-19 process results in spectrum policies that do not allow American companies to fully develop and deploy 5G services and applications and do not enable American consumers to be among the first 5G beneficiaries. And second, to the extent that the United States would be bound by a decision made at the WRC-19, that decision could well override domestic rules and policies and be based on unsound scientific and engineering analysis—each of which would set a bad precedent for the future.

The bottom line: the FCC looks forward to advancing U.S. positions for the WRC-19 that will advance U.S. leadership in 5G and protect passive weather services in the 24 GHz band. Based on the ongoing work of the Commission’s spectrum engineering experts, we do not need to choose between 5G and critical weather forecasting tools. Sound and sober engineering analyses lead us to the firm belief that the United States can have both.

*Question 2.* Chairman Pai, U.S. intelligence agencies allege that Huawei and ZTE are linked to the Chinese government and their equipment could contain “backdoors” for Chinese intelligence. To address the concern, President Trump issued an Executive Order prohibiting the acquisition and installation of telecommunications technology that are determined to be a threat towards national security. With the FCC starting to consider how to apply the ban, rural carriers are now facing uncertainty.

Can you explain the “rip and replace” process and how it might affect rural carriers and their infrastructure? Furthermore, what do you believe would be the overall cost to replace Huawei, ZTE and other equipment?

Response. National security threats posed by certain communications equipment providers have long been a matter of concern to both the Executive Branch and Congress. In April 2018, the Commission adopted a Notice of Proposed Rulemaking proposing to restrict use of universal service funds prospectively to purchase or obtain any equipment or services produced or provided by any company posing a national security threat to the integrity of communications networks or the communications supply chain. The NPRM seeks comment on ways to determine which companies pose a national security threat to communications networks or the communications supply chain, including approaches based on existing legislation (such as the Spectrum Act of 2012 and the National Defense Authorization Act for Fiscal Year 2018), as well as approaches that would rely on other federal agencies to maintain a list of suppliers that they believe pose national security threats to U.S. communications networks. The NPRM also sought comment on the potential costs associated with the proposed rule.

Last October, the Bureau sought comment on the applicability of the John S. McCain National Defense Authorization Act for Fiscal Year 2019 to the Commission’s NPRM and the Commission’s universal service programs. Some commenters have suggested carriers will need to remove and replace equipment purchased from entities determined to pose a national security threat to communications networks or the communications supply chain—but we have yet to find hard data on the costs of such a rip and replace process. The comment cycles have been

completed and Commission staff is carefully reviewing the record in these proceedings, as well as the potential implications of the recent Executive Order.

*Question 3.* Chairman Pai, millions of rural Americans lack access to fixed high-speed broadband, which in today's economy is perceived as basic infrastructure. In the FCC's 2019 Broadband Deployment Report, the FCC concluded that broadband is being deployed to all Americans, including rural Americans, in a timely fashion. The report also asserted that FCC policies are promoting investments and removing burdensome barriers.

Given the ongoing growth in private investments, what are the FCC's priorities moving forward to ensure U.S. broadband providers have the resources they need in the free market for continued investments in rural America?

Additionally, how will the FCC continue to update its mapping to provide an accurate account of high-speed service?

Response. The Commission has taken many steps to better enable the private sector to deploy broadband infrastructure. For example, last year, we made it easier and cheaper for competitive providers to attach fiber to utility poles through a groundbreaking reform called "one-touch make ready." We've also modernized rules that delay service providers from replacing outdated facilities with modern technologies like fiber. In March, we re-chartered the Broadband Deployment Advisory Committee (BDAC). In its second term, the BDAC will continue its work to craft recommendations for the Commission on how to accelerate the deployment of high-speed broadband, including ways to reduce and remove regulatory barriers to infrastructure investment, increase deployment and availability of broadband to low income communities, and train the workforce needed to deploy next generation networks.

We also need to understand where broadband is available and where it is not to target our efforts and direct funding to areas that are most in need. That is why the Commission began a top-to-bottom review of our deployment data collection to ensure that broadband data was more accurate, granular, and ultimately useful to the Commission and the public. After a thorough review of the record and the painstaking work of our career staff, I circulated a Report and Order for consideration at the FCC's August Open Meeting that would result in more granular and more accurate broadband maps through the creation of the Digital Opportunity Data Collection. That means requiring broadband providers to report where they actually offer service below the census block level and incorporating public feedback to ensure up to date and accurate broadband deployment maps.