

FINANCIAL SERVICES AND GENERAL GOVERNMENT APPROPRIATIONS FOR FISCAL YEAR 2018

TUESDAY, JUNE 20, 2017

U.S. SENATE,
SUBCOMMITTEE OF THE COMMITTEE ON APPROPRIATIONS,
Washington, DC.

The subcommittee met at 2:30 p.m., in room SD-138, Dirksen Senate Office Building, Hon. Shelley Moore Capito (chairwoman) presiding.

Present: Senators Capito, Coons, Leahy, Lankford, Van Hollen, Moran, Manchin, Boozman, and Daines.

FEDERAL COMMUNICATIONS COMMISSION

STATEMENTS OF:

HON. AJIT PAI, CHAIRMAN

HON. MIGNON L. CLYBURN, COMMISSIONER

HON. MICHAEL O'RIELLY, COMMISSIONER

OPENING STATEMENT OF SENATOR SHELLEY MOORE CAPITO

Senator CAPITO. We will go ahead and start. My Ranking Member, Senator Coons, will be here shortly, but I will go ahead and make my opening statement and maybe we can begin testimony. So thank you all for being here this afternoon. I appreciate it.

Commissioner Pai, I would just personally like to thank you for your comments last week about the tone of civility that we need to strike. I think you will find that here in this subcommittee, so thank you for that.

Today marks the first hearing of the Financial Services and General Government Subcommittee for the 115th Congress. This is also my first hearing in my new role as the chairwoman of this subcommittee and I am honored to be serving with Senator Coons.

As we begin this important review of the budget request of the FCC, we welcome our witnesses, FCC Chairman Ajit Pai and FCC Commissioners Mignon Clyburn and Michael O'Rielly. We look forward to hearing from you all about the FCC's budget requests and the work that you are doing to carry out the agency's mission.

For fiscal year 2018, the Commission has requested a total of \$322 million. While the FCC's funding is offset by fees that does not minimize our duty to ensure that the agency is operating effectively and that the funds are being spent responsibly. This is espe-

cially important since these fees are passed on directly to the American consumer.

The FCC's policies and actions have an enormous impact on our country's economic growth and potential. That impact is especially critical in rural America. Communities in my State of West Virginia have been hard hit by job loss and decline and creating a major drag on the State's economy and our quality of life. And two of our commissioners here have been in West Virginia firsthand to witness this.

One of my top priorities has been to promote policies that spur new investment and boost economic growth. Broadband access can provide West Virginians with opportunities that lead to new jobs, higher wages, and providing that momentum that our State's economy needs. Potential investors need to see that West Virginia and its workforce is open for business and ready to work in the 21st Century economy.

According to the FCC, more than 30 million Americans lack access to high speed broadband Internet, including a disproportionate number of rural communities. We just had a hearing over in the Commerce Committee that reflected some of that. Without this connectivity, these communities struggle to compete in today's Internet-based world.

In 2015, I launched my Capito Connect plan, jumpstarting a statewide conversation about the need to connect our State. Broadband should be easily available and affordable. It is that simple and at the Federal level we have been all trying to make this a reality. The benefits of broadband access are numerous, but too many parts of rural America cannot attract the investment that they need to get online. Despite significant Federal and private funding, West Virginia is less connected than nearly every other State. We have been hamstrung by a lack of competition between our service providers, burdensome regulations, and we failed to maximize our existing resources as well.

Communities like Thomas and Davis in Tucker County or the whitewater resorts in Fayette County need robust broadband to fully capture the potential of a tourism economy. These communities can capitalize on their natural beauty, attract a technology-based workforce that simply needs a computer, and strong stable connectivity to reach clients around the globe.

In order to help these communities realize their potential, we must equip them with the right tools to succeed. That is why I introduced legislation to accelerate the development of high-speed Internet in low-income communities. The Gigabit Opportunity, or GO Act, encourages new investment to connect these rural and urban communities. By empowering Governors and States to direct investments to areas with the greatest needs, this proposal ensures that communities with the highest potential for economic development are prioritized for funding. For providers, the proposal eliminates barriers to new investment in broadband infrastructure and incentivizes competition.

Under the GO Act, the FCC is directed to release a framework to streamline broadband laws throughout the State, and we have talked about this with the commissioners. This will eliminate the myriad of duplicative and inconsistent laws that currently exist in

all States. Once adopted, the Governors would be able to nominate a portion of their State's low-income areas as Gigabit Opportunity Zones. Businesses that invest in these zones or make upgrades to speed up their networks would benefit from targeted tax and other incentives.

Internet access should be broadly available regardless of whether you live in a small town or big city, and this connectivity is essential to growing our Nation's economy, and in particular, West Virginia's economy. With all the focus on rural America, now is the time to level the playing field and close that digital divide.

So I will let Mr. Coons, Senator Coons, have his opening statement, so I am going to turn to our witnesses, and Chairman Pai, I am going to ask you now to begin with your testimony.

STATEMENT OF HON. AJIT PAI, CHAIRMAN

Mr. PAI. Chairwoman Capito, thank you for holding this hearing. I wanted to recognize Ranking Member Coons and all the Members of the subcommittee for inviting us here today to present the FCC's fiscal year 2018 budget request. I also want to note the participation of my two distinguished colleagues at today's hearing, Commissioners Mignon Clyburn and Mike O'Rielly. It is a privilege to serve alongside each of them as we strive to meet the public interest.

For fiscal year 2018, we have developed a carefully crafted disciplined budget request of approximately \$322 million. That is 5.2 percent below the prior fiscal year's undirected spending level of approximately \$339 million. We also will not need any directed move or restacking funds, which amounted to \$44 million and \$16.9 million in fiscal years 2016 and 2017 respectively. In addition, we propose to reduce our spectrum auction cap from \$117 million to approximately \$111 million. This would enable us to transfer approximately \$6 million more to the Treasury.

We can all agree that budget reductions do not come easily. We will face the same challenges as other agencies in doing more with less. Implementing budget cuts while maintaining essential services means rolling up our sleeves and rethinking how the Commission functions and does business.

In the past, FCC chairmen have emphasized that we are an entirely fee funded agency, but it is important to remember, Madame Chairwoman, as you pointed out, that someone is paying our freight. And that someone includes small businesses, individual licensees, as well as larger companies which pass along those fees to American consumers. It is imperative for the FCC to be fiscally responsible and to avoid unnecessary spending. And I firmly believe that if we refrain from regulatory overreach we will realize additional cost savings as well as more economic growth, results that benefit everyone.

And while we have experienced staffing reductions over the past several years, administrative efficiencies and better IT have ensured that the FCC remains productive. For example, this year with 100 fewer staff than last year, we have already managed to pursue an aggressive schedule for our open meetings where commissioners consider the highest profile matters. Indeed, in 2017 we are averaging more than double the number of items per meeting

than we considered last year, 5.83 versus 2.58. And I expect this increased productivity to continue into fiscal year 2018.

And since I became Chairman in January we have been aggressive in looking for cost savings and our staff has already identified some substantial reductions like closing our offsite warehouse and improving our internal mail services for a projected annual saving of \$851,000. We will also save another \$280,000 by reducing the number of onsite printers and copy machines.

Now as we move into fiscal year 2018, we will focus the FCC's resources on advancing the four strategic goals that were outlined in our budget request. First and foremost, consistent with your comments, Madame Chairwoman, we will concentrate on closing the digital divide. Among other things, we will implement the Connect America Fund Phase II and Mobility Fund Phase II reverse auctions to bring fixed broadband and 4G LTE to more of rural America. These are complicated tasks to be sure, but our Rural Broadband Auctions Task Force has a solid plan for getting the job done.

If I may say, Madame Chairwoman, on a personal note, I appreciate your initiative in introducing the GO Act. This will be a substantial effort, I think, in connecting unserved Americans with digital opportunity. And I thank you for your leadership in that regard.

Second, we will work to promote innovation from implementing policies to ensure American leadership in 5G wireless networks to authorizing television broadcasters to use the next generation television standard. We will also move full speed ahead on implementing the Spectrum Pipeline Act to get more airwaves into the commercial marketplace for consumer use. Third, we will concentrate on protecting consumers and public safety. From combating illegal robocalls to improving video relay service for deaf and hard of hearing Americans, we will continue to pursue an aggressive pro-consumer agenda.

When it comes to public safety, we will continue to support those on the front lines across the country who protect all of us each and every day. And fourth and finally, we will focus on reforming the FCC's processes. The American people deserve to have a transparent and responsive regulator. We have already made substantial progress on this front like making public commission meeting items at least 3 weeks before we vote on them, but there is much more to do, and do it, we will.

Looking ahead to the next fiscal year, I am excited about how the FCC can bring digital opportunity to more Americans, promote technological innovation, protect the American people, and improve our agency's operations. And I believe that this budget request will help us to advance these goals in a fiscally responsive way.

Thank you once again, Madame Chairwoman, for this opportunity to discuss the FCC's budget proposal. I will be pleased to answer any questions you or the Members might have and look forward to working with you in the future on these critical matters.

[The statement follows:]

PREPARED STATEMENT OF HON. AJIT PAI

Chairman Capito, Ranking Member Coons, and Members of the subcommittee, thank you for inviting me here to present the Federal Communications Commission's (FCC) fiscal year 2018 budget request. I also want to note the participation of my two colleagues at today's hearing, Commissioner Mignon Clyburn and Commissioner Michael O'Rielly. It is a privilege to serve with both of them as we work together to advance the public interest.

My appearance today is my fifth time testifying before this subcommittee. But on this occasion, there are obvious differences in my level of responsibility. Now, as Chairman, my duty is to present a viable budget developed under my direction and to detail how the Commission's request will support our core mission and the execution of our programmatic initiatives. In developing the final budget request, we also adhered to the Office of Management and Budget's government-wide effort to cut spending below the prior fiscal year by 5 percent or more.

In the past, FCC Chairmen have routinely noted to this subcommittee that we are an entirely fee-funded agency. But it is important to remember that someone is still paying our freight. That someone includes small businesses, individual licensees, as well as larger companies, which pass along those fees to American consumers. As a result, I have always believed that it is important for the Commission to be fiscally responsible and avoid unnecessary spending. Moreover, I firmly believe that if the FCC refrains from regulatory overreach, we will realize additional cost savings as well as more economic growth—results that benefit everyone.

With this basic philosophy in mind, I instructed the FCC's Office of Managing Director to pare down our proposed fiscal year 2018 spending plan and target all funds toward specific statutory mandates. We initiated an internal review of the Commission's procedures and administrative practices to identify ways to enhance our work and decrease spending. Already, this effort has produced dividends. Our staff has identified several potential cost-cutting initiatives. For example, we have decided to close our off-site warehouse and improve our internal mail services for a projected annual cost-savings of \$851,000. We will also save another \$280,000 by reducing the number of on-site printers and copy machines. And we will continue to investigate and implement cost-savings and cost-avoidance measures related to information technology (IT), like buying less extravagant (but effective) off-the-shelf software—because the most expensive choices do not necessarily equate with the best choices.

As a result of these efforts, we have compiled a tightly-crafted, disciplined budget request of \$322,035,000—or 5.2 percent below the prior fiscal year's undirected spending level of \$339,844,000. This number includes the Office of Inspector General pass-through, which also includes a voluntary reduction. Importantly, during fiscal year 2018, we will not need any directed move or restacking funds. In fiscal years 2016 and 2017, those directed funds totaled \$44 million and \$16 million, respectively. Combined, these spending reductions will mean lower fees for those we regulate, and thus fewer costs passed on to American consumers.

In addition, the spectrum auction cap, which has been steadily increasing over the past 5 years, will receive a 5 percent reduction, from \$117,000,000 to \$111,150,000. We arrived at this number after reviewing prior fiscal year spending with our staff and considering our anticipated workload for the next year. The lower cap is achievable in light of the scale-down of work associated with the broadcast television incentive auction. This reduction means that the FCC will turn over almost \$6 million more to the Treasury than would be the case if the cap stayed steady.

Budget reductions do not come easily. We will face the same challenges as other agencies in doing more with less. Implementing budget cuts in fiscal year 2018, while maintaining essential services, means rolling up our sleeves and re-thinking the way that the Commission functions and does business.

Additionally, we believe that these operational reforms and financial savings can and must be supported by policy changes that reduce the scope and growth of our workload. That is why immediately upon becoming Chairman, I initiated a substantive review of ongoing Commission actions. I set top priorities of stopping regulatory overreach, modernizing our rules to match the modern marketplace, and promoting greater infrastructure investment, innovation, and economic growth.

As we move into fiscal year 2018, we will focus the Commission's resources on advancing the four strategic goals outlined in our budget request: (1) closing the digital divide; (2) promoting innovation; (3) protecting consumers and public safety; and (4) reforming the FCC's processes. My commitment as Chairman is to do as I have promised without straying into activities that exceed our legal authority or go beyond the core competencies of our agency.

First and foremost, we will focus on closing the digital divide.—We will foster a regulatory environment that encourages the private sector to build, maintain, and

upgrade next-generation networks so that the benefits of advanced communications services are available to all Americans, whether they live in Appalachia or the Ozarks, on Tribal Lands or in cities in transition. And where the business case for infrastructure investment does not exist, we will employ effective and efficient means to facilitate deployment and access to affordable broadband in all areas of the country.

To accomplish this goal, we will continue to work on implementing the Connect America Fund Phase II reverse auction to disburse about \$2 billion. This program aims to bring fixed broadband to unserved areas. And we will continue to work on the Mobility Fund Phase II reverse auction to disburse \$4.53 billion. This program aims to bring 4G LTE coverage to parts of our country where high-speed mobile broadband is not currently available. Each of these projects is complicated; each will take up a substantial amount of staff resources during fiscal year 2018. But our Rural Broadband Auctions Task Force has developed a solid plan for getting the job done.

In addition, we will continue to work in fiscal year 2018 to remove regulatory barriers to broadband deployment. For example, we must make it easier for companies to transition from the copper networks of yesterday to the fiber networks of tomorrow. Every dollar spent maintaining an old network is, by definition, a dollar that can't be spent building a next-generation network. We need to encourage private capital to be spent on high-speed, modern digital connectivity. We also must ensure that broadband providers can get timely access to poles and rights-of-way at a reasonable cost.

Second, we will focus on promoting innovation.—Our goal is to foster a competitive, dynamic, and innovative market for communications services through policies that promote the introduction of new technologies and services. To do this, we will ensure that the FCC's actions and regulations reflect the realities of the current marketplace, promote entrepreneurship, expand economic opportunity, and remove barriers to entry and investment.

In the mobile space, we will work to ensure that the United States leads the world in the development and implementation of 5G, or fifth-generation wireless services. That means continuing our work to make more high-band, middle-band, and low-band spectrum available for mobile broadband. And that means removing regulatory barriers to the siting of physical infrastructure. As we transition to 5G, networks will “densify”—that is, coverage will depend more on dozens or hundreds of tightly-packed small cells operating at low power, rather than cell towers operating at higher power. So we need to ensure that our rules keep up with the times. It doesn't make sense to apply a review process designed for a 200-foot tower to a small cell that you can fit in the size of your hand.

In fiscal year 2018, we will also work on promoting innovation in the broadcast space by authorizing television broadcasters to use ATSC 3.0, the next-generation television standard. This standard holds the promise of bringing 4K video, immersive audio, better accessibility features, and advanced emergency alerts to American consumers.

The Commission also still has a great deal of work to do to carry out the spectrum pipeline language from the 2015 Bipartisan Budget Act, and the administration's budget proposes to extend the FCC's auction authority to 2027 in order to raise an additional \$6 billion. This work includes substantial negotiations with sister agencies, identification of new spectrum for commercial use and sharing, and a broad range of engineering activities that requires staff-intensive work. But the agency's excellent staff is up to the task, and we intend to tackle these challenges head-on. The faster we get spectrum into the marketplace, the more innovation we'll see and the more consumers will benefit.

Third, we will focus on protecting consumers and public safety.—The number one topic of complaints we receive from American consumers involves unwanted robocalls. Accordingly, I've made combatting this scourge one of the Commission's top priorities. In March, for example, the Commission adopted a Notice of Proposed Rulemaking and a Notice of Inquiry to consider allowing service providers to block robocalls under certain circumstances, without fear of liability for failing to complete calls. This includes a proposed safe harbor that would allow providers to block presumptively invalid calls that spoof unassigned phone numbers before they reach consumers.

In fiscal year 2018, we will continue to work on a variety of fronts to combat unlawful robocalls. Our Enforcement Bureau will investigate and take appropriate action to penalize those who are breaking the law. And our Consumer and Governmental Affairs Bureau, along with our Wireline Competition Bureau, will continue to work on rules that will make it easier for carriers to stop these unwanted calls.

We will also emphasize expanding the communications opportunities available to Americans with disabilities. Another key Commission priority has been to improve the quality of Video Relay Service available to those who are deaf or hard of hearing. During fiscal year 2018, we will continue this important work.

We will also extend our efforts to protect public safety. June is Public Safety Month at the Commission, and at our next monthly meeting on Thursday, June 22, we will vote on three items to help law enforcement and protect the American people. First, we will advance a proposal to establish a Blue Alert code so that the Emergency Alert System is better able to warn of imminent dangers to law enforcement officials. Second, we will take another step to support FirstNet's development of a nationwide, interoperable broadband network for public safety officials. And third, we will move forward with a proposal to make it easier for law enforcement to discover the identity of those who make threatening phone calls to individuals or organizations. During fiscal year 2018, we will continue working on these areas and others to ensure that our Nation's law enforcement officers get the support they deserve and to keep Americans safe.

Fourth, we will focus on reforming the FCC's processes.—The American people deserve to have a nimble and responsive regulator, and we aim to deliver just that. We hope to modernize and streamline the FCC's operations and programs to increase transparency, improve decisionmaking, build consensus, reduce regulatory burdens, and simplify the public's interactions with the Commission. Last year, this subcommittee included report language to encourage many of the steps that I have already taken to enhance agency transparency. On February 2, 2017, we started releasing items to be voted upon at the Commission's monthly meetings at least three weeks in advance of those meetings. It used to be the case that the American people weren't allowed to see these items ahead of time. Only after the vote was taken were they able to see our work. This system benefited high-priced lobbyists who were often able to get access to information, but it left every other American in the dark. I am extremely pleased by the reaction to this reform and am working on additional ways to increase agency transparency. For example, we are in the process of developing an agency dashboard so that it is easy for the American people to see how we are doing on some key metrics.

When it comes to agency reform and our internal operations, it's critical to emphasize the importance of IT to our mission. We are a licensing agency, and our licensing is IT-based. We conduct auctions, and auctions have a significant IT component. We are a consumer protection agency, and the vast majority of consumer complaints come to us online. There are other examples, too, but the point is that IT is invaluable.

By modernizing our IT systems and moving away from legacy systems, we can reduce overall costs and improve the agency's operations. In recent years, we have made substantial progress on this front, but there is still more work to do. In particular, we have been focused on moving systems to the cloud. In fiscal year 2018, we will continue to upgrade our IT and prioritize those projects that produce the biggest bang for the buck.

Finally, when it comes to agency reform, we must be willing to take a hard look at how the Commission is structured. Today, I don't believe that the Commission is organized in a way that focuses sufficiently on economic analysis. When it comes to legal analysis, we have the Office of General Counsel. When it comes to engineering analysis, we have the Office of Engineering and Technology. But we lack a similar center for economic analysis.

That's why, later this year, I intend to send to the Appropriations Committee a plan that would create an Office of Economics and Data within the FCC. A working group of FCC staffers has been busy consulting with people inside and outside of the Commission to figure out, among other things, how this office should be structured and what authorities it should have. In keeping with a fiscally responsible approach to running the Commission, this office will be staffed with existing FTEs and will not require new FTEs. I look forward to receiving the group's recommendations this summer, and hopefully the Commission this fall will approve the establishment of this office.

Looking ahead to the next fiscal year, I am excited about the steps the FCC can take to bring digital opportunity to more Americans, promote technological innovation, protect the American people, and improve our agency's operations. And I believe that this budget request will help us to advance these goals in a fiscally responsible way. By capturing new administrative efficiencies, improving our internal processes, and focusing on our core responsibilities, we can accomplish more for the American people for less money.

Thank you for this opportunity to discuss the FCC's budget proposal, and I will be pleased to answer any questions that you may have.

Senator CAPITO. Thank you, Chairman.
Now I would like to turn to Commissioner Clyburn and ask for her to present her testimony. Thank you.

STATEMENT OF MIGNON L. CLYBURN, COMMISSIONER

Ms. CLYBURN. Let us try that again. Chairwoman Capito, Ranking Member Coons, and Members of the subcommittee, good afternoon. It is my distinct pleasure to appear before you to offer my perspective on the FCC's fiscal year 2018 budget request. Yesterday marked the FCC's 83rd anniversary. And while much has changed since 1934, our responsibility when it comes to protecting consumers, advancing competition, and ensuring the reliability and resiliency of public safety communications remains unchanged.

To achieve these goals, the FCC needs a fully staffed workforce. However, the agency finds itself with the fewest number of FTEs in more than 30 years. In some cases, this has created much needed efficiencies. In others, it has required employees to double up on responsibilities with little or no pay increase. This not only puts at risk the quality of the final work product, it also has a direct impact on work-life balance.

To put this assertion into perspective, each year the Federal Employee Viewpoint Survey asks FCC employees whether they agree or disagree that they have sufficient resources to get their job done. In 2011, just over 30 percent of FCC employees disagreed with this statement. By 2016, that figure had risen to nearly 38 percent. So additional budget and staffing cuts will likely lead to this number increasing even further in the coming years.

Furthermore, while not unique to the FCC, an increasing number of Federal employees are eligible for retirement. Today, there are 362 FCC employees that are retirement eligible, equaling roughly 23 percent of our workforce. In practice, 124 employees have already departed the agency this year, and this figure is only expected to increase. Some will retire while others will leave for new job opportunities. So while we have no choice but to think about a future which recruits and retains the Nation's next generation best and brightest, we must do so, and do so we will.

You may have also heard me speak about the need for better broadband data. In part, because I have heard from far too many communities that take issue with the FCC's figures. They have said that where our data shows that there is either fixed or mobile broadband coverage that in actuality the service ranges from spotty to non-existent. It should not be this difficult for the expert agency to have accurate data down to the street level, for we know that improved data enables us to better target our infrastructure efforts and improve the accuracy of our national broadband map.

And I am a strong believer in the power of broadband to tackle some of our Nation's greatest challenges, particularly when it comes to healthcare. Thanks to the work of the FCC's Connect2Health Task Force, we have a clearer picture of where the greatest needs exist. Chairman Pai has committed to carrying on the work of the Task Force and I am hopeful that through a sustained investment in this initiative it will continue to fuel and inform us when it comes to broadband health policy and investment for and in rural and underserved communities.

As the subcommittee prepares its appropriations bill for fiscal year 2018, I am also hopeful that IT infrastructure will be top of mind. Modern IT infrastructure should be able to handle a few hundred thousand public comments without grinding to a halt. And to demonstrate the agency's commitment to IT modernization and cyber security, future budget requests should include a dedicated subaccount supporting these critical needs.

Finally, I would like to talk about the agency spectrum auctions program. Despite several auctions currently in development and more in the pipeline, the Commission's budget request would cut \$5.8 million from the program. Our auctions produce a tremendous return on investment and are a win-win for consumers, industry, and the Federal Government. With 5G on the horizon, we need to look long-term and focus on how we will provide the funding necessary to administer timely and efficiently run auctions. A sustained investment in our auctions program will help unlock the next generation of wireless broadband and ensure that America remains a leader in wireless innovation.

Returning to the Commission's central mission, it is a point of great disappointment to me that this FCC is on the track to dismantle many of the key rules involving consumer protections and competition. Is this a prelude to the Commission that ultimately allows large companies to exist in a regulatory free zone? I ask this because the American people count on the FCC to be the referee on the field, ensuring that our Nation's communications providers play by the rules and consumers have a chance to be on the winning team, but only if this agency calls the right plays will it be able to say that it is truly putting consumers first.

I would like to thank you once again for giving me the opportunity to testify today. I look forward to answering any questions you may have of me.

[The statement follows:]

PREPARED STATEMENT OF HON. MIGNON L. CLYBURN

Good afternoon Chairman Capito, Ranking Member Coons and Members of the subcommittee. Nearly 4 years ago, I was honored to appear before this Subcommittee in my role as Acting Chair. Today it is my distinct pleasure to return as a Commissioner to offer my perspective on the Federal Communications Commission's fiscal year 2018 budget request.

We are at an unprecedented time in the FCC's more than 80 year history. The issues we are tasked with addressing are not only increasingly complex, they directly impact the everyday lives of Americans. Yet the agency finds itself tackling these issues with the fewest number of FTEs in more than 30 years. In some cases, this has created much needed efficiencies, in others it has required employees to double up on responsibilities with little or no pay increase. This not only puts at risk the quality of the final work product but it also has a direct impact on work/life balance. To put this assertion in perspective, each year the Federal Employee Viewpoint Survey asks FCC employees whether they agree or disagree that they have sufficient resources to get their job done. In 2011, just over 30 percent of FCC employees disagreed with this statement. By 2016, that figure had risen to nearly 38 percent. So further budget and staffing cuts, will likely lead to this number increasing even further in the coming years.

Equally alarming is that an understaffed FCC undermines our core mission of protecting consumers, advancing competition and ensuring the reliability and resiliency of public safety communications. Additionally, when employees are forced to work unpaid overtime to get the job done, not only can this accelerate staff turnover or burn-out but it may force employees to violate provisions of the Antideficiency Act.

Furthermore, while not unique to the FCC, an increasing number of Federal employees are eligible for retirement. Today, there are 362 FCC employees that are retirement eligible, equaling roughly 23 percent of our workforce. In practice, 124 employees have already departed the agency this year—some for retirement while others will leave for new job opportunities. During the three previous fiscal years, we lost a combined total of 441 employees. So we have no choice but to think about a future which recruits and retains the next generations' best and brightest. Former Commissioner Jessica Rosenworcel once proposed an engineering honors program, modeled after the FCC's highly successful attorney honors program. I strongly support this concept and feel that it should include a pipeline for those with expertise in economics, public policy and communications.

You may have also heard me speak a lot about the need for better broadband data. This is important to me because I have heard from far too many communities that take issue with the FCC's data. They say that where our data shows there is either fixed or mobile broadband coverage, that in actuality, the service ranges from spotty to non-existent. It should not be this difficult for the expert agency to have accurate data down to the street level, for we know that improved data will enable us to better target our infrastructure efforts and improve the accuracy of our National Broadband Map.

With this goal in mind, it should come as no surprise that I am a strong believer in the power of broadband to tackle some of our Nation's greatest challenges, particularly when it comes to healthcare. Thanks to the work of the FCC's Connect2Health Task Force, we have a clearer picture of where the greatest needs exist. Specifically, we have learned that over 36 million Americans live in counties with what can best be described as a "double burden" of need, meaning there are high burdens of chronic disease and a need for or lack of adequate broadband connectivity. Chairman Pai has committed to carrying on the work of the Task Force and I am hopeful that through a sustained investment in this initiative, it will continue to fuel and inform us when it comes to broadband health policy and investment for and in rural and underserved communities.

And as the subcommittee prepares its appropriations bill for fiscal year 2018, I am also hopeful that IT infrastructure will be top of mind. We all remember the headlines of 2014, when a deluge of public comments in response to the Commission's open Internet proceeding caused the FCC's website to crash. Fast forward to last month and it would seem like déjà vu all over again. With headlines like "Net-neutrality supporters cripple the FCC website again," one begins to realize we have a systemic problem on our hands. Modern IT infrastructure should be able to handle a few hundred thousand public comments without grinding to a halt. To demonstrate the agency's commitment to IT modernization and cybersecurity, future budget requests should include a dedicated sub-account supporting these critical needs.

Finally, I would like to talk about the agency's spectrum auctions program. Despite several auctions currently in development and more in the pipeline, the Commission's budget request would cut \$5.8 million from the program, representing a 5 percent reduction. Our auctions produce a tremendous return on investment and are a win-win for consumers, industry and the Federal Government. Take for example the AWS-3 auction which resulted in \$20 billion for deficit reduction, as well as full funding for other key priorities such as FirstNet. With 5G on the horizon, we cannot just think in the short-term which means providing the funding necessary to administer timely and efficiently run auctions. A sustained investment in our auctions program will help unlock the next generation of wireless broadband, giving our communities the much needed fuel for growth and sustainability and ensuring that America remains a leader in wireless innovation.

Returning to the Commission's core mission, it is a point of great disappointment to me that this FCC is on track to dismantle many of our key rules involving consumer protection and competition. Is this a prelude to a Commission that ultimately allows large companies to exist in a regulatory free-zone? The American people count on the FCC to be the referee on the field that ensures our Nation's communications providers play by the rules. The FCC as referee ensures consumers have the chance to be on the winning team. But only if this agency calls the right plays will it be able to say that it is truly putting #ConsumersFirst.

Thank you once again for giving me the opportunity to testify today. I look forward to answering any questions you may have.

Senator CAPITO. Thank you, Commissioner Clyburn.

And now I would like to turn it over to Commissioner O'Rielly. Welcome.

STATEMENT OF MICHAEL O'RIELLY, COMMISSIONER

Mr. O'RIELLY. Chairman Capito, Ranking Member Coons, and Members of the subcommittee, thank you for the opportunity to appear before you. I commend FCC Chairman Pai for preparing the budget request presently before the subcommittee. In particular, I appreciate the Chairman's effort to trim the budget in terms of overall funding and personnel compared to the fiscal year 2017 budget submission and final appropriations level. While these are difficult decisions to make, I am sure, changes as those outlined in the submission can be made without undermining the ability of the Commission to execute its mission.

If I could suggest one area where additional resources may be justified, it would be support for further work on the Commission's Universal Service Fund within the Wireline Competition Bureau. On another note, while it appears that the decision to relocate the Commission headquarters is final, I do think it is necessary to comment that the move will have a negative impact on the agency. For instance, I know of several seasoned agency professionals will choose to leave the Commission rather than transfer to the new location.

In terms of the Commission's structure, I would argue that we maintain outdated bureaus and divisions based on bygone eras. Simply put, the Commission maintains regulatory silos based on transmission mechanisms that predate the invention of the Internet and that radical conversion that has occurred since then. Accordingly, I would humbly suggest this subcommittee consider requesting the Commission to prepare transformative plans for the agency structure.

While this hearing is focused on the Commission's fiscal year 2018 budget, it seems appropriate to raise a couple of policy issues before the Commission for purposes of updating the subcommittee.

First, as mentioned, it is a top Commission priority to make broadband available to as many Americans as possible. In addition to the two USF reform items discussed in the budget, the Commission also completed reform of a rate of return regulations last year. This bipartisan effort supported then and still now by the affected industry will allocate just over \$2 billion over the next 10 years for rate of return carriers so they can expand their networks and economically bring service to consumers.

Additionally, I would be remiss if I did not mention my perpetual project, to finally act on the Remote Areas Fund, or RAF. Second, part and parcel of reforming our subsidy mechanisms, the Commission is reviewing preparing to move the major barriers to broadband deployment imposed by State, local, and Tribal governments. Activities that delay and deny network builds, including excessive fees and official and de facto citing moratoria are being replicated throughout our Nation and cannot be allowed to continue if we are to ever make broadband availability as ubiquitous as possible.

Third, despite best efforts over the last years trying to coax and cajole States not to divert necessary fees collected for 911 purposes, the Commission identified that in 2016 eight States and a U.S. territory continue that practice. While I have previously outlined a few possible ways for the Commission to push States to stop this

behavior, this subcommittee maintains the ability to condition billions of dollars in grants and funding provided to States which can serve as a great course corrector on this subject.

Lastly, for many reasons, the Commission has allowed individuals to illegally set up shop in the middle of radio bands, causing immediate and lasting harm to existing legitimate broadcasters and the American public. Thankfully, the Commission is preparing to take a different track towards these illegal operators, but the subcommittee's endorsement will be welcome as we set forth to end this practice.

Thank you for the opportunity to be before you today and I look forward to answering any questions you may have. Thank you.

[The statement follows:]

PREPARED STATEMENT OF HON. MICHAEL O'RIELLY

Chairman Capito, Ranking Member Coons, and Members of the subcommittee, thank you for the opportunity to appear before you to discuss the fiscal year 2018 budget request for the Federal Communications Commission and other matters.

I. BUDGET REQUEST AND PRIORITIES

I applaud FCC Chairman Pai for preparing the budget request presently before the subcommittee. Due to a timing quirk, I didn't vote in favor of it. Because the original version of the request was prepared in early 2016 under the previous chairman and contained a substantial increase in spending, essentially reversing the prior year's reductions, I withheld my support. Since then, improvements were made by Chairman Pai over the last few months and the document now reflects a direction that I can generally support.

In particular, I appreciate the Chairman's effort to trim the budget in terms of overall funding and personnel compared to the fiscal year 2017 budget submission and final appropriations levels. While these are difficult decisions to make I'm sure, changes as those outlined in the submission can be made without undermining the ability of the Commission to execute its mission. It is not unreasonable to reduce spending by 5.2 percent and personnel by 6.6 percent, as compared to last year (and I trust that the personnel reduction can be maintained notwithstanding the fact that the hiring freeze has been lifted).

If I could suggest one area where additional resources may be justified, it would be support for further work on the Commission's Universal Service Fund (USF) within the Wireline Competition Bureau. Many vital projects to expand broadband to unserved communities come from the individuals that oversee these issues and yet the total number of staff working on them is surprisingly small. Affected industry are stunned to learn that only a dozen or so people are working on the High-Cost program, a critical part of our nearly \$9 billion fund. Wireline certainly qualifies as one of the Commission's workhorse bureaus, and it has been noticed that necessary changes to our programs have been put on hold for lack of resources. However, I believe that this issue can be addressed through reallocating resources within the agency, thereby avoiding increases in overall personnel.

USAC Difficulties.—While I previously suspected that there were questionable practices and poor management occurring within the Universal Service Administrative Company (USAC) (the quasi-private company the FCC uses to oversee its USF programs), it has recently been brought to the Commission's attention that USAC has been plagued by a number of significant problems preventing the efficient distribution of funding contributed by hard-working Americans. It should be clear that Chairman Pai inherited this situation and has been steadfast in trying to right the ship. However, the subcommittee should be aware that more problems are likely to be unearthed in the near future. This may force the Commission to revisit every aspect of USAC, including possibly putting the functions out for competitive bid, which would be my preference. This development does not diminish my belief that the Commission's High-Cost program is on reasonably strong footing, especially compared to other agencies' broadband programs or any new mechanism that could be created to distribute funding.

Spectrum License Fees.—In terms of policy recommendations included in the budget, I do not support the imposition of spectrum license fees on private, commercial entities. The fundamental purpose of spectrum auctions is to efficiently allocate licenses, not raise revenue. Thus, trying to enact a fee to simulate auction value is

not sound spectrum policy. To make those holding licenses obtained outside of the auction process pay additional fees now would result in increased costs on consumers and impact providers' ability to offer service. Similarly, market forces and other commercial spectrum users put constant pressure on commercial license holders to be spectrum efficient. Moreover, in most instances, licensees have paid for the spectrum in the secondary market when licenses were sold or swapped.

I have, however, advocated that the Congress consider imposing Agency Spectrum Fees on those Federal Government agencies that hold spectrum. By establishing an opportunity cost, agencies would be forced to be more spectrum efficient and maintain only those frequencies needed to meet their respective missions. In today's structure, agencies face no penalty for letting spectrum remain fallow and there is only so much pressure that can be applied to agencies to become spectrum efficient.

FCC Move.—While it appears that the decision to relocate the Commission headquarters is final, I do think it is necessary to note that the move will have a negative impact on the agency. For instance, I know that several seasoned agency professionals will choose to leave the Commission rather than transfer to the new location, which seems to be full of logistical nightmares, including the inability to easily access the site by major roads or metro. The loss of productivity from staff departures and lack of individual office space may not be noticeable immediately, but it will be felt over time.

II. COMMISSION STRUCTURE AND OPERATIONS

While the communications and technology industries serve as a vibrant job creator and economic productivity generator, their regulatory overseer needs a serious upgrade. The Commission's structure consists of outdated bureaus and divisions based on bygone eras. Routinely criticized, the Commission maintains regulatory silos based on transmission mechanisms that pre-date the invention of the Internet and the radical convergence that has occurred since then. Just consider that one of the Commission's top priorities, broadband availability, is overseen by at least three different bureaus depending on the underlying technology used (e.g., fiber, mobile or satellite). Also, note that the Media Bureau governs our intervention in over-the-top video offerings, VoIP is done by the Wireline Competition Bureau, and yet both are mere Internet applications, which the Commission arguably doesn't have authority to regulate. Then, there is the fact that the Enforcement Bureau is essentially duplicating functions that should be reserved for the policy bureaus. And the agency's 60 or so economists are scattered throughout the building, effectively preventing coordination or synergies.

The last major Commission reorganization was the creation of new Public Safety Bureau in the mid-2000s, which is hard to consider a real modernization effort. Shouldn't the communications and technology industries, which are constantly facing dynamic changes, have a regulator that reflects such a marketplace?

Accordingly, I would humbly suggest that this subcommittee consider requesting the Commission to prepare transformative plans for the agency's structure. The preparation of such plans would complement the work of Chairman Pai to improve the Commission's operating procedures and create a new Office of Economics and Data. Notwithstanding the good work of the Chairman to date, only Congress can sufficiently direct the Commission to conduct the requisite work to generate a blueprint for a modern FCC organizational structure.

III. POLICY MATTERS

While this hearing is focused on the Commission's fiscal year 2018 budget, it seems appropriate to raise a couple of key policy matters before the Commission for purposes of updating the subcommittee.

Broadband Availability & USF.—As mentioned, it is a top Commission priority to make broadband available to as many Americans as possible. In addition to the two USF reform items discussed in the budget, the Commission also completed reform of our rate-of-return regulations last year in order to allow standalone broadband offerings, while also bringing other necessary improvements forward. This bi-partisan effort—supported then and still now by the affected industry—will allocate just over \$2 billion over the next 10 years for rate-of-return carriers so they can expand their networks and economically bring service to consumers. Additionally, I would be remiss if I didn't mention my perpetual project to finally act on the Remote Areas Fund, or RAF. These are the hardest to serve portions of America and the Commission has generally ignored them for that reason. Hopefully, in the very near future, we will be able to finally make funding available and select providers willing to serve these areas.

Infrastructure Deployment.—Part and parcel to reforming our subsidy mechanisms, the Commission is reviewing and preparing to remove the major barriers to broadband deployment imposed by State, local and Tribal governments. Quite simply, these entities, by their actions, and inactions in some cases, are standing in the way of Americans getting affordable broadband connections. For instance, just a few weeks ago, I was in New Orleans, Louisiana inspecting the installation of small cell systems to bring faster wireless broadband to its citizens. Unfortunately, the city and the local energy company, Entergy, were involved in a sad game of finger pointing and foot dragging that prevents Southern Light, a regional installation specialist and broadband expert, from getting electrical power to the site equipment. This means that a major wireless carrier is unable to double or triple wireless download speeds in some of the less affluent neighborhoods. Such activities that delay and deny network builds, including excessive fees and official and de facto siting moratoria, are being replicated throughout our Nation and cannot be allowed to continue if we are to ever make broadband availability as ubiquitous as possible.

911 Fee Diversion.—Despite best efforts over the years trying to coax and cajole States not to divert necessary fees collected for 9–1–1 purposes, the Commission identified that, in 2016, eight States and a U.S. territory continue the practice, and it did so via self-reporting, meaning the issue may be even more acute. Make no mistake about this: States are either misleading their citizens about where any “extra funds” are going or, worse yet, shortchanging their 9–1–1 system operations from having the resources to function optimally. At the same time, these budgetary shenanigans highlight why many States are ill-prepared to migrate their systems to the next generation of 9–1–1 systems (or NG–911). While I have previously outlined a few possible ways for the Commission to push States to stop this behavior, this Committee maintains the ability to condition billions of dollars in grants and funding provided to States, which could serve as a great course corrector on the subject.

Pirate Radio.—One of the Commission’s fundamental obligations is to issue licenses for the use of the radio spectrum and ensure that licensees’ offerings are protected from harmful interference. Unfortunately, for many reasons, the Commission has allowed individuals to illegally set up shop in the middle of the radio bands, causing immediate and lasting harm to existing legitimate broadcasters and the American public. More specifically, in at least four markets (New York City, Miami, Boston and parts of New Jersey), these hooligans deprive broadcasters of ad revenue and listeners and keep emergency messages from being heard. Thankfully, the Commission is preparing to take a different tack toward these illegal operators, but the subcommittee’s endorsement would be welcome as we set forth to end this practice.

Thank you for the opportunity to be before the subcommittee today and I look forward to answering any questions that Members may have.

Senator CAPITO. Thank you, Commissioner O’Rielly. And I want to turn to Senator Coons for an opening statement, so welcome. It is our first meeting together.

STATEMENT OF SENATOR CHRISTOPHER A. COONS

Senator COONS. Thank you, Chairwoman Capito. Thank you for being gracious about allowing me to make an opening later in the hearing. And I want to thank the entire Commission for being present today. This is our first hearing and your role as Chairwoman of FSGG Subcommittee and I look forward to working with you on a number of the challenging issues we have in front of us.

And I welcome Chairman Pai. He is certainly well known to all of us and Commissioner Clyburn and Commissioner O’Rielly. I welcome the opportunity together to examine the FCC’s budget request and discuss your crucial role in ensuring that national communications remains reliable, effective, efficient, and continuously innovating.

The proposal in front of us is 5 percent below the current operating level of 340 million. Unlike most agencies, the FCC’s funding has been frozen since 2009, forcing it to find savings in a variety of ways in order to meet necessary increases, inflation, and staff raises. These have been found in some cases through productive

means, eliminating waste and duplication, but I am concerned there are no more easy efficiency improvements to be found and that it may end up affecting the very heart of the FCC's mission to lose another 102 FTEs.

To achieve the proposed reductions, these staff cuts, relying on an agency wide hiring freeze, will result in the lowest staffing levels on record for the agency. So I look forward to hearing from the witnesses about how this indiscriminate means of achieving this reduction will be accomplished without impacting the core mission of the agency.

I think there is positive news in that we share an enthusiasm for improving broadband access and the \$10 billion Universal Service Fund administered by the FCC expands access to vital communications necessary in our modern age. I was pleased to hear from Chairman Pai about progress on the Mobility II funding the Connect America Fund, which will provide significant funding for LTE and broadband service. I look forward to working with Chairwoman Capito about that as well.

I will express in the course of my questioning about concerns about reversal and policy direction around net neutrality and consumer privacy protections for Internet data, things where I think it is important that we work together to reassure the public and find common ground. Although Chairman Pai has only led the FCC a few months, you have already made significant progress on a few fronts, NextGen TV and the Incentive Auction to Spur Innovation. It is my hope that we can also work together to find ways to protect consumers and to address the fundamental issues around net neutrality that are a concern to a lot of my constituents as well as to our country as a whole.

Thank you for sharing your perspectives about the FCC's funding requirements and program goals and thank you, Chairwoman Capito, for your leadership.

Senator CAPITO. Thank you. And I noticed that the ranking member of the full committee has entered the room and I wanted to extend an opportunity if he would like to say a few words.

STATEMENT OF SENATOR PATRICK J. LEAHY

Senator LEAHY. Thank you, Madame Chairwoman and my friend from West Virginia, and of course, my friend from Delaware, Senator Coons.

I did want to come here especially to raise a question on net neutrality. But then I looked at the Trump budget proposal. It cuts funding for the FCC's core budget by 5 percent. This may pale in comparison with the drastic cuts proposed for other agencies, but it is a significant reduction for an agency whose budget basically flat funded for years. Perhaps it reflects an agency, and an administration, that is walking away from some of its core responsibilities. And in no area do we see that more than net neutrality and broadband privacy protections.

This is something I hear every single time I go home. I hear it at the airport. I hear it going through the grocery store. I hear it coming out of church on Sunday. I hear it everywhere. In fact, nearly 4 million Americans, 4 million—it is an unprecedented num-

ber—called on the FCC to preserve the Internet as a free and open platform for all.

In Vermont, small businesses and large businesses all say the same thing. They want strong meaningful rules to protect consumers and small businesses and startups. They want rules to protect the Internet as an open forum for commerce ideas and expressions.

I held a Judiciary Committee field hearing in Burlington, Vermont. Small businesses told me directly about why these rules are so important. They do not want any special treatment. They simply want assurance that the Internet would remain an equal playing field, so they could use the Internet to expand their businesses beyond the Vermont border without fear of prohibitive fees or being squeezed out of special Internet “fast lane”.

One very large company, which started as a very small company, said they do not want special preference. They do not want to be in a position where small companies can get squeezed out by big companies that can afford it, they being one. They said otherwise you are never going to see a small company start up again like them.

Now, the FCC’s landmark Open Internet rules reflected the concern of these small businesses and of millions of Americans. The rules ban pay-to-play deals that could derail startups and small businesses, stifling innovation. The FCC’s landmark Open Internet rules ensure the Internet remains an open and dynamic platform for innovation and free speech, but Chairman Pai, immediately after President Trump appointed you, the FCC suddenly did an about face. I mean, you could just almost hear the tires squeal as it spun around.

Chairman Pai, your actions to gut the Open Internet rule appear to further only one cause: to ensure that large corporations are able to maximize profits at the expense of hardworking Americans and small businesses—so many of the small businesses that many of us have in our States. And I’m troubled. I am deeply troubled, Chairman Pai, that under your leadership the FCC has turned from an agency whose primary objective was to ensure competition in the marketplace, to one that has been co-opted by moneyed interests and big businesses that could squeeze out competition. So I hope you will reconsider your ill-advised decision to undermine the Open Internet rules. Undermining net neutrality protections harms consumers.

And I will close with this. In the past few months we have seen efforts to undermine important consumer protections not only from within the FCC, but also from Congress. And I remain disappointed, but sadly not surprised, that the Republican leadership and President Trump have teamed up to side with corporate interests over consumers when they rolled back common sense broadband privacy protections. But I would urge my colleagues on both sides of the aisle: You have a lot of small businesses, a lot of startups that are going to be just killed by this. If corporate interests are placed above the interests of consumers—hardworking Americans—that is unacceptable. Americans deserve better.

Madame Chair, I will place my full statement in the record.

[The statement follows:]

PREPARED STATEMENT OF SENATOR PATRICK J. LEAHY

Thank you, Chairwoman Capito and Ranking Member Coons, for the opportunity to make brief remarks.

The Trump budget proposal for fiscal year 2018 cuts funding for the FCC's core budget by 5 percent. If implemented it would require a reduction in over 100 full-time employees. While this proposed cut may pale in comparison to the drastic cuts President Trump proposed for other agencies, it is a significant for an agency whose budget has been flat-funded since fiscal year 2009. Perhaps this is a reflection of an agency, and an administration, that is walking away from some of its core responsibilities. In no area do we see that more than net neutrality and broadband privacy protections. While the main focus of today's hearing is the FCC's budget request for fiscal year 2018, it is also the duty of Members of the Appropriations Committee to provide oversight and hold agencies accountable for their actions. And today I exercise my oversight responsibilities.

Two years ago, nearly 4 million Americans—a truly unprecedented number—called on the FCC to preserve the Internet as a free and open platform for all. Americans from all walks of life and from all sectors of our economy participated in the FCC's rulemaking process. They wanted strong, meaningful rules to protect consumers, small businesses, and startups. They wanted rules to protect the Internet as an open forum for commerce, ideas, and expression.

At a Judiciary Committee field hearing that I held in Burlington, Vermont, I heard directly from small businesses about why these rules are so important. They do not want any special treatment. They simply want assurance that the Internet would remain an equal playing field, so that they too could use the Internet to expand their businesses beyond the Vermont border without fear of prohibitive fees or being squeezed out of special Internet “fast lanes.”

The FCC's landmark Open Internet rules reflected the concerns of these small businesses and of millions Americans. The FCC listened because net neutrality protections benefit and protect both consumers and broader marketplace competition. The rules ban pay-to-play deals that could derail startups and small businesses, stifling innovation. And the rules ensure that the Internet remains an open and dynamic platform for innovation and free speech.

Yet, immediately after President Trump appointed you, Chairman Pai, the FCC abruptly reversed course. Chairman Pai, your actions to gut the Open Internet rules appear to further only one cause: to ensure that large corporations are able to maximize profits at the expense of hardworking Americans and small businesses.

I am deeply troubled that under your leadership, the FCC has turned from an agency whose primary objective was ensure competition in the marketplace, to one that has been co-opted by moneyed interests and big business. I hope you will reconsider your ill-advised decision to undermine the Open Internet rules. Undermining net neutrality protections harms consumers. It hurts small business and startups looking to enter the market. And it undercuts economic opportunity and freedom of speech.

Unfortunately, in the past few months we have seen efforts to undermine important consumer protections not only from within the FCC, but also from Congress. I remain disappointed, but sadly not surprised, that Republican leadership and President Trump have teamed up to side with corporate interests over consumers when they rolled back commonsense broadband privacy protections. Americans should not have to worry that their personal information will be used or shared by their Internet providers without their express consent. Repeatedly placing corporate interests above the interests of consumers and hardworking Americans is unacceptable. Americans deserve better.

Senator CAPITO. Thank you, Senator Leahy.

At this time, we will proceed with our questioning, which each Senator will do 5 minutes per round and I will begin the questioning.

My first question, Chairman Pai, is about something that was alluded to in your statement, but also in Commissioner O'Rielly's statement about helping States figure out the best way to deploy broadband, eliminate some of the barriers, and I know that this is something you have been working on. Could you just give me a quick status on where you are on that? And I would like to say my State of West Virginia just did pass a semi-controversial broadband expansion bill which I am very proud the governor signed.

Mr. PAI. Thank you for the question, Madame Chairwoman.

We have taken aggressive steps to work cooperatively with States to make sure that we put broadband deployment front and center at all levels of government. For instance, soon after I was designated as chairman I set up the broadband deployment advisory committee, one critical working group of which is devoted specifically to States, helping to try to find a model code so that States that are interested in broadband deployment can take an approved, off the shelf, if you will, set of guidelines—

Senator CAPITO. Right.

Mr. PAI [continuing]. To help promote deployment. Similarly, with the stewardship of our Universal Service Fund programs, we have worked cooperatively with States to make sure that every dollar that is spent is spent wisely on unserved areas. And I met with a number of State officials that—

Senator CAPITO. Is there one State that is doing it really well?

Mr. PAI. There are a number of them. For example, with Tennessee, I have had a chance to learn about how they have migrated Next Generation 911, which is an IP based system. They have been very forward looking. I have worked well with Governor Cuomo in New York State to deliver Connect America Fund subsidies to upstate New York to serve unserved Americans. There are a lot of States—every State, I think, shares that interest.

Senator CAPITO. Right.

Mr. PAI. They might have just different challenges and different ways of getting there.

Senator CAPITO. Okay. Turning to the budget quickly or some comments that both Commissioner Clyburn and Commissioner O’Rielly made sort of coming at it from different angles. I wanted to give you a chance to respond, or anybody really, but first your thoughts since you did not address it in your opening statements on possible agency structure, losing FTEs, 5 percent shrinkage in the budget. How do you see that in terms of your ability to get your job done?

Mr. PAI. A few different points. First, obviously the Office of Management and Budget offered governmentwide guidance with respect to the 5 percent figure and we crafted our budget consistent with that guidance. Secondly, we wanted to make sure that we had our eyes on the prize so to speak to make sure that the FCC discharges its core responsibilities, even if the staffing level might be lower. And that is why, for instance, despite the fact that we have fewer staffers, we have been able to focus on doubling the input—output, rather, with respect to our meeting items where we consider the highest profile issues.

In the first month, we got across the finish line in a bipartisan way, with reforms to our Connect America Fund Program to make sure that fixed broadband and 4G LTE reaches unserved Americans. We have also considered some structural changes to make sure that we use the assets that we have in the most effective way.

So, for instance, in the first speech I gave on this topic I proposed the creation of an Office of Economics and Data. One of the things I found is that the FCC, unlike at the FTC or the SEC, our economists are sprinkled throughout the various bureaus and offices. Some of them are very busy and some of them are not as busy.

And so I thought, well, if the lawyers have an Office of General Counsel, if the engineers have an Office of Engineering and Technology, what if we centralized the economic function so that we consolidate all of the economists, that great talent that we have got, in one office? That would allow us to deploy resources more effectively. It would allow us to attract economists to the agency. And it would give them sort of an academic environment, if you will, to consider bigger picture things, to write white papers, for instance, that have generated some of the most innovative ideas that the FCC has such as price gap regulation and the incentive auction. So we are doing the best we can to meet those core responsibilities within the constraints that have been presented to us.

Senator CAPITO. Thank you.

Commissioner Clyburn, you and I have talked about this in terms of coordination between the FCC, the NTIA, and RUS, we have resources there for broadband deployment. We have some issues in our State with the initial stimulus package and the deployment of those funds as well. What are you seeing in terms of coordination with the FCC here? Is this an area of strength or things that need to be worked on?

Ms. CLYBURN. I think both, to be honest with you. We have a Federal State joint board initiative of framework where we are constantly in contact with our State counterparts about how we can do and how we could build, you know, better relationships.

The Chairman was right to point out that his BDAC that was started gives a blueprint or a means for people to weigh in. I will also say, however, that there is only one local representative on BDAC as it stands now. And what I am hoping that we will continue to do is work with local authorities, work with us and come up with maybe an infrastructure consortium that will better and in a more streamlined and targeted way really get everybody's voices at the table, you know, come with a collaborative framework and really do what you and I want. That is to Connect America. I think there are better ways that we can do it, but only through a concerted effort and by concentrating on what our goals and objectives are and listening to State and local voices will that happen.

Senator CAPITO. Thank you. Thank you.

Senator Coons.

Senator COONS. Thank you, Chairwoman Capito.

Commissioner Pai, if I might, just an opening concern. There is widespread concern now that the administration has been choosing not to respond to requests for information from Democrats which counters a longstanding tradition upheld by both parties as to how Federal agencies ought to respond to questions. Will you commit to responding to all questions, whether from the majority or the minority, that come to you from Members of Congress?

Mr. PAI. Thank you for the question, Senator. Absolutely. I have done so during my tenure as chairman and I will do so going forward.

Senator COONS. Thank you. I appreciate that. As we discussed yesterday, consumer privacy is a topic of real concern to me. On April 3 President Trump signed into law a new enactment that nullified the FCC's previous rules that provided some movement on protection for consumer Internet privacy. As we discussed, you be-

lieve it is the Federal Trade Commission's core challenge, but it is currently outside their jurisdiction, so the FTC cannot currently provide that protection. What privacy protections are currently in place and who is enforcing them? Do you think there should be privacy protections for consumer privacy in the Internet? And how do we achieve a restoration of or a move towards a place where there really are robust privacy protections for consumers?

Mr. PAI. Thank you for the question, Senator. I appreciate your concern as well as the courtesy extended to me yesterday in having this conversation.

I think that the baseline expectation of every consumer and every regulator and elected official I dare say should be a uniform expectation that sensitive information will be protected whenever a consumer goes online. Prior to 2015, the Federal Trade Commission was the cop on the beat, so to speak. They applied a consistent privacy framework across the Internet economy. After 2015 when the FCC deemed telecommunications carriers to be common carriers, we stripped the FTC of jurisdiction. And so that left a hole in terms of privacy protections.

Thus far, the only thing that applies is section 222 of the Communications Act, section (c)(1) which applies these requirements to telecommunications carriers. And that is because the FCC's rules on privacy have never gone into effect.

And so essentially in 2015 we had to figure out how to go forward. We established some guidance based upon our Enforcement Bureau which provides some guidance to the industry. And I think going forward what we wanted to make sure is that we protect consumers as best we can and work collaboratively with the Federal Trade Commission to make sure that regardless of what agency is handling the issue we need to make sure the consumers are protected consistently.

Senator COONS. So do you think it is clear now who is responsible and who has got jurisdiction or do you think there is additional action that needs to be taken in order to provide robust protection for consumer privacy?

Mr. PAI. Well, currently the FCC does have jurisdiction over Internet service providers. The Federal Trade Commission has jurisdiction over everyone else essentially in the Internet economy. And so that is why I have committed to working very closely with Chairwoman Ohlhausen and other members of the Federal Trade Commission to make sure that we have a consistent framework that protects consumers whenever they go online.

Senator COONS. The other area we discussed that I have real concern about is net neutrality. When the FCC first proposed a rule on net neutrality 3 years ago a record-breaking number of Americans filed comments. In fact, I think it crashed the FCC system. It certainly crashed my phone system in my office as well. And then when it was announced as a calendar item again, that happened again. So that just indicates that there is a lot of Americans who have strong views about trying to keep the Internet open.

How will you consider the public comments you receive and how will the Commission weigh the voices of millions of Americans who have got serious concerns about Internet freedom?

Mr. PAI. An important question, Senator. And that is part of the reason why we are having the public conversation. The FCC could have chosen to proceed through what is known as a declaratory ruling, simply saying that what the previous FCC did is null and void as a matter of law and move ahead. But it was important to us to make sure that we had the notice and comment process that is prescribed by the Administrative Procedure Act. And so that is why we had a full 90 days of public comments in addition to the 3 weeks before the FCC's vote to allow for robust public comments.

Once the public comment period closes in the middle of August, August 16, I believe, we will take stock with the FCC's terrific staff and try to figure out whether the FCC should move ahead, and if so, how. And we will be guided, of course, by the principles of substantial evidence as enunciated by the D.C. Circuit, by the facts that are in the record and, of course, by the motivation to figure out what is in the public interest at the end of the day.

Senator COONS. I would be interested, Commissioner Clyburn, in your comment on either of those two issues, net neutrality and consumer privacy, and then I have one last issue I wanted to briefly raise.

Ms. CLYBURN. Well, one of the—I find myself wondering who is the referee on the field and the cop on the beat when it comes to broadband Internet access service as it stands now. With the passage of the CRA and with the direction that we have taken, I—honestly, I am not an attorney, but I do not think anybody is directing, is now monitoring the balls and strikes.

So from that perspective, I am worried. I am worried as a broadband—as a customer, and I am worried for the millions of others who are. I forgot the other question, Senator.

Senator COONS. Consumer privacy and net neutrality and—

Ms. CLYBURN. I believe—

Senator COONS [continuing], How we provide some reassurance to the public that their concerns are going to be taken serious by the Commission.

Ms. CLYBURN. I am hopeful that the 4 plus million comments that we have heard will be taken seriously by this body. Regardless of what form they came in, people took the time to weigh in. Their voices should be heard. We are a government agency. We are responsible for doing the will of the people.

Senator COONS. I will close by just complimenting the proposed rule to reduce robocalls, as someone who is myself the victim of fairly frequent spoofing robocalls where I answer because it looks like it is a number I know, but it is not. I look forward to your work on that. It is a predatory practice and I am glad you are working to stop it. It is my hope that together we will address the unresolved concerns of consumer privacy protection.

Thank you, Madame Chair.

Mr. PAI. Thank you, sir.

Senator CAPITO. Senator Lankford.

Senator LANKFORD. Thank you. Chairman Pai, I appreciate all of you being here as well today. Tell me a little bit about Lifeline and the process that you are going through right now. I know there has been a continual review on Lifeline to determine how to be able to use that. There has been an expansion of that the past several

years. There is still a concern about fraud and want to be able to make sure that obviously taxpayer dollars are used correctly and wisely. Where are you on that right now?

Mr. PAI. Thank you for the question, Senator. I have been very consistent in saying that our top priority at the FCC is closing the digital divide. And I think that the Lifeline Program is an important part of the question in terms of closing that divide.

One of the things that we have looked at is the way to make sure that every single dollar, which is after all a taxpayer dollar that is spent in the Lifeline Program goes to somebody that needs the help. And so we want to make sure that the Lifeline Program is directed toward needy consumers to make sure that, for instance, any of the fraud in the system is investigated and rooted out and so we are in the process of determining the next steps, but you can rest assured that certainly in terms of purpose it is focused.

Senator LANKFORD. All right. So give me a timeline on that because obviously if I go back a year in this same hearing or the year before that, that seemed to be very similar rhetoric that I have heard for a while on it. While there have been some advances over the past several years, what is the next step and when is the next step on dealing with fraud in Lifeline?

Mr. PAI. I think in the near term we have made it a priority. I have spoken with members of the staff as well as folks at the Universal Service Administrative Company which oversees this program among others on our behalf. And so I cannot give you a specific date, but what I can tell you is over the next several months we hope to be able to report to you improvements.

Senator LANKFORD. So let's say by October, November, December? When are we talking about?

Mr. PAI. Yes. I can commit to that. Yes.

Senator LANKFORD. Okay. That would be terrific. So tell me a definition as you are walking through issues between underserved and unserved. That seems to be the great debate on just about every program and everything that we are engaging in with any kind of subsidy. Which has priority, underserved or unserved?

Mr. PAI. They are both important, but to me at least it is critical to get folks who are unserved onto the other part of the ledger. It is increasingly important for folks to have Internet access, whether you want to start a job, educate your kids, get healthcare, and participate in civic society and other functions. So to me at least, it is important, I think, to bring some of those 30-some million Americans who are off the grid when it comes to the digital infrastructure on.

Senator LANKFORD. Right.

Mr. PAI. And so that is consistent if you look at our Universal Service Fund administration, what we have been focused on.

Senator LANKFORD. Okay. So then the priority is shifting more towards that or is it already there where it is the unserved rather than underserved?

Mr. PAI. I think it is largely there. If you look at, for example, the New York Broadband Initiative, we got across the finish line my first week as chairman. If you look at Mobility Fund Phase II, if you look at some of the other programs or initiatives that we have done, we are consistently trying to attack that digital divide.

And the divide is keenest when folks simply do not have access at all. And I have seen that for myself just last week when I was traveling through the upper Midwest.

Senator LANKFORD. So there has been some conversation about all of these areas on digital divide, but you have also got an issue of means testing. And I know that there has been some questions about that. To be able to put out just a generic question, what should we do on a means testing? Just because they do not have access does not mean that they do not necessarily have the finances to access. They have just chosen not to. Where is that right now?

Mr. PAI. That is one of the things we are currently studying and I am actively working with Commissioner O’Rielly as well as the members of our staff to figure out the way forward on that initiative. And it is an important idea worth considering.

Senator LANKFORD. Okay. So answer this question for me. I have already heard it come up so far in this conversation today, that FCC is leaning more towards the big corporate interests rather than the interests of the consumer. Why would that accusation sit out there and how would you answer that?

Mr. PAI. I respectfully disagree with that assessment. I think that if you look at our track record we have been consistently making sure that we have a more competitive marketplace. And if you look at some of our initiatives with respect to, you know, reforming the broadband program to making sure that wireless Internet service providers have the ability to deploy. If you look at our Broadband Deployment Advisory Committee, if you look at my support of the Gigabit Opportunities Act—Each one of these initiatives is targeting and incentivizing some of the smaller providers to enter in the marketplace, to invest more risk capital.

Now, that is something that is often difficult to convey. You know, last week when I was visiting Ethoplex, a fixed wireless provider in Germantown, Wisconsin, one of the things I learned from them is how difficult it is for those with limited budgets to be able to compete with some of the bigger folks. But they are the ones that are critical to providing a more competitive marketplace and those are the ones we are going to continue to focus on.

With respect to consumer initiatives, as I said, robocalling is the number one consumer complaint that people have with the FCC. As of a couple of years ago, the FCC had only issued one citation in that calendar year with respect to it. We have made it a top priority, which is why we have taken steps to block some of those spoofed robocalls that are coming to Senator Coons and God knows how many other millions of Americans. And so we are refocusing the agency on getting the biggest bang for the buck when it comes to consumer protection.

Senator LANKFORD. So when you get into enforcement, obviously robocalls, I would completely agree with Senator Coons on that. That is a big issue, especially the spoof calls, the numbers that are not the actual number, things that are clearly there. Getting authorities to it. I know decency standards have been one of those things that have been out there for a while, unenforced at times when there are clear violations. Ways that you can enforce existing

law and regs that are there would be of great benefit to the consumer across the country.

Mr. PAI. And if I might, Senator, part of the challenge is also that some of these robocalls come—they originate from outside of our country. And so one of the privileges of being the chairman is that I have the chance to meet with and work with some of my counterparts abroad. And I can tell the subcommittee that I have actively spoken with a number of them to make sure that this is on their radar too because it requires cooperation with some of our international counterparts to make sure that we crack down on all levels of some of these robocall schemes.

Senator LANKFORD. Great. I appreciate that. Thank you.

Senator CAPITO. Thank you. Senator Van Hollen.

Senator VAN HOLLEN. Thank you, Madame Chairman, Ranking Member Coons. Good to be on this subcommittee and looking forward to a discussion of the FCC issues. I will say, Madame Chairwoman, I know this is not the subcommittee of jurisdiction, but we just read reports that there may be a new healthcare bill being unveiled as soon as maybe Friday or next week. And I would urge all of our colleagues to urge their colleagues to have hearings on that issue just like we are having a hearing on this. That will affect one-sixth of our economy and hundreds of millions of our fellow Americans. I think it is important to have a hearing on that as we look at the budgets of the FCC and other Federal agencies.

To all the commissioners, welcome. Chairman Pai, I do join my colleagues, Senator Coons and Senator Leahy, in expressing disappointment with the overturning of the privacy protections through the CRA. Obviously, you have a different view, but in my view that action puts millions of Americans, it makes them more vulnerable with respect to privacy information over the Internet. And I will also be following up in writing with questions on net neutrality where we have very real differences. And I think my colleagues expressed them well, but I have some follow up.

I was pleased to hear your comments about expanding access to the Internet and positive comments about the Lifeline Program. Yes, of course, I think all of us want to make sure that nobody is abusing it, but it is also true that it has helped provide broadband access to millions more Americans, wouldn't you agree with that?

Mr. PAI. Yes, sir.

Senator VAN HOLLEN. Thank you. And in Maryland I can tell you that we have a 39 percent participation rate, which means of those eligible, 39 are participating now, which is about 231,000 subscribers, people who would not otherwise have access to the Internet.

In addition to the Lifeline Program, what additional measures are you taking or would you suggest that you take to expand access to broadband throughout the country, to every neighborhood, both urban, suburban, and rural?

Mr. PAI. That is a great question, Senator, and it is a challenge. Obviously, given the geographic dispersion of our population, some of the terrain, we have challenges, but I am committed as Senator Capito said in her opening statement, that now is the time to close the digital divide. And you know better than anyone given Mary-

land's diversity, that it is increasingly important for folks in your State, around the country, to get that access.

I am committed to using every tool in the FCC's tool box to address it. And that means, number one, making sure that we wisely spend the Universal Service Funds that are under our administration to direct them to unserved parts of the country. Number two, making sure that we modernize our regulations to incentivize the deployment of next generation networks. That means everything from working cooperatively with State and local governments to adopt broadband friendly policies to making sure that smaller competitors can get access to the poles, the ducts, the conduits that allow them to deploy some of this infrastructure. It might not be exciting, but this is really one of the biggest cost elements to deploying networks.

The other piece of it, which is admittedly discretionary, but it is the FCC shining a spotlight on the importance of this issue and working cooperatively with this body. Last September I proposed a concept of Gigabit opportunities because I have seen for myself in Alaska native villages above the Arctic Circle and in poor towns in Mississippi that there are far too many folks on the wrong side of the digital divide and that is because in a lot of cases there simply is not a business case for building in some of these areas. Companies see there is not a return on the investment.

I am committed not so much as a regulator, but frankly as an American, to making sure that they get on the right side of that divide. And so that is why I proposed this idea, which I am very grateful to Senator Capito for advancing. I think there are a lot of ways that Congress could advance this, including through the infrastructure plan, if there is one, to direct some of those Federal funds to the FCC for broadband deployment.

It is an important issue and I would love to work with you and any Members of the subcommittee who are interested in solving the problem.

Senator VAN HOLLEN. Thank you. And, Commissioner Clyburn, I know that you recently finished your tour I think connecting the communities, bridging the communications and the opportunities divide that we have been discussing. What are your thoughts on this? Is this an area where we can do more? Is this an area where congressional action would be helpful to you?

Ms. CLYBURN. Yes, yes, and yes.

Senator VAN HOLLEN. All right.

Ms. CLYBURN. One of the things that is the biggest driver that the biggest cost causer in terms of distress is in health. If you fall into a place where health is a challenge, that is usually the number one reasons for bankruptcies. But if you have a connected community, if you have people who are able to communicate with their healthcare professionals in a telemedicine or telehealth in that paradigm, if we can get that affordably through Lifeline, through satellite, through NGS or geo stational whatever it is called in terms of satellite. If we could do all of those in terms of the infrastructure as well as through programs that are means tested, that are Lifeline, that are targeted, then we can really solve many of our critical problems.

So then the answer is yes no matter what the discipline, no matter what, if it is health, education, and life. Connectivity is key and we have to really use all of the tools in our arsenal, our regulatory arsenal to encourage innovation and investment and opportunities.

Senator VAN HOLLEN. Okay. Well, thank you. And, look, Madame Chairwoman, I look forward to working with you and Members of the subcommittee and commissioners on some of the suggestions that were made on this issue, vital issue.

Thank you.

Senator CAPITO. Thank you, Senator.

Senator Moran.

Senator MORAN. Chairwoman, thank you very much. Congratulations on becoming the chairwoman of this subcommittee. I know of your continual efforts in regard to broadband deployment in West Virginia and obviously we care about Kansas and Arkansas and Connecticut. And I look forward to working with you and Senator Coons. I look forward to working with you and Senator Coons to make sure that broadband is deployed.

Well, I recently saw, and I do not—Mr. Van Hollen talked about all across the country. I recently saw an article where rural America is now what used to be the problems of urban, suburban, I am sorry—urban, the core city centers has now spread to rural America based upon the statistics. And we are all looking for hope and this is—technology and telecommunications is one of the areas in which I think we can provide hope for parts of the country that all of us care so deeply about.

I wanted to take a moment, Commissioner O’Rielly, Commissioner Clyburn, Chairman Pai, you are three commissioners that I have very much appreciated working with. Without exception, we have had, in my view, a good relationship of significant response and care and concern for the concerns that me and my staff raise. And I look forward to that relationship continuing.

There was contention, Commissioner Clyburn, in past commissions. And I am not here to, you know, debate how well you all got along, but I know from time to time, Commissioner, you are opposed to some of the decisions that Commission is currently making, but I would hope that you would assure me that you feel that your voice is being heard and that you have opportunity to participate in the process that sometimes seemed missing in a past commission.

Ms. CLYBURN. Most of the time I feel that way, sir.

Senator MORAN. That is a good solid answer. I would encourage the Chairman and the Commission to work closely together. None of this stuff is easy, but voices need to be heard and results. Commissioner O’Rielly.

Mr. O’RIELLY. I was going to say I admittedly am biased on this topic, but in fairness, I think the Chairman has done a wonderful job in setting a new tone for the Commission. There is a fresh breath of air. And I think that even if my colleagues and I disagree on things, we move on to the next issue and try to work together. So I think it has really moved forward, a real kudos to the Chairman.

Senator MORAN. I appreciate hearing that. The nature of the conversations we heard in this subcommittee and the Commerce Com-

mittee over the past several years, in my view, there is an opportunity for that to be improved. And I just encourage you all to take advantage of that.

Ms. CLYBURN. Senator, I would like to also give credit to my fine Southern upbringing for that.

Senator MORAN. Well, since you put it that way, Commissioner, what I was trying to do was to make sure that Chairman Pai is behaving as a Kansas should.

Mr. PAI. Can we—I do not know if we can speed up the clock here.

Senator MORAN. If not, we will talk to his mom and dad. Let me know.

Ms. CLYBURN. Thank you. Appreciate it.

Senator MORAN. Chairman, perhaps the place to start with you is with you on repack. We are looking for a smooth and orderly process. I want to be certain that no broadcaster is forced to go dark through no fault of their own. We have had this conversation numerous times with all of you. I assume that your commitment remains to work with us to ensure that adequate resources are provided to these impacted broadcasters. I assume that is the case, yes?

Mr. PAI. Yes, sir.

Senator MORAN. If as expected the amount of money Congress set aside, the \$1.75 billion currently authorized to pay these moves of broadcasters is insufficient, how will the FCC go about reimbursing broadcasters for covered costs on their moves? Is it going to be a pro rata circumstance in which you meter out payments for everyone? Will you pay in full those who moved first? Is there some other method by which you can fairly treat the circumstances that you find yourself in with that amount of money?

Mr. PAI. All right. Thank you for the question, Senator. So we are in the early stages at this point. We are still waiting to receive cost estimates from the broadcasters. Those estimates should come to the Commission by July 12. At that point, the staff will take a look at all of the estimates that have come in, determining which of those costs are reasonable, and then aggregate them to try and figure out what is the number that we think will be required. If that number is greater than \$1.75 billion, you have my personal commitment that I will come immediately to Congress to let you know so that Congress can make the appropriate decision.

As to what the FCC would do at that point, we have not yet determined, but hopefully we will be able to work with you cooperatively on that topic.

Senator MORAN. Well, I worry about the slowness of Congress, so if you come to us and there is a shortfall in the amount of money, how long will it take for us to respond and what our response will be, I would encourage the Commission to be prepared to figure out how they treat broadcasters in that circumstance, which I think can help us, perhaps if that occurs, help us move our process along as well.

Mr. PAI. Absolutely. One of the core planks of the Incentive Auction, as I have said for many years, is to ensure that broadcasters are treated fairly and consistently with the Spectrum Act. One part of that is not having to go out of pocket for expenses that are rea-

sonably incurred as a result of the Incentive Auction repack. And so I would look forward to working with you and any members of the subcommittee on that.

Senator MORAN. Well, we have had a lot of concern particularly for rural and small broadcasters where the demand for movement will occur probably early in the larger broadcast areas. And I want to make sure that—I know, I see your finger—that—that did not sound good. We want to make sure that those are not left behind in the process.

Mr. PAI. Absolutely, sir. So we have spaced out the repack over 10 different phases. We have also taken different steps to make sure that broadcasters are aided in cases where circumstances beyond their control have impacted their ability to repack smoothly. So, for example, a six-month extension of their construction permit in situations like that. So we are taking steps to make sure that broadcasters like that, again, are treated fairly and consistently with the law.

Senator MORAN. Chairman, thank you very much.

Senator CAPITO. Thank you. I would like to, first of all, wish my fellow West Virginia a Happy West Virginia Day today. June 20, 1863 our State was formed.

So now I would like to call on Senator Manchin.

Senator MANCHIN. And I would like to wish my wife a happy birthday because it is on West Virginia Day also. It helps me to keep both of them.

Senator Capito's State and mine had one of the lowest rates of broadband service in the Nation when the FCC voted to modernize its Universal Service Program in 2011. And in 2016, that is unfortunately where we remain, still the lowest. Significant gaps in mobile broadband coverage still exists in West Virginia. Unfortunately, inaccurate data has failed rural and remote communities across this country. And I say that inaccurate data has caused us to be left behind.

To help address this problem, Senators Wicker, Schatz, Fischer, Klobuchar, Peters, Moran, and I introduced the Rural Wireless Service Act of 2017. The legislation would standardize the way FCC collects mobile data, coverage; in short, it represents an accurate picture of the real-world coverage experience currently available to consumers. The FCC's website notes that its current mobile coverage data has certain limitations that will likely result in an overstatement of coverage. You and I have talked about this, I think.

Mr. PAI. Yes, Senator.

Senator MANCHIN. We cannot afford to leave rural America behind and we are very concerned about this, so I guess what steps are you currently taking, Chairman, in order to address this?

Mr. PAI. Thanks for the question, Senator. This is something I take seriously having been to West Virginia and seen on my own phone how you cannot get a signal in places like Clay and Clendenin and other areas that were hurting.

Senator MANCHIN. You have been there, haven't you?

Mr. PAI. I have. And it is—been in some desperate situations.

Senator MANCHIN. It is tough, isn't it?

Mr. PAI. It is. It is very hard, and especially when you have an area that, as that area was, that was hit by a flood and people are calling 911. You know, I have visited the 911 call center and I have talked to the director about how hard it was to make sure that people were safe in circumstances where connectivity cannot be a given. And so we want to change that equation. And part of changing it is making sure that our data is accurate. And so I am aware the National Broadband Map has not been updated for several years. We want to make sure that we use data that is accurate based on Form 477.

And while I cannot reveal non-public information, what I can say is we are actively working with our staff at the FCC to make sure that we have the right input, so to speak, so that the output in terms of policy is the right one for West Virginia, and I dare say for the country.

Senator MANCHIN. Anybody else have any comments on that?

Ms. CLYBURN. I agree that that Form 477 process needs to be improved. We need more granular data. We need a staff to do so. We also need to make sure, especially going forward with the Mobility Fund Phase II and the other auctions that we have a challenge process that all companies no matter of size or scope, that they could weigh in on that.

Senator MANCHIN. I hope that you would look at the topography of our State too. It is not Kansas. Okay. Kansas might be rural, but it is flat. We are not, so our challenges are much more compounded than any other State because of the terrain we have. We are beautiful, but we have challenges that come with that beauty.

Ms. CLYBURN. Part of my nerves are still up that mountain that I climbed, so I am aware of the beauty and the depth of—

Senator MANCHIN. Another critical component of the Universal Service Program will be the Remote Areas Fund. I am encouraged by the Commission, what you all have reaffirmation to move forward with this Remote Areas Fund no later than a year after the Connect America Fund Reverse Auction. There are almost 13,000 locations in West Virginia alone and rural areas that are eligible for this Remote Areas Fund support.

Many of these communities still lack access to a single viable broadband option where there is simply no business case for a provider to serve without our support. The market is just not large enough to attract them. And I believe the Remote Areas Fund must be targeted to reach these areas. So, Commissioner O'Rielly, would you like to discuss this Remote Areas Fund a little more in depth?

Mr. O'RIELLY. Well, I appreciate the question, Senator. This has been a difficult issue for me. It is something I worked on as soon as I got to the Commission.

Senator MANCHIN. Right.

Mr. O'RIELLY. These are the hardest of hard places to serve.

Senator MANCHIN. Absolutely.

Mr. O'RIELLY. And they have been put at the bottom of the list in terms of priority, that everything else has to be taken care of before we can get to that. And the Chairman has graciously increased the timeline and the effort to push on that, but for 3 years I have been pushing on this and I am not confident at this moment that by the time my term expires we will have finished it.

Senator MANCHIN. Well, when you look at Appalachia, Appalachia is hit all across the board, every bit of it. And you want a war on poverty, you let us—you know, we get the people connected, they have got a chance to survive.

And let me follow up with just last week Senator Heller and I introduced legislation that includes a Government Accountability Office report on the National Broadband Map. As you know, the Commission has not meaningfully updated the map since it inherited it from the National Telecommunications Information Administration. The GAO report will take a look at whether the National Broadband Map reflects the broadband coverage currently available across the country. I guess, Chairman Pai, how do we work together? How much effort and how much money are you putting towards revitalizing this?

Mr. PAI. It is definitely a priority for us. We are looking at the options for updating.

Senator MANCHIN. Do you have people? Do you have the resources?

Mr. PAI. I believe we do, Senator. And—

Senator MANCHIN. You have people dedicated towards?

Mr. PAI. We do, yes.

Senator MANCHIN. Do they know the urgency of how—I mean, we are going to be in a stalemate if we cannot get connected.

Mr. PAI. Yes.

Senator MANCHIN. You know, I think that Senator Capito and I both—and she has worked so hard on this—but both of us understand being around our State. You know, when I was Governor we had less than 50 percent of the people connected. I think we are up to about 85. We have every school and every rural—we have a school, a post office, or a public building that is connected today. We do not have the market to drive the market forces out. That is where we are just dead in the water.

Mr. PAI. You have my personal commitment, Senator. I mean, just last week I drove over 1,600 miles from Milwaukee, Wisconsin to Casper, Wyoming, visited everything from a Sioux reservation in South Dakota to a farm town named Spencer, Iowa. And I saw for myself how difficult it is in some of these places to make sure that people have digital opportunity. And so it is a top priority for me.

Senator MANCHIN. Well, Mr. O’Rielly said it has been on the bottom of the priority list for so, so long, so I hope all of you are committed to putting it on the top of your priority.

Mr. PAI. Without question.

Senator MANCHIN. Thank you. Thank you, ma’am.

Senator CAPITO. Thank you. Senator Boozman.

Senator BOOZMAN. Thank you, Madame Chair. Thank all of you for being here and we do thank you for your willingness to serve. And I know you are working very, very hard for the best interest of the country.

My questions really had to do with rural broadband and I think they have been covered very well. And it is interesting. The Committee is made up of a lot of rural areas and as you can see from the questions that probably the majority of the questions you have been asked today has to do with that, so it is so, so very important.

One of the things that has been talked a lot about and really in the past has had good bipartisan support and I think it has the opportunity of good bipartisan support is an infrastructure package. And we talk in terms of railroads and runways and roads, the three Rs, but we do not talk a lot about infrastructure in terms of broadband. So you can have all those things in place and if you are not connected, as members have been talking about stories and then you all have relayed stories, it simply does not work.

So what I would like to know, Commissioner Pai, and the rest of you guys can chime in also, but I hope that we have a firm commitment from you all in the sense of wanting to weigh in, be part of the infrastructure package in the sense of giving good advice so that we can include not just the three Rs, but have broadband in any package that comes forward.

Mr. PAI. Senator, absolutely. Obviously we defer to the elected branches of government, but back in March I said that to the extent that Congress is considering an infrastructure package, I would hope that digital infrastructure, that broadband is a part of that. It is increasingly important for all walks of American life from agriculture to healthcare, and there are too many Americans who do not have it. And so I am certainly committed to working on that.

Senator BOOZMAN. And I would agree. We make the decision, okay, but where you can be helpful is just giving good information in the sense of that is really what it is all about. And I will tell you, unless you—most of us have the opportunity to be all over our States and we are in the hinterlands and it does get very, very difficult.

Commissioner O'Rielly.

Mr. O'RIELLY. Thank you, Senator. I was going to just make two points. One is that if the decision is made in terms of infrastructure, I would hope you look at the Commission's high cost fund for purposes of where the dollars are spent rather than creating a new program.

Senator BOOZMAN. Okay.

Mr. O'RIELLY. Or using again NTIA's program which I think has had past difficulties. So I think that would be something that we have demand for that we cannot meet with our current dollars that could be filled in with added dollars from the Congress. And two would be that if you look at authority in terms of the Commission's authority overall to push back on some of the barriers to deployment that have been posed by State, local, and Tribal governments. And we want to be respectful of them, as the Chairman highlights, but I have been working on this for 25 years and some of these things are the same problems we had in 1995.

Senator BOOZMAN. Can you give a couple of examples regarding that?

Mr. O'RIELLY. Sure. There are two parts that dominate. One is the cost and the second is the approval process. I was just in New Orleans—

Senator BOOZMAN. Well, that is what I said, in pushing back against State and Tribal.

Mr. O'RIELLY. Sure. Yes. So—

Senator BOOZMAN. What specifically do we need to do?

Mr. O'RIELLY. Right. So we have some authority, and I think it is extensive authority, but I think it would be added if Congress were to amplify those points to make clear that we want broadband deployed. And, you know, there are some things that already banned by localities and States such as RF exposure and aesthetics that seem to be coming back. De facto moratoria are still happening in the United States, even though they are already prohibited in some regard. And so we have to constantly fight over what the language is and if Congress can clarify that for us, it would be very helpful.

Senator BOOZMAN. Good.

Ms. CLYBURN. I think from where I sit, Senator, is that we need to make sure that our house is in order. And what I mean by that is when we approve and consider and look and evaluate different technologies, we need to make sure that they are appropriate for the surroundings. So if I live on top of the mountain, which I do not and will not, you know, stringing fiber to me might not be the best way to connect me. So we have got, you know, satellite. We have got NGSOs. We have got, you know, TV white spaces. We have got other things that we need to make sure that are on par that have a chance to be approved and green lit by this agency. So, again, it is everything, what everybody said and the things that we have not thought about that you will help us with.

Senator BOOZMAN. Okay. Thank you, Madame Chairman.

Senator CAPITO. Senator Daines.

Senator DAINES. Chairwoman Capito, Ranking Member Coons, thank you very much and congratulations, Senator Capito. I am honored to call you Chairwoman Capito.

Senator CAPITO. Oh, thank you.

Senator DAINES. Well done. I want to thank the Chairman and thank the Commissioners for coming out today to testify. As the Commission is well aware of, out in Montana it is a rural State. I think there is a real rural tone to today's hearing. And when you are from a urban area you can take connectivity for granted. We do not take connectivity for granted in a rural State like Montana.

In fact, I look at some of the maps the Commission has put out, you see gaping holes across the West. This is not only a barrier for businesses, for individuals. It has been talked as a public safety issue. And as Commissioner Clyburn stated, the maps do not even reflect the actual coverage in many areas. I spend a lot of time in my pickup, tens of thousands of miles driving around Montana. In fact, in Montana, we do not measure time in terms of oil changes. It is tire changes driving around the State. We see areas where it is—there is no cell coverage, let alone LTE coverage, so I very much look forward to working with each of you as we continue to close that gap.

Chairman Pai, the Commission recently completed an incentive auction and is currently working on the repack and move of broadcasters to new channels and wireless companies in the spectrum that they purchased. In Montana, this auction is an important step forward to expanding broadband into our rural and particularly our tribal communities. However, we must take and make sure that we balance the rights of wireless companies to have access to the spec-

trum that they won outright with the real needs of broadcasters who have to vacate that same spectrum.

Mr. Chairman, can you promise and commit to work with all of those effected by the incentive auction and with Congress if needed to make sure this transition will go as smoothly as possible?

Mr. PAI. Yes, Senator, I will.

Senator DAINES. I feel like I am giving the marriage vows here or something. Wow. All right. I felt like a Sunday morning here, I will, by the grace of God.

Commissioner O'Rielly, another issue we have seen in Montana is inhibiting the expansion of broadband, that is inhibiting it is spectrum squatting. Some companies are buying up spectrum and not deploying it in the areas that desperately need it, but instead they are sitting on it and later selling it at a much higher price. What enforcement authority and actions including tightening the rules can the FCC take in order to make sure that spectrum is practical and efficient and not placed on a shelf awaiting maturity?

Mr. O'RIELLY. Well, absolutely. In fairness, most wireless companies expedite the deployment of wireless frequencies as soon as possible because they need them for the advancement of their networks, but there are some instances—and I think your point is highlighted, is we can tighten our build out requirements, and that is the timing and the percentages needed to comply to make sure that they maintain their license. And that is something that I have looked at and I think that we could do that going forward. I do not think it is something you can go backwards on, but I think it is definitely something we can tighten going forward.

Senator DAINES. We would appreciate it. It has been an issue for us—

Mr. O'RIELLY. Absolutely.

Senator DAINES [continuing]. Out West. This is for Chairman Pai and Commissioner Clyburn. I have been impressed by the ways that TV white spaces can be better used to serve rural communities, including use in education, in public safety, rural health. How do you see the use of TV white spaces being utilized to get broadband access to hard to reach areas which is certainly lacking today? And I will start with Commissioner Clyburn.

Ms. CLYBURN. Well, I will be quick and say it is more affordable. It allows for a more entry by smaller providers and some of the existing providers to do things at a less expensive cost. So, you know, to me, you know, to be able to get rid of the burdens and the hurdles have mostly been economic. And if you can have another way that would be, you know, not legacy to get to connecting communities, then I think it is a positive. So, to me, the underlying has been entry, cost entry, lowered tremendously.

Senator DAINES. Right. And for these rural communities that have very, very small budgets and they are struggling on revenues, I think it is something that could help.

Ms. CLYBURN. It could make the business case.

Senator DAINES. Well, they do not need the coverage beyond what this white space can deliver.

Mr. Chairman.

Mr. PAI. Senator, I think Commissioner Clyburn captured well the gist of what is at stake. I will simply add that I have had the

chance to talk to, for myself, with a number of the folks who were interested on this issue and so we are actively working on it at the moment.

Senator DAINES. Commissioner O’Rielly, and this is my last question. We are running out of time. One of the main goals in the Commission is to protect consumers. In Montana, we have seen an onslaught of these spoofed phone numbers and scammers using our area code for our entire State is 406. And they lure folks into a sense of false security because they see 406, kind of the hometown area code pop up. They think it is somebody perhaps that is okay. Scammers are getting better and better and I think it is our responsibility to move at a fast pace to keep up with them.

Could you outline for me what are some of the recent actions the FCC has taken to combat spoofing, robocalls, and these telephone scams?

Mr. O’RIELLY. Senator, I do not want to be dismissive of your question. It is very important and you get to—but it is something that we are actually going to address in 2 days from now. We have an item before us that I think the Chairman has graciously put forward. I think it will address some of this.

I want to be careful in terms of spoofing. There is the ability to get a number that is local even though you are outside the area, you know, for purposes of VOIP or something like that. That is not necessarily spoofing, but in terms of trying to commit fraud or harm the consumer, that can be that. So there is finite universes and definitions.

I always—when we had the conversation about robocalls, I would like to be careful and say illegal robocalls because robocalls in and of themselves can have benefits, and I want to be careful. So there is fine lines here, but your question is important. I do not mean to be dismissive.

Senator DAINES. No, that is fine. And then in 2 days, what is going to happen in 2 days? Is it another hearing or a meeting you are having?

Mr. O’RIELLY. We have our monthly meeting.

Senator DAINES. Okay. You are addressing this issue in that meeting then.

Mr. O’RIELLY. That is our intent, I think, is it, Chairman?

Mr. PAI. Yes. I am not sure if I am allowed to reveal any more information.

Senator DAINES. Okay. All right. Okay. All right.

Mr. PAI. But I can say, if I might, that we have already taken some steps to address this issue. For instance, a couple of months ago we allowed some of the carriers to block spoofed calls that are clearly from unassigned numbers. These are numbers that are not assigned to any person within the United States. We also wanted to explore the idea of allowing consumers to affirmatively say to their phone company, do not carry any call that is not from me, sort of like a do not originate call to mirror the do not call list.

Additionally, longer term, we are working with really talented engineers and technologists on call authentication. So to make sure that the person who is calling is in fact that person. So if you get a call from Senator Coons, for instance, it is not me trying to pitch you on the beauty of Wilmington. It is actually Senator Coons who

is trying to call you. And that seems like a very simple thing, but in the technologically challenged world that we are in, it is very difficult sometimes to make sure.

Senator DAINES. Yes. Okay. Thank you. I am out of time. We need to move as fast or faster than the bad guys is what we need to do here in this space, don't we?

Mr. PAI. Absolutely.

Senator DAINES. Yes. All right. Thank you.

Senator CAPITO. Thank you. I have one additional question and then I think Senator Coons has a question or two he would like to post. So I would like to begin, first of all, with thanking all of you for being here and I want to thank the Chairman for the transparency initiatives that you have put forward. I think that is—you know, you are getting into some controversial areas and I think the more transparent that you can be, the better. And I am glad that you have made moves in that direction and I would encourage more.

My last question really is, Commissioner O'Rielly, on the CAF 2 funding is relatively new to the unserved and underserved. I think, was it 2017 it started or 2016?

Mr. O'RIELLY. What, our decisions?

Senator CAPITO. No. When the money going for the 6 years on the CAF 2.

Mr. O'RIELLY. Okay. Yes. CAF II, okay.

Senator CAPITO. Yes. Yes.

Mr. O'RIELLY. Sorry. So the rate of return we did in 2016, the original CAFs for a number of years, and then we are doing CAF Phase II hopefully later this year and the decisions were made this year. Is that what you speak of? Yes.

Senator CAPITO. Right. Right. I am wondering do you have any data as to whether—because what I am concerned about is, for instance, in our State \$38 million a year additional for our State for underserved and unserved areas. I just—we have heard a lot of concern and deep concerns about the mapping and the accuracy of the data because we know anecdotally as we walk around or, you know, it sounds like all we do when we go home is go to the grocery store, but maybe that is what we do. You know, but you are always getting approached at the grocery store. You know, I cannot get Internet or my daughter cannot do her homework, blah, blah, blah. And then you go back to the carrier and it is like, oh, yes, we serve that area, when in actuality it is underserved or unserved.

So I guess are you seeing? I mean, what kind of accountability are we going to have that when you spend all of this money and we spend all of this money that we are really going to get the results that we desire?

Mr. O'RIELLY. First, I think the question that was raised earlier in terms of underserved or unserved, I think unserved has been the Commission's focus and has to be. Those that do not have service, I think that is the main priority of the Commission and will continue to be.

In terms of the dollars, we are trying to better pinpoint the dollars and how they are spent and make sure they go to those that actually need it. Better mapping will improve that. The 477 data

that we are going to improve hopefully soon will improve that. Right now it is done in a broader sense and we are trying to actually pinpoint that as best we can going forward. So——

Senator CAPITO. Yes. Just it is the Phase II money that I was talking about.

Mr. O'RIELLY. Yes. Yes.

Senator CAPITO. All right. Senator Coons. Thank you.

Senator COONS. Thank you, Chairwoman.

On media ownership rules, your current rules limit any broadcaster from reaching more than 39 percent of the country to ensure independence, variety, inclusion of local voices, minority voices. And if I understand correctly, the FCC is moving to reinstate the UHF discount which some would argue unwinds these requirements and you are now considering a merger between Sinclair and Tribune, which could create a massive broadcast group with access to three-quarters of all U.S. households dwarfing competitive media owners.

Do you believe the 39 percent limit should still be in place as a barrier to overconcentration in the market and what factors will you be reviewing as you look at media ownership going forward? Then I have one more question.

Mr. PAI. Senator, thanks for the question. At this point, it is very preliminary, so the UHF discount decision we made earlier was simply returning to the status quo. And the argument I made back then was that we could not repeal the discount without also considering whether any adjustments to the national cap were necessary. So we have not made any determinations about what that number should be. Our point was simply the administrative slash legal one of as one goes, so does the other. As the UHF discount goes, we also have to consider the national cap and we do not have a time-frame for considering that. And, of course, we have not made any—we have not received any papers with respect to the transaction you mentioned, so I cannot opine about how our rules might affect our consideration of that.

Senator COONS. Okay. And then last, I referenced in my opening questions that your current budget plan is to by attrition reduce I think it was 102 FTEs, but I did not hear clarity about sort of what the plan is and what officers or functions might be reduced. And I am concerned about whether the regular day to day functioning of the agency that is supposed to continue moving forward on things that maybe are not big national policy issues, but that need to be moved forward in order for carriers to have some predictability about processes they are involved in, whether they will continue or whether you expect significant disruptions as a result of this reduction in overall expenditures.

Mr. PAI. A critical question, Senator. I am confident that we will not experience any negative impact like that on our core programmatic responsibilities.

Just to give you one quick example, I recently met with the FCC team that handles E-rate appeals. So these are schools and libraries across the country that are looking for E-rate funding. For whatever reason, they have been sucked into this appeals process and some of those appeals have been around for almost 20 years. And so we recently found that we needed more resources on that

team to handle some of those appeals and to prioritize longest lasting ones and the most difficult ones.

So I met with them obviously to thank them for their hard work, but also to hear from them about some of the challenges. These are a lot of tricky cases. And at the end of the day, the message I left with them is that you will get the resources that you need. These are a lot of institutions that are critical to the American society and we need to make sure we give you an answer, give them an answer, the applicants an answer in a more timely way. And so in areas like that, we are going to make sure that we meet those core responsibilities in a way that will make Congress proud and certainly deliver value for American taxpayers.

Senator COONS. Could I just invite the other two commissioners, if you have concerns about staffing levels? I think, Commissioner O'Rielly, you made a sort of passing reference around the Universal Service Fund. I would also welcome hearing that as well in terms of staffing.

Ms. CLYBURN. Well, I will add to that. I support what the Chairman just put forth. I will say using a balloon example. When you squeeze a balloon one place, the air goes to another. And that is not necessarily always positive, meaning that resources or individuals are taken from somewhere else and that could possibly slow down efficiencies in other places. I agree and this is the Chairman's job to be efficient and direct appropriately, but continue. You know what our situation is. You know what we are faced with. We are asked to do more increasingly with less, and it is—I am positive that there is going to come a time when we are going to have diminishing margin returns and I think that time is quickly approaching.

Mr. O'RIELLY. I would only add to that that when we all talked about—the conversation about rural broadband, most of those decisions and most of the hard work are done by the Wireline Competition Bureau and the good folks working on the High Cost Program. And I have been working with them for many years now and, quite frankly, a number of items have to be stacked up because they do not have the resources.

That does not mean we cannot allocate resources from elsewhere. It does not mean that we cannot do the budget that the Chairman has put forward or the team has put forward. I think we can do both. I think we can improve our efficiency. I was just suggesting that they could use some additional resources in one particular very important part of our agency.

Senator COONS. Well, Commissioners, Chairman, thank you. Chairwoman, thank you for your graciousness. And I appreciate your dedication to continuing to move forward and to execute on the mission of the agency. Thank you.

ADDITIONAL COMMITTEE QUESTIONS

Senator CAPITO. So, thank you, Senator Coons. And thank all of you, again, particularly our witnesses for the testimony today. If there are no further questions, the hearing record will remain open until Tuesday, June 27, at 2:30 for subcommittee members to submit any statements or questions to the witnesses for the record.

[The following questions were not asked at the hearing, but were submitted to the Commission for response subsequent to the hearing:]

QUESTIONS SUBMITTED TO HON. AJIT PAI

QUESTION SUBMITTED BY SENATOR SHELLEY MOORE CAPITO

Question. Please provide an update on the FCC's move/restack.

Answer. The lease at the FCC's current headquarters location expires on October 16, 2017. In September 2015, the General Services Administration (GSA) issued a solicitation for offers to interested lease parties. In October 2015, Parcel 49C filed a pre-award agency level protest with GSA. In December 2015, the GSA Agency Protest Official issued a decision denying the protest in entirety. Thereafter, Parcel 49C filed a pre-award protest with GAO.

In March 2016, GAO issued a decision dismissing the Parcel 49C protest in part, and denying the balance of the protest. Parcel 49C proceeded to file a pre-award protest with the U.S. Court of Federal Claims in April 2016, and the court denied the protest in November 2016. In December 2016, the GSA executed a lease with Trammell Crow to move the FCC to a new building.

In February 2017, Parcel 49C, the owner of the current FCC's Headquarters building, filed a brief with the U.S. Court of Appeals for the Federal Circuit in an effort to retain the FCC as its tenant. In March 2017, the parties (Parcel 49C, GSA, and Trammell Crow) submitted a joint motion to the court to suspend the proceedings to allow the parties to attempt to resolve the protest outside of court.

The effort to resolve the protest outside of court is still ongoing. GSA is continuing to negotiate with Parcel 49C to obtain a lease extension for the FCC. And the FCC is continuing to work on the planning for the new building—GSA provided the FCC with a due date of August 9, 2017, for the FCC to submit its completed requirements to GSA and Trammell Crow so the design phase of the FCC's new space may begin.

QUESTIONS SUBMITTED BY SENATOR CHRISTOPHER A. COONS

Question 1. The budget request for the FCC is a 5 percent reduction below current levels, when eliminating the one-time moving costs we provided in fiscal year 2017. I am concerned that this is an arbitrary amount, not the product of thoughtful analysis. The budget would rely on an agency-wide hiring freeze, which will not result in a strategic reallocation of staff, but a random loss of the agency's institutional knowledge. Please explain the strategic vision you have for the agency that would result in these final staffing levels. How will you reduce staff in the areas that are being deprioritized? How will you ensure that the vital daily functions of the agency are still being performed?

Answer. The FCC has had essentially flat funding since fiscal year 2008. Before I became Chairman, the Commission dropped its FTE level from 1,776 to 1,572. The proposed fiscal year 2018 budget will follow this trajectory by providing for 1,448 FTEs. This staffing decision adheres to the Office of Management and Budget's guidance for the fiscal year 2018 budget submission to reduce spending by 5 percent from the prior fiscal year. In fact, the FCC's fiscal year 2018 request represents a 5.2 percent reduction from fiscal year 2017.

In light of current budgetary constraints, my strategic vision is simple—focus on our core mission and realize administrative efficiencies across-the-board, freeing up and redirecting staff to specific statutory-based tasks and provide them with the IT tools to accomplish their work. This vision includes refraining from regulatory overreach to conserve resources and foster economic growth. It also recognizes the reality that we are completely fee-funded, and reducing this burden will ultimately reduce the cost of services for American consumers. We will continue to find cost savings administratively to preserve our workforce options and use the most cost-efficient options for IT projects.

I should note that the spectrum auction cap, which has been steadily increasing over the past 5 years, was reduced by 5 percent as well. We arrived at this number after reviewing prior fiscal year spending and considering our anticipated workload for the next year. The lower cap is achievable in light of the scale-down of work associated with the broadcast television incentive auction. These budget reductions do not come easily.

Question 2. On April 3rd, President Trump signed a law which nullified the FCC's rules that provided protections for consumer Internet privacy. I understand that you

believe this should be the responsibility of the Federal Trade Commission, however, this is currently outside of their jurisdiction, so the FTC cannot provide this protection. So, with FTC lacking jurisdiction and FCC's rules nullified, what privacy protections are currently in place and who is enforcing them? Do you believe there should be protections in place when it comes to consumers' privacy on the Internet and what should they be?

Answer. Section 222 of the Communications Act requires telecommunications carriers to protect the privacy of their customers, and the FCC's Enforcement Bureau has existing guidance regarding how that section applies to ISPs' protection of consumers' privacy. American consumers' privacy deserves to be protected regardless of who handles their personal information. The Federal Trade Commission (FTC) is well-situated to deliver that consistent and comprehensive protection. The FTC is America's most experienced and expert privacy regulator, and the FCC's Restoring Internet Freedom Notice of Proposed Rulemaking proposes to return jurisdiction to the FTC and end the uncertainty and confusion that was created in 2015 when the FCC intruded in this space.

Question 3. As you know, when the FCC issued a proposed rule on net neutrality in 2014, a record-breaking number of Americans filed comments to say that they wanted the Internet to remain open and fair, crashing the FCC's system. Already this year, when the FCC announced that net neutrality was on the calendar for discussion, the comments poured in again, crashing the FCC's system for a second time. How will you ensure that the comment system remains functional so that Americans can be confident their comments are being received? How will you weigh the voices of millions of Americans who demand Internet freedom?

Answer. The Commission has received over 12 million comments in this proceeding already and the Electronic Comment Filing System (ECFS) continues to provide filers with the opportunity to make their views known. Although there was a disruption from the evening of May 7, 2017 until the following day caused by a nontraditional DDoS attack, commenters had ample time to submit comments to the FCC before the vote on the *Restoring Internet Freedom NPRM*, and the ECFS system to date has functioned very well since the adoption of the NPRM.

Although we cannot guarantee that the system will not be subject to any further disruptions, working with our commercial cloud providers, we have taken a number of steps to mitigate the impact of any future attacks on the system. Also, it is important to note that the FCC maintains four separate methods for commenting: sending a written document, filing through the normal web interface, filing through the API, or submitting through the electronic inbox using the Bulk Upload Template.

Any decision that the FCC makes in this proceeding will be based on the facts and the law, and we will look to the comments filed in the record to guide our determinations on the relevant issues. As with all proceedings before the FCC, we comply with Section 706 of the Administrative Procedure Act, as interpreted by the Supreme Court in (among other cases) *Consolo v. Federal Maritime Commission*, 383 U.S. 607, 619–620 (1966), as well as our own rules concerning public input. Essentially, the question is whether the agency collected evidence that a reasonable person would agree would be adequate to support the conclusions ultimately made. That is the standard that we will apply, and we will make the appropriate judgment based facts in the record and applicable law.

Question 4. The first ever incentive auction has concluded, but the work isn't done—now the FCC starts the process of moving the remaining broadcasters to new spectrum locations. Those broadcasters are concerned that the \$1.75 billion set aside for their moving costs will be insufficient, and the 39-month timeframe is too short. What will the FCC do if there is not enough money or time to move all of the 957 broadcasters across the country? Will you commit, that no broadcaster will be forced off the air?

Answer. I share your view that the post-auction transition must be done in a careful and orderly manner that minimizes viewer inconvenience; takes into account the interference and other dependencies of all the stations who will be changing channels; enables efficient allocation of the resources necessary for broadcasters to undertake the change; and ensures that winning bidders for wireless licenses in the forward auction can deploy in the 600 MHz band in a timely manner.

July 12 was the deadline for broadcast television stations that are going to be repacked during this process to submit construction permit applications and cost estimates to the Commission. And 2 days later, the FCC announced that the aggregate amount of the estimated costs reported by broadcast television stations and multi-channel video programming distributors (MVPDs) eligible for reimbursement from the Commission was \$2.115 billion. In this announcement, we cautioned that we expected to receive additional estimates from MVPDs and a small number of stations.

In recent days, the Commission has received several additional estimates, and the aggregate total of estimated costs has increased by approximately \$24 million to \$2.139 billion. At this point, we only expect to receive additional cost estimates from some smaller MVPDs and eight broadcast television stations. These eight stations were granted waivers of the July 12 deadline because they are unable to construct at their current channel assignment and must apply to receive a new one. But extrapolating from the estimates that we have received to date, we are confident that once all initial estimates are received, the aggregate total will be below \$2.2 billion.

Looking beyond the initial round of estimates, the aggregate total of estimated repacking costs will continue to change as the post-incentive auction transition process proceeds. Many stations will end up amending their initial estimates. Additionally, both the Commission and its fund administrator will conduct reviews of those estimates, which will likely alter the aggregate number. For these reasons, the FCC cannot definitively report how much the repack actually will cost. The final number could be lower than the current \$2.139 billion. It could also be higher. But I can say that the agency expects the final number to be above the \$1.75 billion that Congress has provided the Commission to reimburse impacted broadcast stations and MVPDs. As a result, unless Congress acts to raise the \$1.75 billion cap, the substantial likelihood is that local broadcasters will be required to pay some portion of their repacking costs out of their own pockets. I would be happy to work with your office to address this issue.

If Congress does not provide additional funding, then I will work with my colleagues to determine how best to allocate the \$1.75 billion that we have been provided. With respect to the timeline for the repack, we will continue to monitor the situation closely and go where the facts lead us. I have repeatedly stated that I believe no broadcaster should be forced off the air during this process as a result of circumstances outside of their control.

Question 5. The Lifeline and E-Rate programs provide Internet for low-income Americans, and schools and libraries across the country. Both programs are critical to help close the digital divide and the homework gap, and both programs were also greatly expanded in the previous administration. This year, under this administration, the FCC has taken a few concerning steps for these programs, by removing 9 providers from the lifeline program and revoking a staff report on the success of the e-rate program. What is your vision for the future of these two important programs? What future changes are you considering?

Answer. I am deeply committed to doing everything within the FCC's power to close the digital divide. I have said that as long as I am Chairman, broadband will be a part of Lifeline. I also believe that it is necessary to strengthen the Lifeline program's efficacy and integrity by respecting the States' role in the program and ensuring the program is free of waste, fraud, and abuse.

The Government Accountability Office (GAO) recently released a report confirming that waste, fraud, and abuse are still all too prevalent in the Lifeline program. I have accordingly directed the Universal Service Administrative Company (USAC) to take immediate action to combat this abuse of the program and establish procedures for ongoing vigilance to protect the Fund. I stand ready to work with my colleagues to crack down on the unscrupulous providers that abuse the program so that the dollars we spend support affordable, high-speed broadband Internet access for our Nation's poorest families.

I believe an effective E-rate program—one that promotes better connectivity for students and library patrons alike—can be a powerful tool to help bridge the digital divide. This is why, 4 years ago, I said that “E-rate is a program worth fighting for.”

Unfortunately, there have been serious flaws in the administration of the E-rate program, specifically related to the process for schools and libraries to apply for E-rate funding, that are preventing many schools and libraries from getting that funding. I have asked USAC to provide a detailed report on plans to fix the existing problems so it can administer the E-rate program in a manner that is fully compliant with our rules and that works for applicants and participants.

QUESTIONS SUBMITTED BY SENATOR PATRICK J. LEAHY

Question 1. The President has expressed his interest in passing an infrastructure package that would invest in critical areas of our economy. Do you believe that the deployment of broadband is an essential component of any infrastructure package? What role will you and the FCC assume in ensuring that broadband deployment—including deployment in rural areas—is part of the administration's infrastructure plans?

Answer. Yes. I have stated publicly that if Congress moves forward with a major infrastructure package, broadband should be included. I also have said that any direct funding for broadband infrastructure appropriated by Congress should be administered through the FCC's Universal Service Fund.

Question 2. The FCC is undertaking an examination of the barriers to deploying investments in wireless broadband. Looking beyond the barriers, what role do you envision the Federal Government, through programs at the FCC or other agencies, playing in making capital available for investment in broadband?

Answer. We know that, in some areas, the business case for broadband deployment will just not be there absent government help. That is why in February of this year, the FCC adopted on a bipartisan basis a plan to make 4G LTE mobile broadband available in parts of rural America without wireless service. Phase II of the Mobility Fund will make available \$4.53 billion in new funding over 10 years for building mobile networks where the market would not otherwise do so. I have circulated for my colleagues' consideration for our August open meeting a proposed Mobility Fund Order that would establish a "challenge process" for resolving disputes over whether areas should be eligible for Mobility Fund subsidies. This is the next step in making sure funding is targeted at areas still lacking adequate coverage.

In February, the Commission also adopted rules for the Connect America Fund (CAF) Phase II competitive bidding process, and we are planning on moving forward with the next step—the CAF II Commitment Public Notice—at our August meeting. The CAF Phase II auction will offer almost \$2 billion over the next 10 years to broadband providers that commit to offer voice and broadband services to fixed locations in unserved high-cost areas in our country. The auction rules are structured to induce new entrants to participate—competitive entrants like wireless Internet service providers, small-town cable operators, satellite companies, and electric utilities.

QUESTIONS SUBMITTED BY SENATOR JERRY MORAN

Question 1. I understand the next generation of wireless network infrastructure will be built using small-cell networks employing 5G wireless technology. The faster data speeds and improved connectivity of 5G is essential for the Internet of Things (IoT) which will unleash billions of dollars in economic growth. The U.S. is the world leader in 4G, but I am worried we are not taking the necessary steps to maintain our global leadership to deploy 5G. Carriers tell me the regulatory barriers to deploy small-cell networks are outdated, hampering investment and economic growth. Do you agree 5G deployment is critical for the American economy, and if so, what steps is the FCC taking to eliminate barriers and costs to deploying 5G technology in a timely manner?

Answer. Yes. 5G services will stimulate the American economy by providing end users with higher quality connections, more bandwidth, and lower latency. A key feature in the transition from 4G to 5G is a change in network architecture from heavy reliance on large, macro-cell towers to wireless networks that will include hundreds of thousands of densely-deployed small cells operating at lower power. As these networks evolve, the FCC is taking steps to accelerate the deployment of 5G facilities by removing any unnecessary barriers to such deployment, whether caused by Federal law, FCC regulation, State, local, and/or Tribal reviews, or other rules and procedures.

In April, the Commission adopted a Notice of Proposed Rulemaking and Notice of Inquiry on wireless infrastructure, which seeks comment on multiple measures to reduce regulatory barriers to investment and deployment in wireless network infrastructure. Moreover, earlier this year, I announced the formation of the Broadband Deployment Advisory Committee (BDAC), which is tasked with identifying regulatory barriers to infrastructure investment and making recommendations to the Commission on how to reduce or remove these barriers. The BDAC held its first meeting in April and its second meeting in July, and I hope will provide initial recommendations to the Commission by the end of the year.

Question 2a. I continue to hear from Kansans who remain concerned about the status and effectiveness of the Universal Service Fund's (USF's) High-Cost program. In April, I joined a number of my colleagues in a letter to the FCC strongly encouraging you to take immediate steps to ensure sufficient resources are available to enable this program to work as statutorily mandated.

I hear that the budget shortfall is resulting in canceled network builds and undermining the intended effect of the reforms to make standalone broadband affordable

for consumers. Are you hearing this too, and what steps are you taking to address this?

Answer. Four years ago, I called on the Commission to tackle the issue of affordable broadband in rural America head-on. Despite the previous Commission's efforts in the *2016 Rate-of-Return Reform Order*, I still hear from small carriers that offering stand-alone broadband would put them underwater—that the rates they have to charge exceed the rates for bundled services because of the different regulatory treatment. This is unfortunate, but unsurprising. As I noted in my dissent to the *Order* in 2016, the previous Commission needlessly complicated our rate-of-return system and in many ways made it harder, not easier, for small providers to serve rural America.

To provide some relief, my colleagues in recent months have urged me to work through a punch list of lingering issues from the *Order*. Although I hope these changes will help, something more fundamental may be needed. After all, if the *Order* is not carrying out its stated purpose of advancing broadband deployment in rural America, we cannot ignore that problem—time is not on the side of rural Americans.

Question 2b. Some have talked about an infrastructure package from Congress as a potential solution for this USF budget shortfall. If Congress does come forward with such funding, would you commit to adequately funding the program for these small, rural carriers?

Answer. If Congress does enact an infrastructure package that directs adequate funding to the program for these small, rural carriers, then yes, the Commission would faithfully discharge its duty to ensure these carriers have sufficient and predictable funding.

Question 3. As mentioned in some of your written testimonies, I believe that modernizing the Federal Government's information technology (IT) systems needs to remain a top-priority for all agencies. According to the Government Accountability Office's (GAO) 2015 High Risk Series report, the Federal Government annually spends over \$80 billion on IT, but more than 75 percent of this spending is for "legacy IT". I have worked with my colleague Senator Udall on legislation called the Modernizing Government Technology (MGT) Act of 2017 in an effort to replace "legacy IT" systems that continue to plague numerous Federal agencies. With examples like the reported cyberattack on the FCC's Electronic Comment Filing System, I think that this effort needs to remain a priority.

Could you please speak to the cybersecurity benefits resulting from the FCC's current and ongoing efforts to replace "legacy IT" systems?

Answer. Replacing legacy IT systems with more modern systems and moving from local hosting of these systems to the cloud allows the FCC to more accurately monitor traffic to the FCC's site and applications. As a result, the FCC has been able to accommodate higher volumes of data without a corresponding increase in costs. The cloud-based solutions are far more secure than the legacy code that previously supported the Commission's applications. Our legacy systems contained code that was both unsupportable in the marketplace and subject to malware attacks. For example, the cloud-based systems have reduced our FISMA findings nearly 80 percent. The FCC can now afford to have the best tools on the market for its cyber mission because of the savings that resulted from moving to cloud products.

Question 4. Your testimony discussed the FCC's ongoing efforts to close the "Digital Divide" by expanding fixed and mobile broadband deployment in the Connect America Fund Phase II and the Mobility Fund Phase II. What role do you see the Rural Broadband Auctions Task Force playing in implementing these important USF-related auctions?

Could you please further elaborate on the Task Force's plan that you referred to in your written testimony?

Answer. Absolutely. I have directed the Task Force to use resources from throughout the Commission to make sure both the CAF Phase II and MF Phase II auctions are implemented in a timely manner so that taxpayer funds are allocated efficiently for rural broadband deployment and that as many Americans as possible are able to get Internet access. The Task Force has been working with the staff of the Wireline Competition Bureau, the Wireless Telecommunications Bureau, the Office of General Counsel, the Office of Strategic Policy and Planning, the Office of the Managing Director, as well as others within the Commission to map out the steps necessary to proceed with these reverse auctions.

For example, the Task Force has been diligently working with auction experts inside and outside the agency to design the CAF Phase II auction, which has culminated in the Public Notice that the Commission is considering on its August open meeting to seek comment on the design of that auction as well as the surrounding processes (such as the forms of applications). In parallel, the Task Force has been

overseeing the development of the IT systems that will ensure the smooth operation of the CAF Phase II auction once it commences next year.

Question 5. Title II and “Open Internet” rules are not the same and should not be conflated. If people are worried about Open Internet issues, shouldn’t Congress act to put “Open Internet” rules into statute and thus end the regulatory ping pong and market uncertainty that results every time the Administration changes parties and a new FCC Chairman steps into this issue?

Answer. I believe that legislation would provide greater certainty to consumers and companies alike.

Question 6. For each year beginning in 2011, and cumulatively, please provide Universal Service Fund (USF) annual collections and annual obligations. Please provide this information collectively and broken down by USF program.

Answer.

UNIVERSAL SERVICE FUND—COLLECTIONS

[In Millions]

	2011	2012	2013	2014	2015	2016	2017 *	Total
High Cost ..	4,516.16	4,571.82	4,589.47	4,531.14	4,522.04	4,543.24	4,546.06	31,819.93
Lifeline	1,468.99	2,277.82	1,952.24	1,690.27	1,548.81	1,499.31	1,400.77	11,838.21
E-Rate	2,220.90	2,358.61	2,374.40	2,395.63	2,435.13	2,493.88	1,814.75	16,093.30
RHC	85.78	118.12	145.14	241.69	255.97	294.41	439.30	1,580.41
Total	8,291.83	9,326.37	9,061.25	8,858.73	8,761.95	8,830.84	8,200.88	61,331.85

UNIVERSAL SERVICE FUND—OBLIGATIONS INCURRED

[In Millions]

	2011	2012	2013	2014	2015	2016	2017 *	Total
High Cost ..	4,061.26	4,101.25	4,578.75	3,843.15	12,294.51	3,313.80	8,734.17	40,926.89
Lifeline	1,588.43	2,081.88	2,008.59	1,683.20	1,567.00	1,572.97	1,405.70	11,907.77
E-Rate	3,118.21	3,469.76	3,046.09	3,689.25	2,802.31	2,230.18	3,363.66	21,719.47
RHC	211.63	243.81	204.77	201.86	338.19	206.18	641.31	2,047.74
Total	8,979.53	9,896.70	9,838.21	9,417.46	17,002.01	7,323.13	14,144.84	76,601.89

* In both tables above, the fiscal year 2017 figures include projections for the fourth quarter.

Question 7. For each year beginning in 2011, and cumulatively, please provide Universal Service Fund (USF) annual collections and annual amounts dispersed. Please provide this information collectively and broken down by USF program. If these figures are different from the figures provided in response to Question 1, please explain the reason for the difference.

Answer.

UNIVERSAL SERVICE FUND—COLLECTIONS

[In Millions]

	2011	2012	2013	2014	2015	2016	2017 *	Total
High Cost ..	4,516.16	4,571.82	4,589.47	4,531.14	4,522.04	4,543.24	4,546.06	31,819.93
Lifeline	1,468.99	2,277.82	1,952.24	1,690.27	1,548.81	1,499.31	1,400.77	11,838.21
E-Rate	2,220.90	2,358.61	2,374.40	2,395.63	2,435.13	2,493.88	1,814.75	16,093.30
RHC	85.78	118.12	145.14	241.69	255.97	294.41	439.30	1,580.41
Total	8,291.83	9,326.37	9,061.25	8,858.73	8,761.95	8,830.84	8,200.88	61,331.85

UNIVERSAL SERVICE FUND—OUTLAYS (AMOUNTS DISBURSED)

[In Millions]

	2011	2012	2013	2014	2015	2016	2017 *	Total
High Cost ..	4,084.31	4,113.66	4,046.15	4,116.08	4,269.20	4,590.48	4,600.55	29,820.43
Lifeline	1,601.83	2,088.14	1,992.53	1,683.32	1,582.80	1,554.81	1,452.38	11,955.81
E-Rate	2,400.21	2,293.70	2,208.71	2,380.79	2,163.59	2,584.67	2,875.91	16,907.58
RHC	133.23	173.56	163.20	195.00	260.90	303.55	351.64	1,581.08
Total	8,219.58	8,669.06	8,410.59	8,375.19	8,276.49	9,033.51	9,280.48	60,264.90

* In both tables above, the fiscal year 2017 figures include projections for the fourth quarter.

The differences between obligations incurred and amounts dispersed each year largely relate to timing—funds must first be obligated before they are disbursed (and there may be a lag between the two), and adjustments may occur after obligations are incurred, which would affect the amounts dispersed.

Question 8. Since 2011, funds have been collected in excess of obligations, please provide the following information:

a. For amounts for which specific allocations are identified—

- i. Amount
- ii. Description of Intended allocation
- iii. FCC order or other action effectuating such allocation

b. For amounts for which specific allocations are not identified—

- i. Amount
- ii. Limitations on allocation of such funds (e.g., limited to a specific USF program), including citation to limiting rule, order, etc.

Answer.

UNIVERSAL SERVICE FUND—COLLECTIONS LESS OBLIGATIONS INCURRED

[In Millions]

	2011	2012	2013	2014	2015	2016	2017	Total
High Cost	454.90	470.57	10.72	687.99	(7,772.47)	1,229.44	(4,188.11)	(9,106.96)
Lifeline	(119.44)	195.94	(56.35)	7.07	(18.19)	(73.66)	(4.93)	(69.56)
E-Rate	(897.31)	(1,111.15)	(671.69)	(1,293.62)	(367.18)	263.70	(1,548.91)	(5,626.17)
RHC	(125.85)	(125.69)	(59.63)	39.83	(82.22)	88.23	(202.01)	(467.33)
Total	(687.70)	(570.33)	(776.96)	(558.73)	(8,240.06)	1,507.71	(5,943.96)	(15,270.04)

The general instruction regarding excess funds is found in the FCC's rules at 47 C.F.R. § 54.709(b). If the contributions received by the Administrator in a quarter exceed the amount of universal service support program contributions and administrative costs for that quarter, the excess payments will be carried forward to the following quarter. The contribution factors for the following quarter will take into consideration the projected costs of the support mechanisms for that quarter and the excess contributions carried over from the previous quarter.

The Commission may instruct the Administrator to treat excess contributions in a manner other than as prescribed in paragraph (b). Such instructions may be made in the form of a Commission Order or a public notice released by the Wireline Competition Bureau. Any such public notice will become effective 14 days after release of the public notice absent further Commission action. Also, the Schools and Libraries and Rural Health Care program's collections occur within a given fund year; the outlays take place over a longer period, typically 2 to 3 years.

In addition, the FCC has provided additional instructions over time; see summarized details below:

—*High Cost—USF/ICC Transformation Order, 26 FCC Rcd 17663, 17847 (2011), paras. 559–563:* The FCC instructed USAC that if contributions to support the high-cost support mechanisms exceed high-cost demand, excess contributions were to be credited to a Connect America Fund reserve account (which has the effect of increasing or maintaining, instead of reducing, the contribution factor). Thus, USAC was directed to forecast total high-cost universal service demand as no less than \$1.125 billion per quarter for years 2012–2017 in order to avoid dramatic shifts in the contribution factor while the Connect America Fund was implemented.

—*High Cost—USF/ICC Transformation Order, 26 FCC Rcd at 17663:* Alternative Connect America Model (A-CAM) is announced.

—*High Cost—Connect America Fund Order, 31 FCC Rcd 3087 (2016):* The FCC established the rules for A-CAM.

—*High Cost—January 2017 Public Notice, DA 17-99, pg. 3, n.12:* The FCC directed USAC to retain \$1.768B in the high-cost account to cover the net increase in support associated with A-CAM for 2018–2026.

—*Schools and Libraries—Schools and Libraries Third Report and Order, 18 FCC Rcd 26912, 26933–35 (2003), paras. 52–58:* The FCC amended its rules to make unused funds available annually in the second quarter of each calendar year for use in the next full funding year of the Schools and Libraries mechanism. Based on the estimates provided by the Administrator, the Commission announces a specific amount of unused funds from prior funding years to be carried forward in accordance with the public interest to increase funds for the next full funding year in excess of the annual funding cap.

—*Schools and Libraries—E-rate Modernization Order, 29 FCC Rcd 8870, 8900 (2014), para. 81:* The FCC added a provision that the Chief of the Wireline Competition Bureau is delegated authority to determine the proportion of unused funds to meet category one demand and to direct USAC to use any remaining funds to provide category two support. See also 47 C.F.R. § 54.507(a)(5).

Question 9. Please describe the extent to which, if at all, prior period adjustment affects the information provided above.

Answer.

UNIVERSAL SERVICE FUND—ANNUAL PRIOR PERIOD ADJUSTMENTS PER QUARTERLY DEMAND
FILING
[In Millions]

	Fiscal Year 2011	Fiscal Year 2012	Fiscal Year 2013	Fiscal Year 2014	Fiscal Year 2015	Fiscal Year 2016	Year to Date 2017	Total
High Cost	103.21	114.69	(10.09)	1.68	(19.70)	13.38	(13.71)	189.46
Lifeline	(16.80)	(46.77)	(332.81)	(49.15)	(60.57)	(30.44)	(53.16)	(589.70)
Schools and Libraries	(2.01)	0.01	(2.23)	0.79	(2.54)	0.14	(1.76)	(7.60)
Rural Health Care	58.28	48.33	(10.18)	(5.19)	(7.77)	7.29	(12.51)	78.25
Total	142.68	116.26	(239.05)	(290.92)	(381.50)	(9.63)	(81.14)	(743.30)

The prior period adjustments (PPAs) are added to or subtracted from program demand to determine the collection requirement. Since 2011, a total reduction to demand of \$743 million has occurred through PPAs. These adjustments have no effect on obligations or disbursements.

QUESTION SUBMITTED BY SENATOR JOHN BOOZMAN

Question. Chairman Pai, I have been hearing concerns with the Commission’s AM Revitalization proceeding. The elimination of certain interference protections on AM radio could generate new interference on AM radio and may harm Arkansans’ ability to receive news and information. As Chairman of the Homeland Security subcommittee, I’m particularly interested in FEMA’s concerns with the FCC’s proposal to eliminate skywave interference protections for Class A stations, due to the threatened disruption to the emergency alert system. My State could be particularly vulnerable to a loss of emergency information due to increased interference. At nighttime, Arkansans receive 15 Class A radio stations, but under the current FCC proposal, a station upgrading its signal in a distant State could create added interference locally in Arkansas. I applaud the work the Commission has done thus far to improve AM radio, but I hope the Commission will heed FEMA’s concerns with changing the interference protections for Class A AM radio stations.

Answer. I can assure you that the continued integrity of the Emergency Alert System is a priority for the Commission. We are aware of FEMA’s concerns, and we will certainly take them into account as we continue with our proceeding to revitalize the AM radio service.

QUESTIONS SUBMITTED BY SENATOR JOE MANCHIN, III

Question 1. The universal service mandate means that Americans living in even the most rural and remote areas of the Nation must have access to comparable services available to those in urban communities. That necessarily includes reliable, affordable broadband access. At the beginning of this year, I introduced the *Rural Telecommunications and Broadband Service Act of 2017*. Importantly, that legislation would require a report defining what constitutes a rural area that has access to comparable services in accordance with the principles of universal service. I applaud your formation of the Broadband Deployment Advisory Committee, which I understand will focus on accelerating broadband deployment in rural America.

Would you commit to having this advisory committee focus on the question of what access to comparable services means in rural areas?

Answer. The Broadband Deployment Advisory Committee (BDAC) is a crucial component in the FCC's efforts to close the digital divide. The mission of the BDAC includes making recommendations that would accelerate the deployment of high-speed Internet access in communities across the country, including rural America. The BDAC will provide an effective means for stakeholders to identify regulatory barriers to infrastructure investment and make recommendations on reducing and/or removing them, which will in turn enhance the Commission's ability to carry out its statutory responsibility to encourage broadband deployment to all Americans. The BDAC's comprehensive examination of ways to expedite broadband deployment in rural areas will include an examination of issues related to the one you raise in your question.

Question 2. The Commission's budget proposes to require the auction of additional spectrum by 2027. I strongly support the continued focus on making more spectrum available for commercial use. Federal communications policy both embraces and requires that rural Americans must have access to the economic opportunities provided by broadband access. Innovative ideas are not limited by geography. We must do more to ensure they are not limited by a lack of connectivity.

How can future auctions be structured to ensure additional wireless spectrum deployment in rural areas actually occurs?

Answer. Eliminating the digital divide is one of my top priorities as Chairman. In my Digital Empowerment Agenda, I laid out three keys ways to encourage more mobile broadband in rural America, where high costs and low population density make the private-sector case for deployment much more difficult.

First, I said the FCC should move forward with a Mobility Fund Phase II, which with your support we have been doing. This program includes buildout requirements to ensure that the funds we provide are actually used to connect rural America.

Second, I said the FCC should increase the build-out obligations of wireless carriers and incentivize rural broadband investment by extending license terms up to 15 years. I have asked my colleagues to consider such a proposal at our August agenda meeting.

Third, I called on Congress to create a "rural dividend" to supplement existing funding sources by setting aside 10 percent of the money raised from future spectrum auctions for the deployment of mobile broadband in rural America. Although legislation would be required to enact a rural dividend, it would provide an ongoing source of funding to ensure that rural Americans get the mobile broadband opportunities they need.

Question 3. Broadband has an important role to play in providing access to healthcare services, particularly in rural America. I commend the Commission's work through the Connect2Health Task Force to provide valuable insight into broadband health policies. Most fundamentally, telehealth services are only an option for those who have a broadband connection. I strongly support the Commission's focus on closing the digital divide through programs such as Mobility Fund II, which has the potential to be a critical part of the broadband expansion necessary for telehealth in rural areas.

Beyond connectivity, would you please discuss what barriers to telehealth services currently exist at the State level?

Answer. Through its broad stakeholder outreach and data gathering efforts, the FCC's Connect2Health Task Force has learned that the main barriers to the availability of telehealth services at the State level include: the need for more effective policies to streamline the deployment of broadband infrastructure and services for health; the need for a more coordinated and sustained effort to promote sustainable business models for broadband-enabled health in rural and underserved areas; a lack of understanding about the value proposition of broadband in helping to meet State and local health goals; and interstate physician licensure and other payment/reimbursement issues that are not within the FCC's ability to address.

In addition, small healthcare providers, especially those operating in rural areas, have cited cost, inadequate or lack of funding support, liability concerns, and lack of training/expertise as other barriers to telehealth services. Finally, another barrier is simple lack of access to telehealth services. Many consumers, especially in rural and underserved areas, reportedly obtain the bulk of their healthcare services at city and county health departments and other community health centers that do not offer telehealth services.

Question 4. I understand the Commission opened a proceeding in April to explore barriers to wireline broadband infrastructure deployment. I applaud the Commission's continued focus on rural broadband deployment. Under current law, most providers generally have a duty to allow other providers access to its broadband infrastructure like conduit. However, because broadband conduit cannot be visibly inspected, it has been brought to my attention that providers have had difficulty finding out where it is already in the ground. In turn, this can hinder broadband deployment.

Can ensuring greater access to conduit make financial sense for providers as well as help close the digital divide?

Answer. Streamlining rules, accelerating approvals, and removing other barriers, where possible, will better enable broadband providers to build, maintain, and upgrade their networks, which in turn will lead to more affordable and accessible Internet access and other broadband services for consumers and businesses alike.

As you note, in April the Commission proposed and sought comment on a number of actions designed to accelerate the deployment of next-generation networks and services by removing barriers to infrastructure investment. In particular, that document seeks comment on how to reform the FCC's pole attachment rules to make it easier, faster, and less costly to access the poles, ducts, conduits, and rights-of-way necessary for building out next-generation networks. Additionally, I have also established the Broadband Deployment Advisory Committee (BDAC) to provide advice and recommendations to the Commission on how to accelerate deployment of broadband. I look forward to seeing the record develop on the promise of greater access to conduit as well as any recommendations from the BDAC on that issue, and of course working with your office to close the digital divide.

Question 5a. A mix of low, mid, and high-band spectrum deployed in rural areas is necessary both for wireless coverage today and to build network capacity in the future. The broadcast incentive auction that concluded earlier this year was an important step to deliver additional low-band spectrum to carriers, which is particularly beneficial for expanding service in rural areas. Applications for construction permits and reimbursement cost estimates for reassigned broadcast stations are due next month.

Could you discuss the steps the Commission is taking right now to ensure the transition occurs as quickly as possible?

Answer. The Commission released a Transition Scheduling Plan in January that sets forth the order and schedule of stations' channel moves throughout the transition period. The plan is designed to minimize viewer inconvenience, enable efficient allocation of the resources necessary for broadcasters to operate on their new frequencies, and ensure that winning bidders for wireless licenses in the forward auction can deploy in the 600 MHz band in a timely manner.

Commission staff has already granted hundreds of television stations' construction permits, enabling stations to move from planning to actual construction. We will continue to process construction permit applications and to implement the 10-phase construction schedule that we adopted in January to facilitate efficient use of the resources necessary to complete the transition.

Question 5b. What steps are you taking to ensure cost allocations for reassigned stations are not insufficient?

Answer. July 12 was the deadline for broadcast television stations that are going to be repacked during this process to submit construction permit applications and cost estimates to the Commission. And two days later, the FCC announced that the aggregate amount of the estimated costs reported by broadcast television stations and multichannel video programming distributors (MVPDs) eligible for reimbursement from the Commission was \$2.115 billion. In this announcement, we cautioned that we expected to receive additional estimates from MVPDs and a small number of stations.

In recent days, the Commission has received several additional estimates, and the aggregate total of estimated costs has increased by approximately \$24 million to \$2.139 billion. At this point, we only expect to receive additional cost estimates from some smaller MVPDs and eight broadcast television stations. These eight stations were granted waivers of the July 12 deadline because they are unable to construct at their current channel assignment and must apply to receive a new one. But ex-

trapolating from the estimates that we have received to date, we are confident that once all initial estimates are received, the aggregate total will be below \$2.2 billion.

Looking beyond the initial round of estimates, the aggregate total of estimated repacking costs will continue to change as the post-incentive auction transition process proceeds. Many stations will end up amending their initial estimates. Additionally, both the Commission and its fund administrator will conduct reviews of those estimates, which will likely alter the aggregate number. For these reasons, the FCC cannot definitively report how much the repack actually will cost. The final number could be lower than the current \$2.139 billion. It could also be higher.

But I can say that the agency expects the final number to be above the \$1.75 billion that Congress has provided the Commission to reimburse impacted broadcast stations and MVPDs. As a result, unless Congress acts to raise the \$1.75 billion cap, the substantial likelihood is that local broadcasters will be required to pay some portion of their repacking costs out of their own pockets. I would be happy to work with your office to address this issue.

Question 6. In 2013, West Virginia University became the first university in the United States to use TV white spaces to offer broadband access. TV white space spectrum can be particularly beneficial for last-mile broadband deployment in rural areas and I applaud the Commission's focus on wireless solutions that can narrow the digital divide.

How do you believe technologies such as these help expand broadband deployment in high-cost, hard to reach areas?

Answer. Eliminating the digital divide is one of my top priorities as Chairman. I am also focused on promoting innovative means to help narrow that divide. Expanding broadband deployment in high-cost, hard-to-reach areas should not be a one-size-fits-all approach, so I am interested in how this spectrum can be used to help bridge the digital divide. That's why I went to South Boston, Virginia recently, where I saw for myself how students were using white-space devices to stay connected from home. We are currently studying this issue and engaging with all interested stakeholders to determine whether and how to proceed.

QUESTIONS SUBMITTED BY SENATOR CHRIS VAN HOLLEN

Question 1a. Chairman Pai—Congress gave the FCC robust rulemaking authority and statutory directives to protect consumers and competition, yet on many of the highest profile issues, such as net neutrality and privacy, you have sought to disclaim that authority to other agencies such as the FTC.

You have publicly said that there is evidence that Title II has slowed down investment in broadband. Have ISPs specifically stated that Title II classification is reducing investment? How has that investment been reduced? How is it related specifically to Title II and not other factors?

Answer. Yes, ISPs have specifically stated that the *Title II Order* has reduced their investment. For example, just 2 months after the Commission issued the *Title II Order*, many small ISPs declared under penalty of perjury that they were cutting back on investments because of that decision. Those declarations can be found in GN Docket No. 14–28.

Question 1b.1. If the Courts have said that Title II is a permissible grant of authority for the FCC why do you believe consumers have been or will be harmed by this classification?

Answer. For nearly two decades, the Internet flourished under a bipartisan, light-touch regulatory framework upheld by the Supreme Court. As I stated when the Commission commenced the current proceeding, the evidence so far suggests that was the right way to go—we had a free and open Internet as well as tremendous investment in our networks prior to the *Title II Order*. In the *Restoring Internet Freedom NPRM*, the Commission discussed these issues and sought comment on whether there is harm from the Title II classification. In particular, I am concerned that the *Title II Order* has impeded infrastructure investment, which means fewer Americans benefiting from digital opportunity. I look forward to reviewing the record of the current proceeding to determine the best path forward for consumers.

Question 1b.2. Why do you believe that the FTC is best charged with this role despite Congressional directive and the court's ruling?

Answer. The FTC has a long track record of protecting consumers' interests across the Internet ecosystem. As the staff of that agency recently commented in Docket No. 17–108:

“[t]he FTC has developed specific expertise over privacy and data security issues affecting BIAS [broadband Internet access service] providers. . . . The FTC has consistently used its privacy and data security enforcement authority

against unfair and deceptive practices by BIAS providers. . . . One privacy law—not affected by the Title II Order—that the FTC continues to enforce against BIAS providers is the FCRA [Fair Credit Reporting Act]. . . . For example, the FTC brought separate cases against Time Warner Cable and Sprint for allegedly imposing less favorable terms on consumers who had negative information on their credit reports, without providing notices required by the FCRA. . . . In addition to enforcement, the FTC has long engaged in policy initiatives and business guidance efforts particularly germane to BIAS providers’ privacy and data security practices.”

Question 1c. You have publicly stated that there is no evidence of collusion or fast lane contracts between ISPs and edge service providers despite examples of this collusion. For example, from 2011–2013, AT&T, Sprint and Verizon blocked Google Wallet, a mobile-payment system that competed with a similar service called Isis, which all three companies had a stake in developing. In 2012, the FCC fined Verizon because Verizon as the Nation’s largest wireless network, had asked Google to remove 11 applications in the Android marketplace that were being used to circumvent Verizon’s \$20 tethering charge. Google agreed to remove the apps from its marketplace, thereby directly hurting consumers. However, you describe these future potential contracts as “efficient” methods of delivering content to end users.

Given your public statements, how will the FCC, under your leadership, address agreements between companies that throttle content from competitors?

Answer. As with any adjudication, the FCC would address such agreements based on the relevant facts and the law with the goal of furthering the public interest. I cannot say in the absence of particular facts how the agency might approach a specific agreement.

Question 1d. Can you provide an example of when would a contract between an ISP and edge providers would be too “efficient” and harm consumer access to the Internet? What would be the FCC’s role in protecting consumers and competition if that situation arose?

Answer. We are currently seeking comment in the context of the Restoring Internet Freedom NPRM on whether there are such contracts, what impact they may have, and what the appropriate regulatory response to them might be, and I look forward to reviewing the record to determine the best role for the FCC in protecting consumers going forward.

Question 2a. The press has reported that ultimately you believe that a system where ISPs self-regulate is the best way going forward to protect consumer privacy. Is protecting consumer data a priority for the FCC?

Answer. Yes.

Question 2b. Do you believe a paragraph—written by lawyers—buried within long and complicated terms of use agreements, asking consumers to opt-in, instead of clearly asking them to opt-out, can sufficiently protect the privacy of most Americans?

Answer. I believe clearly written and easy-to-understand policies best protect consumers.

Question 2c. Do you think it is the responsibility of Americans to hunt for information regarding how their sensitive information is being used by ISPs or you believe that companies should be more transparent?

Answer. I believe all online companies should be transparent with respect to their use of sensitive consumer information.

Question 2d. Do you believe that consumers should have the right to determine who collects their data online and how it can be used?

Answer. Yes.

Question 2e. Many consumers, particularly those in rural areas, cannot switch providers if they do not like their provider’s privacy policy. What options does the FCC have for these users? What is their recourse?

Answer. I have previously stated that fostering further broadband deployment, coupled with restoring the FTC’s role as cop on the beat with respect to online privacy, would best serve all consumers, particularly those in rural areas.

Question 2f. Over 20 States have introduced legislation to reinstate the opt-in rule that was rolled back by Congress. Do you believe your public statements before the CRA was passed, Congressional actions, and the FCC have created a patchwork and disjointed system?

Answer. In 2015, the FCC under the prior Administration created a disjointed system for protecting consumers’ online privacy when it stripped privacy jurisdiction from the FTC by reclassifying broadband Internet access service as a common carrier service. As I have said before, the government should respect consumers’ uniform expectation of privacy online and work towards restoring a uniform system of privacy protections administered by the FCC.

Question 3. Chairman Pai, you often say that the Internet flourished because of competition. If fast lanes are created how will small start-ups compete against big business that can afford fast lanes?

Answer. The Commission's *Restoring Internet Freedom NPRM* asks about the trade-offs of banning outright certain business models. In an age of rapid technological advancement, a variety of business models may be needed to support increasingly complex networks for delivering increasingly sophisticated services. Examples might be real-time or interactive services, such as the remote monitoring of consumers' healthcare vital signs. Other examples might suggest less pro-competitive outcomes. We will review the record on this point as we determine the best way forward.

Question 4a. Chairman Pai, in May you met with local and State MD officials on the issue of microcells. At that meeting, Montgomery County Executive Leggett underscored the importance of working with local authorities. Maryland is a unique State because we have very dense urban communities and rural and mountainous areas—we are a microcosm of the challenges of nationwide broadband deployment. I am very excited about the expansion 5G next generation networks. However, local governments feel that they are being left out of the conversation.

Commissioner Pai and Commissioner O'Rielly—you have both spoken numerous times about Federal overreach and over regulation. What steps will you take to ensure that local jurisdictions are heard and that your actions do not preempt their regulations?

Answer. In April 2017, the Commission adopted the *Wireless Infrastructure NPRM and NOI*, seeking comment on multiple potential measures to remove or reduce regulatory barriers to wireless network infrastructure investment and deployment. We solicited input on how Section 332(c)(7)(B) of the Communications Act applies to local government review of wireless facility siting applications and on other local requirements that have an impact on the deployment of wireless facilities. In addition to the opportunity to comment in this proceeding, we have met with local leaders such as yours and discussed their concerns, and on May 24, 2017 we held a Webinar on the NPRM and NOI for State and local governments. I look forward to completing this rulemaking expeditiously and working with stakeholders to ensure that 5G is a reality for all Americans.

Question 4b. Do you think federally regulated expansion will encourage the private sector to invest profits into areas that are less profitable to serve—such as rural areas?

Answer. Reducing regulatory costs for broadband deployment will, by definition, improve the business case to deploy broadband everywhere in the United States. That's why removing regulatory barriers is so key to less-profitable-to-serve areas. But we know that, in some areas, the business case for broadband deployment will not be there absent government help. That is why in February of this year, the FCC adopted bipartisan plans to spur broadband deployment in rural America through the Connect American Fund Phase II and Mobility Fund Phase II reverse auctions. I should note that reducing the cost of deployment in the areas targeted by these auctions will mean that Federal taxpayer dollars can be stretched farther to serve even more of rural America.

Question 4c. Do you agree that the private industry and local governments are working to create innovative solutions regarding microcells?

Answer. Yes, I believe that in many cases wireless providers and State and local governments are working very well together to expedite wireless infrastructure deployments.

Question 4d. You have said Chairman Pai “the more heavily you regulate something, the less of it you're going to get.” The FCC, under your directive, is aggressively rewriting its rules regarding pole attachment and is seeking Congress's approval to expand the Commission's authority over pole attachments.

Do you believe that this innovation would continue under the new rules and expanded authority?

Answer. I have heard from countless consumers about the importance of increasing broadband deployment and heard from numerous ISPs that access to existing poles, conduit, and rights-of-way is critical delivering better, faster, cheaper broadband. This is one of the major cost elements to building a high-speed broadband network. If we are to put consumers first and increase competition and innovation in the broadband marketplace, every indication is that we will need new rules for pole attachments.

Question 5. The Laboratory Division of the FCC is located in Columbia, MD. This facility conducts testing on radio frequencies and ensures that equipment sold in the U.S. meets safety standards. What resources are you devoting to support this division and its engineers?

Answer. The Columbia, Maryland facility is one of the FCC's most important assets in terms of equipment and staff. In addition to housing our Office of Engineering (OET) and Technology's Laboratory (Lab), it also contains our Enforcement Bureau (EB) field office and monitoring equipment and the Sensitive Compartmented Information Facilities for the Public Safety and Homeland Security Bureau (PSHSB). The Lab houses engineers, administrative staff, and has test facilities including the Anechoic Chamber that permits testing of devices for compliance, interference, and safety requirements required by our rules. The test facilities and supporting equipment are also used to support the Commission's policy making activities by evaluating new technologies.

These operations are all essential to the Commission's core, spectrum-based mission. Accordingly, we will prioritize the allocation of financial and human resources to ensure that the work continues properly and that facilities are upgraded as soon as funds can be obligated for this purpose. I can report that the PSHSB staff have relatively new and modern facilities and that we are upgrading the OET building's HVAC system and infrastructure. We are also moving EB staff into the OET building to ensure they have more up-to-date facilities. And we hope to fund a modernized Equipment Authorization system, which will upgrade the database of equipment grants of certification used by the public and allow for more efficient interaction with the Lab staff during review.

QUESTIONS SUBMITTED TO HON. MIGNON CLYBURN

QUESTIONS SUBMITTED BY SENATOR JERRY MORAN

Question 1. As mentioned in your testimony, I believe that modernizing the Federal Government's information technology (IT) systems needs to remain a top-priority for all agencies. According to the GAO's 2015 High Risk Series report, the Federal Government annually spends over \$80 billion on IT, but more than 75 percent of this spending is for "legacy IT". I have worked with my colleague Senator Udall on legislation called the Modernizing Government Technology (MGT) Act of 2017 in an effort to replace "legacy IT" systems that continue to plague numerous Federal agencies. With examples like the reported cyberattack on the FCC's Electronic Comment Filing System, I think that this effort needs to remain a priority.

Could you please speak to the cybersecurity benefits resulting from the FCC's current and ongoing efforts to replace "legacy IT" systems?

Answer. Thank you for the question, Senator. The FCC has made significant strides in modernizing its IT systems by transforming costly legacy infrastructure into more efficient and secure cloud-based networks. Since 2013, the FCC has reduced its legacy IT spending from 85 percent to less than 50 percent of the agency's IT budget. However, there is still progress to be made at the FCC and across all Federal agencies when it comes to IT modernization. This is evidenced by the 30,899 cyber incidents reported by Federal agencies just last year, as well as the FCC's own difficulties maintaining an operational public comment website during times of heavy use. A fully operational comment system is crucial for our rulemaking process, and further system upgrades are necessary to avoid disruptions to our agency mission. Increased funding through programs like the one proposed in the *Modernizing Government Technology Act of 2017* would provide the FCC with the funding required to build and maintain a robust IT infrastructure, while moving to a cloud-based system needed to ensure a fully functional and secure network.

Question 2a. I continue to hear from Kansans who remain concerned about the status and effectiveness of the Universal Service Fund's (USF's) High-Cost program. In April, I joined a number of my colleagues in a letter to the FCC strongly encouraging you to take immediate steps to ensure sufficient resources are available to enable this program to work as statutorily mandated.

I hear that the budget shortfall is resulting in canceled network builds and undermining the intended effect of the reforms to make standalone broadband affordable for consumers. Are you hearing this too, and what steps are you taking to address this?

Answer. I have heard from many rural carriers over the course of the past year since the Commission adopted its rate-of-return reforms. Some have excitedly told me about how they are using universal service dollars to build out more broadband. Others have expressed dismay at having to cancel network builds. We need to have a rural broadband program that addresses the needs of all Americans, and we are working to do so.

One step I am hopeful the Commission will take is to address waste, fraud, and abuse in the high-cost fund. By prohibiting ratepayer dollars from being spent on

things like artwork and golf memberships, we can simultaneously increase the amount of money available for rural broadband, and help rein in wasteful spending of government dollars.

I stand ready to work with my colleagues to ensure that rural America is not relegated to second-class broadband.

Question 2b. Some have talked about an infrastructure package from Congress as a potential solution for this USF budget shortfall. If Congress does come forward with such funding, would you commit to adequately funding the program for these small, rural carriers?

Answer. All of our universal service programs—high-cost, rural healthcare, E-Rate, and Lifeline—work together to bring the benefits of broadband to all Americans. I would carefully evaluate the level and nature of funding that is available and would commit to working with your office to ensure that any concerns you have are adequately addressed.

Question 3a. Your written testimony touched upon the increasing number of FCC employees that are eligible for retirement (about 23 percent of the agency's current workforce). You identified recruitment as a key action item to bring in the "next generations' best and brightest" for the future of the agency. Could you please elaborate on the engineering honors program that you briefly described in your written testimony?

Answer. Engineers support critical aspects of the Commission's work, including our testing laboratory in Columbia, Maryland. An engineering honors program, modeled after a similar program we have for attorneys, could provide 2 years of employment and training needed to support the next generation of engineers. A competitive selection process, requiring applicants to submit a cover letter, resume, transcript and sample of their work, would ensure we attract the best and brightest and provide a pipeline for new engineers as agency retirements continue.

Question 3b. What other efforts do you think are necessary to recruit and retain the staff talent pool that the FCC needs to effectively carry out its mission?

Answer. Every year, many recent graduates go through the process of deciding between a career in public service or a job in the private sector. When government cannot compete on salary, I believe we must think creatively on other ways to give agencies like the FCC a competitive advantage. The following are a few recommendations:

- Ensuring staff have adequate resources to do their job.
- Empowering staff with the ability to make decisions within their area of expertise
- Starting a generous student loan reimbursement program
- Promoting a flexible telework policy.
- Enabling greater staff collaboration across Bureaus, including the ability to easily transition between Bureaus or Offices.

QUESTIONS SUBMITTED BY SENATOR JOE MANCHIN, III

Question 1. The Commission's budget proposes to require the auction of additional spectrum by 2027. I strongly support the continued focus on making more spectrum available for commercial use. Federal communications policy both embraces and requires that rural Americans must have access to the economic opportunities provided by broadband access. Innovative ideas are not limited by geography. We must do more to ensure they are not limited by a lack of connectivity.

How can future auctions be structured to ensure additional wireless spectrum deployment in rural areas actually occurs?

Answer. Thank you for the question, Senator. Ensuring that Americans in rural areas have access to robust and affordable broadband has been a top priority of mine since I joined the Commission 8 years ago. I would like to highlight two ways the Commission is working to ensure that spectrum auctions promote actual deployment in rural areas: bidding credits and the Universal Service Fund.

Two years ago, the Commission updated its competitive bidding rules, and for the first time, established a bidding credit for eligible rural service providers. This bidding credit allows providers serving predominately rural areas and who have 250,000 or fewer subscribers to apply for a 15 percent bidding credit in spectrum auctions. I supported this expansion of our bidding credits, and am pleased to report that it was successfully employed during the Incentive Auction. There, 23 service providers collectively obtained 123 licenses to serve 13.4 million subscribers in rural America, via \$18.3 million in bidding credits. These providers invested over \$100 million in rural broadband, and I am confident that the bidding credit will continue to provide incentives for rural broadband deployment in future auctions.

Moreover, as you know, the Commission has two USF auctions in the pipeline: Connect America Fund Phase II and Mobility Fund Phase II. Both of these will support wireless connectivity in rural areas, and could provide a boost to ensure that spectrum that is currently unused will be utilized in those areas.

Question 2. Broadband has an important role to play in providing access to healthcare services, particularly in rural America. I commend the Commission's work through the Connect2Health Task Force to provide valuable insight into broadband health policies. Most fundamentally, telehealth services are only an option for those who have a broadband connection. I strongly support the Commission's focus on closing the digital divide through programs such as Mobility Fund II, which has the potential to be a critical part of the broadband expansion necessary for telehealth in rural areas.

Beyond connectivity, would you please discuss what barriers to telehealth services currently exist at the State level?

Answer. What I have heard from stakeholders on the ground, as well as those who have filed comments in response to the FCC's Broadband Health proceeding (GN Docket No. 16-46) is that telehealth and telemedicine services have become an essential component of States' healthcare systems, especially in providing healthcare services to people living in rural and remote areas. A good example of where these services have made a meaningful impact is in the State of Mississippi. From a broadband perspective, we continue to hear concerns about the lack of broadband or inadequate broadband services and speeds especially in rural areas, which is impacting the availability of telehealth and telemedicine services. And some of this is not only based on the lack of infrastructure or service providers, but it is also based on the unavailability or insufficiency of Federal and State funds. In this regard, with respect to Federal Universal Service funding, we are hearing from numerous healthcare providers, especially those that run community health centers, such as Federal Qualified Health Centers (FQHCs), that the FCC needs to increase the \$400 million per year cap under the Rural Health Care (RHC) program, given that the cap has been reached (in Funding Year 2016 and likely also in 2017), and that the inadequate funding will threaten the provision of medical services.

In terms of specific State issues that are impeding the provision of telehealth services, one major issue is physician licensure—i.e., the inability of a physician to provide telehealth and telemedicine services to a patient residing in a different State where he/she is not medically licensed, although some State medical boards have begun to issue special licenses or certificates to address this issue, and I understand that other States are continuing to look into this impediment issue. Another major State issue is reimbursement for the provision of these services. While many States are beginning to expand telehealth reimbursement, others continue to restrict and place limitations on telehealth delivered services. I am encouraged, however, that States appreciate the value of these services. Indeed, I was recently informed by FCC staff that looked into these issues that, in the 2016 legislative session, 44 States introduced over 150 telehealth-related pieces of legislation to address these and other State issues related to the provision of telehealth services.

Question 3. I understand the Commission opened a proceeding in April to explore barriers to wireline broadband infrastructure deployment. I applaud the Commission's continued focus on rural broadband deployment. Under current law, most providers generally have a duty to allow other providers access to its broadband infrastructure like conduit. However, because broadband conduit cannot be visibly inspected, it has been brought to my attention that providers have had difficulty finding out where it is already in the ground. In turn, this can hinder broadband deployment.

Can ensuring greater access to conduit make financial sense for providers as well as help close the digital divide?

Answer. You are correct, utilities generally have an obligation to make conduit available at nondiscriminatory rates, terms, and conditions under section 224 of the Communications Act. I would welcome further FCC action to ensure competitive access to conduit.

QUESTIONS SUBMITTED TO HON. MICHAEL O'RIELLY

QUESTION SUBMITTED BY SENATOR SHELLEY MOORE CAPITO

Question. Commissioner O'Rielly, you previously stated that there are bad actors who may take advantage of broadband deployment, particularly those that seek to deploy 5G wireless service. What steps is the Commission taking to prevent this from occurring?

Answer. The Commission has initiated a multi-pronged approach to eliminate and minimize roadblocks to broadband deployment. For instance, earlier this year Chairman Pai established a new advisory committee, aptly named the Broadband Deployment Advisory Committee, consisting of experts tasked with examining ways to remove barriers to deployment. Further, the Commission has issued a (1) Public Notice on streamlining small cell wireless deployment (2016), (2) a broader Notice of Proposed Rulemaking and Notice of Inquiry pertaining to wireless issues (2017), and (3) a Notice of Proposed Rulemaking, Notice of Inquiry and Request for Comment pertaining to wireline services (2017). These efforts are intended, in part, to solicit steps and requisite authority the Commission can exercise to eradicate barriers. I am hopeful that these items will conclude in the very near future and providers can focus on bringing service to all Americans, instead of being smothered by unnecessary red tape and/or excessive payments to some State, local or Tribal governments.

QUESTIONS SUBMITTED BY SENATOR JERRY MORAN

Question 1. I understand the next generation of wireless network infrastructure will be built using small-cell networks employing 5G wireless technology. The faster data speeds and improved connectivity of 5G is essential for the Internet of Things (IoT) which will unleash billions of dollars in economic growth. The U.S. is the world leader in 4G, but I am worried we are not taking the necessary steps to maintain our global leadership to deploy 5G. Carriers tell me the regulatory barriers to deploy small-cell networks are outdated, hampering investment and economic growth. Do you agree 5G deployment is critical for the American economy, and if so, what steps is the FCC taking to eliminate barriers and costs to deploying 5G technology in a timely manner?

Answer. Yes. Too many State, local and Tribal governments are acting in bad faith, by imposing unreasonable approval procedures or seeking to extract excessive compensation, preventing or delaying the deployment of small cell networks. I strongly believe that the Commission must be willing to step in to aggressively use authority provided by Congress to preempt these regulatory barriers. In addition, the Chairman has established a new Commission advisory committee to examine these and other issues and make recommendations for further Commission action. I am hopeful that the advisory committee's work will be fruitful for its intended purposes.

Question 2a. I continue to hear from Kansans who remain concerned about the status and effectiveness of the Universal Service Fund's (USF's) High-Cost program. In April, I joined a number of my colleagues in a letter to the FCC strongly encouraging you to take immediate steps to ensure sufficient resources are available to enable this program to work as statutorily mandated.

I hear that the budget shortfall is resulting in canceled network builds and undermining the intended effect of the reforms to make standalone broadband affordable for consumers. Are you hearing this too, and what steps are you taking to address this?

Answer. Yes, I have heard this is occurring. I support providing some additional funding resources to both the model and legacy sides for rate of return carriers. The Commission should promptly examine whether this can be done without increasing the burden on consumers, by using funding from our reserves without jeopardizing funding for other purposes.

Question 2b. Some have talked about an infrastructure package from Congress as a potential solution for this USF budget shortfall. If Congress does come forward with such funding, would you commit to adequately funding the program for these small, rural carriers?

Answer. If Congress decides to allocate Federal taxpayer dollars for broadband deployment and if such funding is allocated to the FCC for distribution via our high-cost program, which I have advocated would be the best mechanism, I would certainly commit to ensuring that the funds are properly distributed to extend broadband deployment nationwide. Depending on how the funding is designated by Congress, I would agree that additional targeted funding should go to carriers will-

ing to serve parts of America that lack broadband service, which tend to be the more rural areas.

Question 3. I believe that modernizing the Federal Government’s information technology (IT) systems needs to remain a top-priority for all agencies. According to the GAO’s 2015 High Risk Series report, the Federal Government annually spends over \$80 billion on IT, but more than 75 percent of this spending is for “legacy IT”. I have worked with my colleague Senator Udall on legislation called the Modernizing Government Technology (MGT) Act of 2017 in an effort to replace “legacy IT” systems that continue to plague numerous Federal agencies. With examples like the reported cyberattack on the FCC’s Electronic Comment Filing System, I think that this effort needs to remain a priority.

Could you please speak to the cybersecurity benefits resulting from the FCC’s current and ongoing efforts to replace “legacy IT” systems?

Answer. I may not be in the best position to comment on this, as it is an area generally overseen by the Chairman. In terms of replacing legacy IT systems, I wholeheartedly agree that modernizing our physical equipment, networks and databases is a sound investment, assuming funding is available to do so, and would tend to improve the security of our internal network from any threats.

Question 4. Your testimony discussed the FCC’s ongoing efforts to close the “Digital Divide” by expanding fixed and mobile broadband deployment in the Connect America Fund Phase II and the Mobility Fund Phase II. What role do you see the Rural Broadband Auctions Task Force playing in implementing these important USF-related auctions?

Answer. As I understand from conversations with the Chairman’s staff, the task force is charged with designing and executing the respective reverse auctions for high-cost program funds, in compliance with decisions made by the Commission. While these functions previously existed, the Chairman felt it was important to ensure that the necessary focus and attention was paid to this important topic via a dedicated task force of Commission staff.

Question 5. Title II and “Open Internet” rules are not the same and should not be conflated. If people are worried about Open Internet issues, shouldn’t Congress act to put “Open Internet” rules into statute and thus end the regulatory ping pong and market uncertainty that results every time the administration changes parties and a new FCC Chairman steps into this issue?

Answer. The Commission currently has an open proceeding on the matter and I am committed to reviewing the record as it develops, so I will withhold lengthy commentary at this point. However, I can state that I firmly believe that the only way to ensure lasting peace on the issue of net neutrality is for Congress to enact requisite legislation on the topic, as it deems appropriate. Absent this action, changes to rules are likely to occur as Commissioners change over time.

QUESTIONS SUBMITTED BY SENATOR JOE MANCHIN, III

Question 1. The Commission’s budget proposes to require the auction of additional spectrum by 2027. I strongly support the continued focus on making more spectrum available for commercial use. Federal communications policy both embraces and requires that rural Americans must have access to the economic opportunities provided by broadband access. Innovative ideas are not limited by geography. We must do more to ensure they are not limited by a lack of connectivity.

How can future auctions be structured to ensure additional wireless spectrum deployment in rural areas actually occurs?

Answer. I believe the best way to facilitate wireless coverage to all areas is to have firm build-out requirements that are enforced vigorously. That being said, I do not support making retroactive changes to existing licenses for this purpose, as it would unfairly impose burdens on those licensees who purchased licenses under rules previously designed. Instead, any such reform should be done on a going forward basis.

Question 2. Broadband has an important role to play in providing access to healthcare services, particularly in rural America. I commend the Commission’s work through the Connect2Health Task Force to provide valuable insight into broadband health policies. Most fundamentally, telehealth services are only an option for those who have a broadband connection. I strongly support the Commission’s focus on closing the digital divide through programs such as Mobility Fund II, which has the potential to be a critical part of the broadband expansion necessary for telehealth in rural areas.

Beyond connectivity, would you please discuss what barriers to telehealth services currently exist at the State level?

Answer. While Congress has assigned a limited role for the Commission in regard to telehealth, I am familiar with these issues from my previous employment. Certainly, the issues of licensing and liability have been roadblocks to further use of telehealth, requiring greater attention and possible action by Congress or individual States. However, the Commission recently released a Public Notice seeking additional information and answers to questions regarding a host of aspects involving telehealth and whether the Commission can play a role in facilitating its usage, within the bounds of our authority.

Question 3. I understand the Commission opened a proceeding in April to explore barriers to wireline broadband infrastructure deployment. I applaud the Commission's continued focus on rural broadband deployment. Under current law, most providers generally have a duty to allow other providers access to its broadband infrastructure like conduit. However, because broadband conduit cannot be visibly inspected, it has been brought to my attention that providers have had difficulty finding out where it is already in the ground. In turn, this can hinder broadband deployment.

Can ensuring greater access to conduit may make financial sense for providers as well as help close the digital divide?

Answer. In terms of duty to offer access to conduit, different legal requirements may apply depending on the type of provider and the service being offered. For instance, section 251(b)(4) of the Communications Act of 1934 imposes the obligation on each local exchange carrier "to afford access to the poles, ducts, conduits, and rights-of-way of such carrier to competing providers of telecommunications services on rates, terms and conditions that are consistent with section 224" (pertaining to pole attachments). As you note, the Commission has initiated a proceeding, and one of the points it is considering is the scope of any such requirements.

The Commission is also broadly considering whether barriers to wireline investment can be eliminated or modified to facilitate broadband deployment. The record on the that item has since closed and it is now before the Commission to determine the best course of action, if any. I plan to review the record closely to see the answers commenters provided to the many questions and proposals posed.

Generally, greater access to existing conduit, consistent with obligations under the law, may be helpful to broadband deployment, depending on the remedial structure and costs. Certainly, any efforts on this front shouldn't serve directly or indirectly as an incentive not to deploy broadband facilities.

QUESTIONS SUBMITTED BY SENATOR CHRIS VAN HOLLEN

Question 1a. Chairman Pai: In May you met with local and State MD officials on the issue of microcells. At that meeting, Montgomery County Executive Leggett underscored the importance of working with local authorities. Maryland is a unique State because we have very dense urban communities and rural and mountainous areas—we are a microcosm of the challenges of nationwide broadband deployment. I am very excited about the expansion 5G next generation networks. However, local governments feel that they are being left out of the conversation.

Commissioner Pai and Commissioner O'Rielly: You have both spoken numerous times about Federal overreach and over regulation. What steps will you take to ensure that local jurisdictions are heard and that your actions do not preempt their regulations?

Answer. I believe that a good portion of State, local and Tribal governments want their citizens to have the opportunity to obtain broadband services and the benefits that can come from such technology. However, a number of bad actors remain that delay the approval process for necessary deployment through various means or seek to extract exorbitant payments from broadband providers. Moreover, there are some governmental entities that prevent deployment based on reasons that are not under their purview. Accordingly, I believe that the Commission must exercise authority provided by Congress to preempt these instances.

Question 1b. Do you think federally regulated expansion will encourage the private sector to invest profits into areas that are less profitable to serve—such as rural areas?

Answer. The development and deployment of new technologies, such as fixed wireless broadband and satellite offerings, is likely to decrease the cost to serve many of the hardest to reach areas, although there may still be areas where it is cost prohibitive to offer services. Accordingly, the Commission operates its high-cost program to provide a subsidy mechanism to entice providers to serve areas where there is no business case at the current time. In terms of removing barriers to entry, I

do believe that this can reduce the cost of service or lead to greater network expansion.

Question 1c. Do you agree that the private industry and local governments are working to create innovative solutions regarding microcells?

Answer. In many instances, the current regulatory landscape hampers the deployment of broadband. Therefore, I applaud efforts by State, local and Tribal governments to find creative ways to expedite deployment and minimize the cost for siting new wireless technologies, including small cells. I do worry, however, that the patchwork of differing regulations and costs can act as an additional deployment barrier.

SUBCOMMITTEE RECESS

The subcommittee hearing is hereby adjourned. Thank you all. Thank you.

[Whereupon, at 3:55 p.m., Tuesday, June 20, the subcommittee was recessed, to reconvene subject to the call of the Chair.]