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OVERSIGHT OF THE FEDERAL COMMUNICATIONS COMMISSION

HEARING

BEFORE THE

SUBCOMMITTEE ON COMMUNICATIONS AND TECHNOLOGY

OF THE

COMMITTEE ON ENERGY AND COMMERCE

HOUSE OF REPRESENTATIVES

ONE HUNDRED FIFTEENTH CONGRESS

SECOND SESSION

JULY 25, 2018

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CONTENTS

	Page
Hon. Marsha Blackburn, a Representative in Congress from the State of Tennessee, opening statement	1
Prepared statement	2
Hon. Leonard Lance, a Representative in Congress from the State of New Jersey, prepared statement	3
Hon. Michael F. Doyle, a Representative in Congress from the Commonwealth of Pennsylvania, opening statement	4
Prepared statement	5
Hon. Greg Walden, a Representative in Congress from the State of Oregon, opening statement	7
Prepared statement	8
Hon. Frank Pallone, Jr., a Representative in Congress from the State of New Jersey, opening statement	9
Prepared statement	11
Hon. Susan W. Brooks, a Representative in Congress from the State of Indiana, prepared statement	84
Hon. Anna G. Eshoo, a Representative in Congress from the State of California, prepared statement	85

WITNESSES

Ajit Pai, Chairman, Federal Communications Commission	12
Prepared statement	15
Answers to submitted questions	122
Michael O'Rielly, Commissioner, Federal Communications Commission	22
Prepared statement	24
Answers to submitted questions	152
Brendan Carr, Commissioner, Federal Communications Commission	33
Prepared statement	35
Answers to submitted questions	156
Jessica Rosenworcel, Commissioner, Federal Communications Commission	40
Prepared statement	42
Answers to submitted questions	158

SUBMITTED MATERIAL

Statement of the Credit Union National Association, submitted by Mrs. Blackburn	86
Statement of the Utilities Technology Council, submitted by Mrs. Blackburn	88
Letter of July 23, 2018, from the the Committeee to the Federal Communications Commission, submitted by Mrs. Blackburn	90
Statement of USTelecom, submitted by Mrs. Blackburn	93
Letter of July 10, 2018, from Mr. McKinley to the Federal Communications Commission, submitted by Mrs. Blackburn	95
Statement of Anthem, Inc., submitted by Mrs. Blackburn	96
GAO report [1], submitted by Mrs. Blackburn	
Letter of July 23, 2018, from wireless ISPs to the Federal Communications Commission, submitted by Mr. Doyle	99
Tweet from Chairman Pai, submitted by Mr. Doyle	108
Article entitled, "Ajit Pai gets message from his hometown ISP: Don't hurt us small ISPs," Ars Technica , submitted by Mr. Doyle	109
Letter of July 18, 2018, from the United States Department of Commerce to the Federal Communications Commission, submitted by Mr. Doyle	116

Page

Letter of May 8, 2018, from Senator Wyden to the Federal Communications Commission, submitted by Mr. Doyle 120

[1] The information can be found at: https://docs.house.gov/meetings/IF/IF16/20180725/108599/HHRG-115-IF16-20180725-SD010-U10.pdf.

OVERSIGHT OF THE FEDERAL COMMUNICATIONS COMMISSION

WEDNESDAY, JULY 25, 2018

HOUSE OF REPRESENTATIVES,
SUBCOMMITTEE ON COMMUNICATIONS AND TECHNOLOGY,
COMMITTEE ON ENERGY AND COMMERCE,
Washington, DC.

The subcommittee met, pursuant to notice, at 1:00 p.m., in room 2123, Rayburn House Office Building, Hon. Marsha Blackburn (chairman of the subcommittee) presiding.

Present: Representatives Blackburn, Lance, Shimkus, Latta, Guthrie, Olson, Kinzinger, Bilirakis, Johnson, Long, Flores, Brooks, Collins, Walters, Costello, Walden (ex officio), Doyle, Welch, Clarke, Loebsack, Ruiz, Dingell, Eshoo, Matsui, McNerney, and Pallone (ex officio).

Staff Present: Jon Adame, Policy Coordinator, C&T; Samantha Bopp, Staff Assistant; Karen Christian, General Counsel; Kelly Collins, Legislative Clerk, Energy/Environment; Kristine Fargotstein, Detailee, C&T; Sean Farrell, Professional Staff Member, C&T; Margaret Tucker Fogarty, Staff Assistant; Adam Fromm, Director of Outreach and Coalitions; Brighton Haslett, Counsel, O&I; Elena Hernandez, Press Secretary; Paul Jackson, Professional Staff, DCCP; Bijan Koohmaraie, Counsel, DCCP; Tim Kurth, Deputy Chief Counsel, C&T; Lauren McCarty, Counsel, C&T; Drew McDowell, Executive Assistant; Brannon Rains, Staff Assistant; Evan Viau, Legislative Clerk, C&T; Greg Zerzan, Counsel, DCCP; Jeff Carroll, Minority Staff Director; Jennifer Epperson, Minority FCC Detailee; Alex Hoehn-Saric, Minority Chief Counsel, Communications and Technology; Jerry Leverich, Minority Counsel; Jourdan Lewis, Minority Staff Assistant; Dan Miller, Minority Policy Analyst; Tim Robinson, Minority Chief Counsel; and C.J. Young, Minority Press Secretary.

OPENING STATEMENT OF HON. MARSHA BLACKBURN, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF TENNESSEE

Mrs. BLACKBURN. The Subcommittee on Communications and Technology will now come to order. I want to thank our witnesses for being here. We appreciate having you before us today. And I recognize myself for 5 minutes for an opening.

And welcome to this hearing on Oversight of the Federal Communications Commission. Today's hearing marks the first time in 28 years that the FCC has appeared before this subcommittee having been reauthorized by Congress. So I am delighted to welcome

the recently reauthorized Commission here today. This reauthorization effort reflects bipartisan, bicameral support of the FCC and the important work it carries out each day to enhance public safety, technologies and alerts, strengthen our national security, increase broadband deployment, and protect consumers while fostering competition and innovation in the communications marketplace.

I hope today also demonstrates the importance of being reauthorized as each of the commissioners articulates how that action benefits the organization. I know we can deliver the same bipartisan accomplishment for your colleagues at the NTIA.

While the FCC is charged with many important tasks, one of the most critical roles it plays revolves around public safety, from working to ensure it that alerting technologies warn the public of impending emergencies to aiding in the restoration of communication networks and services following emergencies, the FCC is responsible for making sure our communication systems are there when Americans are most in need of lifesaving information. This work is furthered through the Nation's 9-1-1 service platform. With this year being the 50th anniversary of the first 9-1-1 call, we here in Congress have been actively working with both the FCC and the NTIA to improve the country's 9-1-1 systems and facilitate the transition to Next Gen 9-1-1 services. I am looking forward to hearing more today about the FCC's work to advance public safety before, during, and after emergencies the FCC has also worked closely with this subcommittee in our shared goal of promoting broadband access and closing the digital divide. We all agree on the importance of bringing the benefits of broadband to all Americans, and this is especially true in rural America. RAY BAUM'S Act included a number of bipartisan provisions for members of this subcommittee and members of the full Energy and Commerce Committee that will help the FCC in removing Federal barriers to broadband deployment, increasing the amount of available spectrum in funding broadband. And just last week on a hearing on rural broadband, we heard from a variety of stakeholders on the impact of that legislation. I look forward to hearing more today on how the FCC has begun to implement the legislation.

I also look forward to hearing the Commission's recommendations on how we can improve connectivity for communities that are in desperate need of improvements to their education and healthcare services. It is this committee's primary role to conduct oversight of all the programs and policies overseen by the FCC, and I remain focused on our key priorities so we can focus the work of this commission.

And at this time, I yield the balance of my time to Mr. Lance for an opening statement.

[The prepared statement of Mrs. Blackburn follows:]

PREPARED STATEMENT OF HON. MARSHA BLACKBURN

Good morning and welcome to today's hearing on oversight of the Federal Communications Commission (FCC). Today's hearing marks the first time in 28 years that the FCC has appeared before this Subcommittee having been reauthorized by Congress. So, I am delighted to welcome the recently reauthorized Commission here today.

This reauthorization effort reflects bipartisan, bicameral support of the FCC and the important work it carries out each day to enhance public safety technologies and alerts, strengthen our national security, increase broadband deployment, and protect consumers while fostering competition and innovation in the communications marketplace. I hope today also demonstrates the importance of being reauthorized, as each of the Commissioners articulates how that action benefits an organization. I know we can deliver the same bipartisan accomplishment for your colleagues at the NTIA.

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It is this Subcommittee's primary role to conduct oversight of all the programs and policies overseen by the FCC and I remain focused on our key priorities so we can focus the work of the Commission.

At this time, I will yield to the remainder of my time to Mr. Lance for an opening statement.

Mr. LANCE. Thank you very much, Chairman. This is the most important responsibility we have on this subcommittee, and certainly we believe that it is incredibly important that the Commission, which does such fine work, is responsive to our concerns. I commend all of the Commissioners for your work. It has been my honor to work with every member of the Commission. I want to continue to do so in as strong a capacity as possible. And moving forward, we have to make sure that we work in bipartisan cooperation on the issues so important to the American Nation.

Thank you, Chairman. I yield back the balance of my time.

[The prepared statement of Mr. Lance follows:]

PREPARED STATEMENT OF HON. LEONARD LANCE

Thank you Chairman Blackburn and thank you to Chairman Pai and the rest of the Commissioners for appearing before us today.

I commend the Commission and the members of the subcommittee for the good, bipartisan work that has occurred over the past year and a half. Much of the coverage on telecom issues focuses on a few politically divisive issues; however, I believe these are the exception not the rule. From closing the digital divide, to ensuring public safety, there is much we can agree on.

Just last night we secured passage of four bipartisan public safety and broadband access bills including two I worked on with Congressman Tonko, the PIRATE Act and ACCESS BROADBAND. Our greatest bipartisan achievement this congress was RAY BAUM'S Act, which finally reauthorized the FCC and included an array of other bipartisan legislation.

Another thing we agree on is the importance of the US winning the race to 5G, which is why Ranking Member Doyle and I introduced the AIRWAVES Act early this year and have secured over fifty bipartisan cosponsors, a majority of which are on this Committee.

I look forward to discussing important issues such as these with the Commissioners today, and hope to continue to work with all of you on ways to serve best the public, despite our differences.

Mrs. BLACKBURN. The gentleman yields back.

At this time, I recognize the subcommittee's ranking member, Mr. Doyle, for 5 minutes.

OPENING STATEMENT OF HON. MICHAEL F. DOYLE, A REPRESENTATIVE IN CONGRESS FROM THE COMMONWEALTH OF PENNSYLVANIA

Mr. DOYLE. Thank you, Madam Chair, for holding this very, very long overdue hearing. And thank you to the witnesses for, finally, after 9 long months, coming before this committee once again.

In the 9 months since our last hearing, the FCC has continued to expand its track record of anti-consumer, anti-small business, anti-innovation policies. It seems that at almost every opportunity, the Commission has chosen corporations over consumers and failed in its duty to uphold the public interest. In December of last year, the Commission voted to eliminate net neutrality protections that are supported by the vast majority of Americans from all sides of the political spectrum. Chairman Pai's comments regarding the quote/unquote, chicken littles who were concerned about the repeal should take a look at the public opinion polls that show the vast majority of his own party is opposed to the Commission's action. These rules protected consumers and small businesses, as well as entrepreneurs and innovators. I am happy to say that the Senate has already passed a resolution restoring these rules. And we hope that we have a vote on our own bipartisan resolution here in the House.

The rest of the Commission's agenda has been no better. They have proposed gutting Lifeline Program, which is an essential communications tool for millions of Americans, including veterans and seniors. The Commission has made a series of decisions to encourage consolidation among broadcasters, from eliminating the main studio rule to reinstating the UHF discount, weakening the kid vid rules, and proposing to change the congressionally established National Ownership Cap. It seems that each of these actions benefit broadcast corporations, and it leaves the public worse off.

The Chairman has claimed that he cares about rural broadband deployment, but the Commission in its zeal not to burden major wireless carriers with reporting where they have wireless service deployed imposed as part of Mobility Fund II a bizarre and onerous challenge process that requires rural providers to hire people to walk through cornfields and backyards trying to prove that communities don't have wireless service. And if those companies can't afford to send people up, the Commission will assume these communities are connected. Now tell me, how does that help the 24 million Americans without access to high-speed broadband?

In the same vein, how does making changes to the CBRS ban to make it less accessible to rural wireless providers who are deploying broadband in hard-to-reach communities enhance the Commis-

sion and this committee's shared goal of closing the digital divide? Well, it doesn't. This Commission's reckless actions are on broadband data services and copper retirement were so corporate friendly that NTIA, the White House's adviser for telecommunications policy, recently said that they remain "concerned, however, that streamlined regulatory requirements may place on Federal departments and agencies that rely on services subject to discontinuance in the untenable position of losing access to critical national security and public safety communications functionality."

How is the Commission putting the convenience of carriers above our Nation's national security and public safety needs? And that is besides the impact that these policies have on schools, libraries, hospitals, small businesses, and competitors that also rely on these services. What about Americans' privacy? Senator Wyden's office recently found that wireless carriers had been sharing the real-time location data of hundreds of millions of cell phones with third parties without consent from their users. That included sharing information with law enforcement agencies that used this data to illicitly look up Americans' location data without a warrant or due process. And we don't even know the scope of this problem because the Commission was asleep at the wheel. I understand that the Commission is now investigating, but how are you so in the dark on an abuse that was a widespread industry practice? And what confidence can this committee have that the Commission will take appropriate enforcement action against carriers who have so recklessly shared our location data without our consent? Again and again, the Commission has failed in its obligations to uphold the public interest and has instead repeatedly sided with corporations over consumers. And in waiting 9 months to do this oversight hearing, this committee has been complicit in the Commission's action by turning a blind eye and being derelict in our responsibilities to provide oversight for this agency.

I would just add that, while I am pleased the Commission issued a hearing designation order for the Sinclair merger and in doing so acknowledged the near universal concerns about Sinclair's honesty and candor, I am extremely concerned that the President has weighted into this issue. I hope, Chairman Pai, that you can assure us the President's tweet last night will not cause the Commission to change course or affect the proceedings of an administrative law judge.

Thank you. And I yield back.

[The prepared statement of Mr. Doyle follows:]

PREPARED STATEMENT OF HON. MICHAEL F. DOYLE

Thank you, Madam Chairman, for holding this very, very long-overdue hearing, and thank you to the witnesses for finally—after 9 long months—coming before this Committee once again.

In the 9 months since our last hearing the FCC has continued to expand its track record of anti-consumer, anti-small business, and anti-innovation policies. It seems that at almost every opportunity the Commission has chosen corporations over consumers—and failed in its duty to uphold the public interest.

In December of last year, the Commission voted to eliminate Net Neutrality protections that are supported by the vast majority of Americans from all sides of the political spectrum.

Chairman Pai's comments regarding the "chicken littles" who were concerned about the repeal should take a look at public opinion polls that show that the vast majority of his own party is opposed to the Commission's actions.

These rules protected consumers and small businesses as well as entrepreneurs and innovators. I'm happy to say that the Senate has already passed a resolution restoring these rules, and we hope to vote on our own bipartisan resolution here in the House.

The rest of the Commission's agenda has been no better. They have proposed gutting the Lifeline program, which is an essential communications tool for millions of Americans, including veterans and seniors.

The Commission has made a series of decisions to encourage consolidation among broadcasters—from eliminating the main studio rule to reinstating the UHF discount, weakening the Kid-Vid rules, and proposing to change the Congressionally established National Ownership Cap.

It seems that each of these actions benefits broadcast corporations and will leave the public worse off.

The Chairman has claimed that he cares about rural broadband deployment. But the Commission—in its zeal to not burden major wireless carriers with reporting where they have wireless service deployed—imposed, as part of Mobility Fund 2, a bizarre and onerous challenge process that requires rural providers to hire people to walk through cornfields and backyards trying to prove that communities don't have wireless service. And if those companies can't afford to send people out, the Commission will assume these communities are connected. How does this help the 24 million Americans without access to high speed broadband?

In the same vein, how does making changes to the CBRS band to make it less accessible to rural wireless providers—who are deploying broadband in hard-to-reach communities—enhance the Commission and this Committee's shared goal of closing the digital divide? It doesn't.

This Commission's reckless actions on Broadband Data Services and copper retirement were so corporate-friendly that NTIA, the White House's Adviser for Telecommunications policy, recently said that they remain quote—"concerned, however, that streamlined regulatory requirements may place federal departments and agencies that rely on services subject to discontinuance in the untenable position of losing access to critical national security and public safety communications functionality"—unquote. Why is the Commission putting the convenience of carriers above our nation's national security and public safety needs? That's besides the impact these policies have on schools, libraries, hospitals, small businesses, and competitors that also rely on these services?

What about Americans' privacy? Senator Wyden's office recently found that wireless carriers had been sharing the real-time location data of hundreds of millions of cell phones with third parties without consent from their users. That included sharing information with law enforcement agencies that used this data to illicitly look up Americans' location data without a warrant or due process.

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Again and again the Commission has failed in its obligations to uphold the public interest—and has instead repeatedly sided with corporations over consumers. And in waiting 9 months to do this oversight hearing, this Committee has been complicit in the Commission's actions by turning a blind eye and being derelict in our responsibility to provide oversight for this agency.

I will just add, that while I am pleased the Commission issued its hearing designation order for the Sinclair merger—and in doing so acknowledged the near universal concerns about Sinclair's honesty and candor—I am extremely concerned that the President has waded into this issue. I hope, Chairman Pai, that you can assure us the President's tweet last night will not cause the Commission to change course or affect the proceedings of the Administrative Law Judge?

Thank you.

Mrs. BLACKBURN. The gentleman yields back.

Mr. Walden, the chairman of the full committee, is recognized for 5 minutes.

OPENING STATEMENT OF HON. GREG WALDEN, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF OREGON

Mr. WALDEN. Well, thank you, Madam Chair. I want to thank you for your leadership on these topics. Specifically, I want to thank you for highlighting the improving emergency alert and 9-1-1 services, as well as your outreach to the minority on the NTIA reauthorization. We have reauthorized the FCC for the first time in what 28 years on the RAY BAUM'S Act. In fact, I think that is the last time you were here to testify before us, Mr. Chairman.

The Commission's efforts in wildfire and hurricane response, its focus on emergency alerts and implementing improved call routing, location accuracy are key priorities for all of us. When we reauthorized the FCC for the first time in two decades, we appreciated the Commission's input on our work. And thanks to the hard work of everyone on the Committee, we were able to incorporate provisions from 18 bipartisan bills that now form RAY BAUM'S Act that is law. So here we do try to work together whenever we can on these issues, 18 bipartisan bills, the RAY BAUM'S Act, and I think we did 57 bills on opioids, virtually all of which were bipartisan.

So I look forward to hearing about the FCC's progress in implementing this important law, such as the broadcast repack. The Commission has been very busy doing good work on the repack. We provided an extra billion dollars and fixed some of the issues that were there to make sure that translators and FM radio stations could get their antennas moved, their equipment moved, so we can free up that spectrum.

And I know the Commission, under your leadership and others, successfully pulled off the biggest reverse auction in history. You brought to our attention, Mr. Chairman, the issue involving the illegality of the funds that came to the Commission. You couldn't put them anywhere legally, even though your predecessor did. And so we fixed that, and I think that was important to take care of.

I want to thank you for coming out to my district last month, and we traveled around, we saw a health clinic and what telehealth means. I want to commend the Commission for the decision to lift the cap on the rural health telemedicine piece. That made a huge and positive difference for our rural clinics, when you added $171 million over the $400 million cap. You heard it firsthand when you were out there meeting with the clinic, and I appreciated the discussion we had with the broadcasters, the small ISPs. I think you got a taste for what the seventh or eighth largest congressional district in the country is, even though we never got out of one county, but we were there all day.

Commissioner O'Rielly and I have recently had conversations about the uphill challenge facing our radio industry, which I have some experience. My colleagues say I have a great voice for radio and a face for it too. They are not very nice people. Radio, as you know, was my original story, and my father's as well. And I think it is a really important part of our country's framework and fabric of sharing information and entertainment. That fraternity of voices is sharing the same fate as newspapers unfortunately, which never gained the benefits of cross-ownership relief under the Commission for some 15 years. Entities captured once again by regulations from another time. We seem trapped in this constant time warp that

regulations of the seventies or the 1930s for that matter somehow work for the present day or beyond. And some obviously want to take us back to the regime of the 1930s.

We will discuss the changing media landscape today as well. Another sector that edge providers are disrupting, which is great news. It is yet another example of why I put the call out a year ago and then a few months ago inviting the CEOs of some of America's greatest innovative technology companies to please come here and share with us before this committee their concerns and recommendations on a wide range of topics.

The rhetoric around these issues has become like watching the opening of an old television show, waiting to get to the main programming. We sit here and listen to the same old falsehoods, that we ripped away privacy and net neutrality protections, while the reality is all we have done is restore bipartisan equilibrium and regulatory framework that existed just 3 years ago. Little mom-and-pop startups kind of found their way through a light-touch regulatory framework. Though we now know those as old Facebook, Google, Netflix—you name it—all grew up in a light-touch framework, not with the 1930s way we regulated telephones.

In this committee room, we do have the benefit of hearing our critics speak out loud, though unlike other corrosive voices that seek to destroy our daily discourse.

As Chairman Pai knows all too well, be fearful if you are conservative and let your views be known. I am sorry for what you and your family have gone through. Whether you are on the right or the left, somewhere here we have to get back our humanity where we are not shouting at each other and threatening each other, but instead trying to work out our differences. We do that a lot in this committee. And we will continue to.

So, with that, Madam Chair, thank you for this hearing.

And I yield back the balance of my time.

[The prepared statement of Mr. Walden follows:]

PREPARED STATEMENT OF HON. GREG WALDEN

Thank you, Madame Chair,

I want to thank you for your leadership on these topics. Specifically, I want to thank you for highlighting the improving emergency alert and 9-1-1 services as well as your outreach to the minority on the NTIA reauthorization. We've reauthorized the FCC for the first time in 28 years under the RAY BAUM'S Act, in fact, I think that's the last time you were here to testify before us Mr. Chairman.

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Commissioner O'Rielly and I have recently had conversations about the uphill challenge facing our radio industry, which I have some experience. Radio, as you know, was my original story and my father's as well and I think it's a really important part of our country's framework and fabric of sharing information and entertainment. That fraternity of voices is sharing in the same fate as newspapers, unfortunately, which never gained the benefits of cross ownership relief under the Commission for some fifteen years—entities captured once again by regulations from another time. We seem trapped in this constant time warp that regulations of the 1970s, or the 1930s for that matter, somehow work for the present day or beyond. And some, obviously, wanted to take us back to the regime of the 1930s.

We'll discuss the changing media landscape today as well, another sector that 'edge providers' are disrupting, which is great news. It's yet another example of why I put the call out a year ago, and then a few months ago, inviting the CEOs of some of America's greatest innovative technology companies to please come here and share with us, before this committee, their concerns and recommendations on a wide range of topics.

The rhetoric around these issues have become like watching the opening of an old television show, waiting to get to the main programming. We sit here and listen to the same old falsehoods that we ripped away privacy and net neutrality protections, while the reality is, all we have done is restore a bipartisan equilibrium and regulatory framework that existed just three years ago.

Old "Mom and Pop" startups kind of found their way through a lighttouch regulatory framework. We would now know those as, oh, Facebook, Google, Netflix—you name it—all grew up in a light touch framework, not with the 1930s way we regulated telephones. In this committee room, we do have the benefit of hearing our critics speak out loud, though, unlike other corrosive voices that seek to destroy our daily discourse. As Chairman Pai knows all too well, be fearful if you are a conservative and let your views be known.

I'm sorry for what you and your family's gone through. Whether you're on the right or the left, somewhere here we have to get back our humanity where we're not shouting at each other and threatening each other, but instead trying to work out our differences. We do that a lot in this committee and we will continue to.

So, with that, Madame Chair, thank you for this hearing, and I yield back the balance of my time.

Mrs. BLACKBURN. The gentleman yields back.

At this time, I recognize the ranking member of the full committee, Mr. Pallone, for 5 minutes.

OPENING STATEMENT OF HON. FRANK PALLONE, JR., A REPRESENTATIVE IN CONGRESS FROM THE STATE OF NEW JERSEY

Mr. PALLONE. Thank you, Madam Chairman.

The Federal Communications Commission is an independent agency created by and accountable to Congress. Congress gave the agency broad powers and the responsibility to protect consumers, advance competition, promote universal service at reasonable rates, and enhance public safety. In other words, to work in the public interest. As the FCC's oversight committee, it is our duty to ensure the Commission's actions advance those goals and hold the Chairman and Commissioners accountable when the agency does not.

Unfortunately, the Republican majority of this committee has been unwilling to follow through on its promise to hold quarterly

oversight hearings with the FCC. This is the first oversight hearing in 9 months and only the third this Congress.

During that time, the Commission has repeatedly acted contrary to its core mission. In a series of partisan votes, the agency dismantled protections for consumers and initiated numerous proceedings designed to benefit big corporations to the detriment of working class Americans and local communities.

By far the most high-profile and controversial decision was the elimination of the FCC's net neutrality rules. Those safeguards protected consumers, protected small businesses, and protected free speech. Chairman Pai ignored the vast majority of the 24 million comments from individuals and businesses supporting net neutrality.

It is not surprising that Chairman Pai's order faces massive consumer opposition. Public outrage from startup companies, working families, educators, healthcare professionals, veterans and so many others at townhalls and community centers have driven congressional action. In May, the Republican-controlled Senate passed legislation that would reinstate net neutrality. Ranking Member Doyle is now championing that legislation here in the House. And it is not too late to stand with the American people and restore net neutrality. And I urge Speaker Ryan to bring this legislation up for a vote and stand with the bipartisan Members that have signed the petition to force one.

Sadly, the FCC's disregard for consumers does not end there. At a time when other agencies are separating children from their families at our borders and violence in schools is far too commonplace, the Trump FCC wants to roll back rules that limit advertising to children and requires stations to air educational programming for kids. And this doesn't make sense. If the agency was serious about focusing on consumers, it would want to help parents searching for quality educational programming and shield children, not make them easier targets for big business.

In another example of siding with corporations over consumers, Chairman Pai's changes of the FCC's media ownership protections undermine competition, localism, and diverse viewpoints in favor of corporate consolidation. While the Commission rightfully acknowledged that Sinclair's proposed merger and related divestitures may violate the law, the rollback of the media ownership rules opens the door for the next Sinclair.

Universal service, critical to the most vulnerable populations, also has been undermined under Chairman Pai's leadership. The FCC's proposal to revise the Lifeline Program is a particularly egregious example. If adopted, this proposal could cut phone or internet service for approximately 8.3 million people. These are single mothers struggling to get by, veterans searching for jobs, and seniors on fixed incomes. They are at risk of being left behind. The FCC should be looking for ways to help these struggling participants in our economy and community and not just cut them off.

And, finally, while the Commission has worked to update the Emergency Alert System, advance Next Generation 9-1-1, and implement the SANDy Act, it has fallen short in making cybersecurity a priority. The agency has retreated from the efforts of pre-

vious administrations at a time when cyber criminals, foreign and domestic, are becoming more aggressive.

Today's communications networks connect businesses, consumers, and government agencies. And these networks drive a modern economy. But those same networks provide a target for cyber attacks by criminal gangs and nation-states. As the agency charged with promoting public safety, the FCC should work with and encourage companies to develop best practices, address vulnerabilities, and prepare for cybersecurity attacks.

Since the FCC is shirking its responsibility, Congress should be conducting more oversight in the future.

So I want to thank the Chairman and Commissioners for appearing before us today and look forward to your testimony.

And I yield back, Madam Chair.

[The prepared statement of Mr. Pallone follows:]

PREPARED STATEMENT OF HON. FRANK PALLONE, JR.

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Unfortunately, the Republican majority of this committee has been unwilling to follow through on its promise to hold quarterly oversight hearings with the FCC. This is the first oversight hearing in nine months, and only the third this Congress. That is an embarrassment.

During that time, the Commission has repeatedly acted contrary to its core mission. In a series of partisan votes, the agency dismantled protections for consumers and initiated numerous proceedings designed to benefit big corporations to the detriment of working-class Americans and local communities.

By far the most high profile and controversial decision was the elimination of the FCC's net neutrality rules. Those safeguards protected consumers, protected small businesses, and protected free speech. Chairman Pai ignored the vast majority of the 24 million comments from individuals and businesses supporting net neutrality.

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Finally, while the Commission has worked to update the emergency alert system, advance next generation 9-1-1, and implement the SANDy Act, it has fallen short in making cybersecurity a priority. The agency has retreated from the efforts of previous Administrations at a time when cyber criminals—foreign and domestic—are becoming more aggressive.

Today's communications networks connect businesses, consumers, and government agencies. These networks drive the modern economy. But those same networks provide a target for cyber-attacks by criminal gangs and nation states. As the agency charged with promoting public safety, the FCC should work with and encourage companies to develop best practices, address vulnerabilities, and prepare for cybersecurity attacks.

Since the FCC is shirking its responsibilities, Congress should be conducting more oversight in the future.

I thank the Chairman and Commissioners for appearing before us today and look forward to your testimony, and I yield back.

Mrs. BLACKBURN. The gentleman yields back.

And that concludes the member opening statements.

I remind all members that, pursuant to committee rules, all member's opening statements will be made a part of the record.

And we are going to try to get through our opening statements before votes are called around 1:40. So I want to thank all of you for being here today. Today's witnesses will have the opportunity to give their opening statements. It will be followed by a round of questions from members. Our panel today includes Chairman Pai, Commissioner O'Rielly, Commissioner Carr, and Commissioner Rosenworcel. We appreciate that you are here and that your testimony was prepared and submitted on time. We will go in order of seniority, which is the tradition in this subcommittee, and I begin with you today, Chairman Pai. You are recognized for 5 minutes for an opening statement.

STATEMENTS OF AJIT PAI, CHAIRMAN, FEDERAL COMMUNICATIONS COMMISSION; MICHAEL O'RIELLY, COMMISSIONER, FEDERAL COMMUNICATIONS COMMISSION; BRENDAN CARR, COMMISSIONER, FEDERAL COMMUNICATIONS COMMISSION; AND JESSICA ROSENWORCEL, COMMISSIONER, FEDERAL COMMUNICATIONS COMMISSION

STATEMENT OF AJIT PAI

Mr. PAI. Thank you, Chairman Blackburn, Ranking Member Doyle, and members of the subcommittee, thank you for holding this hearing. I appreciate this chance to update you on the FCC's work. But before I do, I would like to thank this subcommittee for its vital assistance. The RAY BAUM'S Act of 2018, which originated in this subcommittee, contained a host of provisions that are already having a positive impact on the FCC's work. Perhaps most importantly, it corrected a technical problem involving deposits for spectrum auctions. With this fix in place, the FCC is moving forward aggressively to hold auctions and move a substantial amount of high band spectrum into the commercial marketplace.

This year, we are commencing the 28 gigahertz band option, followed immediately by an option of the 24 gigahertz band. In the second half of 2019, we intend to hold an auction of spectrum at 37, 39, and 47 gigahertz bands. Combined, these options will make

almost 5 gigahertz of spectrum available and advanced America's global leadership in 5G, the next generation of wireless connectivity. None of this would have been possible without the subcommittee's leadership.

The FCC has also benefited from the subcommittee's support in carrying out our top priority, closing the digital divide. Yesterday, the FCC kicked off its Connect America Fund Phase II reverse auction, which will provide up to $2 billion over the next decade to bring fixed broadband to unserved areas across rural America.

Earlier this year, we dedicated $500 million in additional funding to assist small carriers deploying rural broadband. We proposed over $1 billion to restore and improve communications networks in Puerto Rico and the Virgin Islands following the devastating 2017 hurricane season. And we boosted telemedicine's promise by extending funding in our rural healthcare program by 43 percent, or $171 million.

Funding aside, we are also modernizing our rules, cutting through the regulatory red tape and making it easier for broadband providers to invest in next generation networks. We have exempted small cells from the Federal historic preservation and environmental review processes that were designed for traditional cell towers. We have updated our Business Data Services regulations. We have reformed our network transition rules to make it easier for companies to upgrade from the fading networks of yesterday toward the resilient networks of tomorrow. We are making it easier and cheaper for providers, including competitive entrants, to get access to utility poles with One Touch Make Ready rules as proposed by our Broadband Deployment Advisory Committee. And we have returned to the successful light-touch regulatory framework under which the internet flourished in the United States from 1996 until 2015.

I am pleased to report that our policies to promote broadband deployment are working. According to a recent study in 2017, more commercial buildings in the United States added fiber connections than in any year since at least 2004. And according to figures released just today, it appears that broadband network investment in the United States increased by between $1.5 billion and $3 billion in 2017, reversing the declines that occurred during the last 2 years of the prior Administration. This increased investment is having a tangible and positive impact on American consumers.

I will give you just one example. VTel is a small internet service provider based in Springfield, Vermont. The company reported recently that because of recent FCC policies it "committed $4 million to purchase equipment and services to upgrade its LTE core to enable voice roaming and remedy Wi-Fi calling to all of Vermont rural subscribers and to simultaneously begin rolling out faster mobile broadband that will start our transition to 5G." VTel concludes, and I quote again, "it is quite optimistic about the future, and the current FCC is a significant reason for our optimism."

In short, we are on the right track, and I am confident that we will continue to see more positive results in the months ahead as more of our policies take hold.

I am also pleased by the amount of bipartisan cooperation we have seen at the FCC. This year, for example, fewer than 6 per-

cent, or 1 in 16, of our over 100 votes have been party line. Of course, there will be times when we disagree. But my hope is the debate will be based on facts, consistent with law, and grounded in reality.

I will close on a personal note. I love this agency. I have worked at the FCC for most of the past 11 years, first as a staffer and then as an appointee. It has been a tremendous honor to lead this commission over the last 18 months. A major reason why is because I get to work alongside and have gotten to know the FCC's fantastic staff, those who race toward hurricane-hit areas to help, those who strive to make technologies available to Americans with disabilities, those who devote countless hours to representing our country abroad, and more.

As for me, the issues I have faced are challenging. The decisions I have made haven't always been easy, but so long as I have the privilege of serving as the Chairman of the FCC, I am going to find the facts, I am going to follow the law, and I am going to call 'em like I see 'em.

Chairman Blackburn, Ranking Member Doyle, members of the subcommittee, thank you once again for holding this hearing. I look forward to answering your questions and to continuing to work with you and your staffs in the time to come.

[The prepared statement of Mr. Pai follows:]

STATEMENT OF
CHAIRMAN AJIT PAI
FEDERAL COMMUNICATIONS COMMISSION

HEARING ON "OVERSIGHT OF THE FEDERAL COMMUNICATIONS COMMISSION"

BEFORE THE
SUBCOMMITTEE ON COMMUNICATIONS AND TECHNOLOGY
OF THE UNITED STATES HOUSE OF REPRESENTATIVES
COMMITTEE ON ENERGY AND COMMERCE

JULY 25, 2018

Chairman Blackburn, Ranking Member Doyle, and Members of the Subcommittee, thank you for holding this hearing. I appreciate this opportunity to update you on the work of the Federal Communications Commission to advance the public interest.

But before doing so, I'd like to thank this Subcommittee for the vital assistance that it has provided the FCC. Earlier this year, the RAY BAUM'S Act of 2018 was enacted into law as part of the Consolidated Appropriations Act. That legislation, which originated in this Subcommittee, contained a host of provisions that are already having a positive impact on the Commission's work. Perhaps most importantly, the RAY BAUM's Act included a provision which corrected a technical problem involving deposits for spectrum auctions that prevented the Commission from moving forward with large auctions.

United States Leadership in 5G.—With this fix in place, the FCC is moving forward aggressively to hold auctions and move a substantial amount of spectrum into the commercial marketplace. On November 14, we plan on beginning our 28 GHz band auction, which will be quickly followed by our 24 GHz band auction. Then, in the second half of 2019, I intend to hold a single auction of spectrum in the 37 GHz, 39 GHz, and 47 GHz bands. Combined, these auctions will make 4.95 GHz of spectrum available to the private sector and advance America's global leadership in the deployment of the next generation of wireless connectivity, or 5G. None of this would have been possible without this Subcommittee's leadership.

The FCC is also moving forward on other fronts to ensure that our nation is a pioneer in 5G. Earlier this month, we proposed to make more mid-band spectrum in the 3.7-4.2 GHz band available for flexible terrestrial use. In June, we proposed making spectrum in the 26 and 42 GHz bands available for flexible terrestrial use. In May, the Commission proposed to allow more efficient and effective use of spectrum in the 2.5 GHz band by increasing flexibility for existing Educational Broadband Service licensees and providing new opportunities for educational entities, rural Tribal Nations, and commercial entities to access unused portions of the band. Earlier this year, we proposed in our *Spectrum Horizons* proceeding to allow for greater experimentation in very-high spectrum bands above 95 GHz. Commissioner O'Rielly is taking the lead in working with staff to conclude the 3.5 GHz proceeding in the coming months. And I've committed to putting forth a proposal in the fall to make greater use of the 6 GHz band.

With respect to low-band spectrum, the transition in the 600 MHz band following the incentive auction is proceeding apace. We've granted wireless licenses to the vast majority of auction winners, and T-Mobile has already started offering service in the band in more than 900 cities and towns in 32 states. Moreover, the additional funding that Congress recently provided the Commission in the Consolidated Appropriations Act will ensure that we are able to fully reimburse full-power and Class A television stations for their reasonable relocation expenses and provide funding to LPTV, television translators, and FM stations that are adversely affected by the repack as well as funding for consumer education.

Of course, American leadership in 5G is not just about spectrum policy; getting infrastructure policy right is critical as well. We can make all of the spectrum in the world available for 5G service, but it won't make a difference if the physical infrastructure isn't in place to carry this traffic. And the private sector will need to install a lot of physical infrastructure because we know that the wireless networks of the future will be much more densified than the networks of today.

That's why I asked Commissioner Carr to lead the Commission's efforts to modernize our wireless infrastructure rules. Many of our regulations were designed for 200-foot towers, not small cells that can be the size of pizza boxes. That needed to change. And thanks to Commissioner Carr's leadership, that is changing. Earlier this year, for example, we decided that small cells would no longer have to go through the same federal historic preservation and environmental review processes that were designed for traditional large towers. This common-sense step will expedite the deployment of small cells, cut the cost of deployment, and allow for the faster rollout of 5G. I'd also like to thank Commissioner O'Rielly for his strong support of this important initiative.

Our wireless infrastructure efforts dovetail with our initiatives to promote the deployment of wireline infrastructure, which is essential to carry the massive amounts of 5G traffic that we anticipate. I'll now turn to our wireline efforts.

Closing the Digital Divide.—From the beginning of my tenure as head of the agency, I've made clear that my top priority would be to close the digital divide. I take this issue personally, having grown up in a small town in rural Kansas. And in order to inform our efforts on how to connect unserved areas, I've travelled to 33 states and two U.S. territories and have logged nearly 9,000 road miles to learn about rural communities around the country. I've seen places that are using the Internet to open new doors of opportunity as well as towns that are being bypassed by the digital revolution. In the time to come, I'll continue to visit these areas and keep the Commission's eyes focused on how we can find innovative ways to address this critical challenge.

I'm pleased to report that the FCC has been taking significant steps to expand broadband deployment in previously unserved parts of our country. Yesterday, for example, the Commission kicked off its Connect America Fund Phase II reverse auction, which will provide up to $2 billion over the next decade to bring fixed broadband to unserved areas in rural America. Through this first-of-its-kind multi-round reverse auction, a wide variety of providers, including rural electric cooperatives, fixed wireless providers, incumbent local exchange carriers, cable companies, and satellite providers, are competing for universal support funding to expand broadband deployment. The reverse auction mechanism will ensure that this money is distributed efficiently and that we get the most bang for our buck. A lot of work went into getting this auction off the ground, and I'd like to thank the Rural Broadband Auctions Task Force for all its efforts on this essential project.

On the universal service front, we've also taken other significant steps. Earlier this year, for example, we provided about $500 million in additional funding to assist rate-of-return carriers in expanding broadband deployment in rural America and sought public input on the future steps we should take so that these carriers have sufficient resources to build out broadband. We also raised the cap in our Rural Health Care program by $171 million a year and agreed to adjust the cap in future years to account for the impact of inflation. And in August, we will examine a $100 million pilot program to expand connected care everywhere, spearheaded by Commissioner Carr. These steps will enable more rural patients to access telemedicine through high-speed broadband.

Although reforming our universal service programs is an important aspect of closing the digital divide, that alone won't get the job done. We also have to cut through the regulatory red tape and make it easier for broadband providers to invest in next-generation networks. And that's exactly what we're doing. Among other things, we've modernized our rules to make it easier for companies to transition away from maintaining the fading copper networks of yesterday and toward investing in the resilient networks of tomorrow. We're also taking action to make it easier and cheaper for providers to get access

to utility poles and conduits. At our August meeting, for example, we will be voting on one-touch-make-ready rules. This proposal was recommended by our Broadband Deployment Advisory Committee, and if adopted, this initiative would substantially reduce the time and expense of preparing poles for new attachments. Many broadband providers, particularly competitive entrants, have told the FCC how the time and cost of attaching equipment to poles is a significant barrier to broadband deployment. Adopting one-touch-make ready rules would be a significant step toward solving that problem.

The Commission has also given the green light to companies that want to send a large number of satellites into low-Earth orbit to provide high-speed broadband. These new networks promise much faster and more reliable satellite broadband services and could help us reach the hardest-to-serve areas.

And finally, we've returned to the successful light-touch regulatory framework under which the Internet flourished in the United States from 1996 to 2015. Under the heavy-handed regulations adopted by the prior Commission in 2015, network investment declined for two straight years, the first time that had happened outside of a recession in the broadband era. But we've now abandoned that failed policy. In the *Restoring Internet Freedom Order*, which was adopted last December, we stopped regulating the Internet with 1934 rules designed for the Ma Bell telephone monopoly. We strengthened our transparency rules so that broadband providers are required to disclose more information about their network management practices. And we restored the authority of the Federal Trade Commission, our nation's premier consumer protection agency, to police the practices of Internet service providers—authority the prior Commission had stripped from the FTC in 2015.

At the time that the *Restoring Internet Freedom Order* was adopted, there were many hysterical predictions of doom and gloom. We were told that it would be the destruction of the Internet, or as some outlets put it, "the end of the Internet as we know it." But the *Restoring Internet Freedom Order* has taken effect, and the sky has not fallen. Indeed, the only thing that has fallen is the credibility of the Chicken Littles who made such dire predictions.

The bottom line is this: The Internet remains open and free, and we now have a regulatory framework in place that is encouraging the private sector to make the investments necessary to bring better, faster, and cheaper broadband to more Americans. This fact was brought home recently by Michel Guité, President of VTel, a small Internet service provider based in Springfield, Vermont. He recently wrote: "I can assure that regulating broadband like legacy telephone service would not create any incentives for VTel to invest in its broadband network. In fact, it would have precisely the opposite effect." And as a result of recent FCC policies, VTel "committed $4 million to purchase equipment and services from Ericsson to upgrade its LTE core to enable voice roaming and Wi-Fi calling to all our Vermont rural subscribers and to simultaneously begin rolling out faster mobile broadband that will start our transition to 5G." Mr. Guité concluded that VTel "is quite optimistic about the future, and the current FCC is a significant reason for our optimism." I have attached VTel's letter to this statement so that you can see for yourself the positive consumer impacts our decisions, including light-touch regulation, are having.

Public Safety.—In recent months, the Commission has taken many important steps to improve public safety. A principal focus has been on improving our nation's alerting systems: the Emergency Alert System (EAS) and Wireless Emergency Alerts (WEA). Earlier this year, for example, we adopted new rules to improve the geographic targeting of WEA alerts. The Commission heard from many public safety officials that alerts being transmitted to an overly broad geographic area were undermining the efficacy of the WEA system. Either public safety officials were unwilling to send certain alerts because they could not be sufficiently targeted, or consumers were beginning to ignore alerts because too many they received were not relevant to them. In order to address this problem, we will require wireless providers participating in WEA to improve geographic targeting so that alerts do not overshoot the affected area by more than one-tenth of a mile. Participating wireless providers must also now support the use of "clickable" embedded links in alerts so that consumers are able to easily access additional

emergency information. And we have adopted rules to add a new "Blue Alert" to the EAS to notify the public about threats to law enforcement and help apprehend dangerous suspects.

As you know, in January, the nation received a stark reminder about the dangers posed by false emergency alerts when the State of Hawaii issued a false ballistic missile alert on a Saturday morning. Such false alerts are entirely unacceptable because they cause widespread panic and undermine public confidence in our alerting systems. Immediately following this false alert, our Public Safety and Homeland Security Bureau leaped into action and launched a thorough investigation of what went wrong and what could be done to stop such an incident from happening again. Earlier this year, the Bureau issued a report that contained a variety of important recommendations for preventing false alerts and minimizing the impact of those that do occur. Since that time, the Bureau has been taking steps to make state and local alert originators aware of these recommendations. And earlier this month, the Commission adopted new rules implementing some of the Bureau's recommendations and seeking comment on others.

Another important public safety priority is disaster response and recovery. Last year's hurricanes caused substantial damage in many parts of our country. And the impact was particularly severe in Puerto Rico and the U.S. Virgin Islands. The FCC immediately recognized that the situation on the islands would be unlike other hurricane recovery operations and therefore took unprecedented efforts to assist with the restoration of communications networks. Most notably, we made available over $70 million in frontloaded universal service funding for carriers in Puerto Rico and the U.S. Virgin Islands to expedite recovery efforts in the immediate aftermath of Hurricanes Irma and Maria. Earlier this year, the Commission voted to create two funds—the Uniendo a Puerto Rico Fund and the Connect USVI Fund—to continue to provide much-needed funding for restoration efforts. In the short term, we agreed to make available another $64 million for the restoration of communication networks and to convert the advanced funding we provided last year into new funding by declining to recover those amounts from future universal service payments. We also sought comment on providing almost $900 million in medium-term and long-term funding to expand fixed and mobile broadband connectivity in Puerto Rico and the U.S. Virgin Islands. Our goal should not be just to restore the communications networks that served the islands prior to last year's hurricanes. Instead, we want to create networks that will be more resilient when future storms hit and to expand high-speed Internet access to more Puerto Ricans and Virgin Islanders. In March, I was pleased to visit Puerto Rico and the U.S. Virgin Islands to meet with public and private sector leaders and see first-hand the status of recovery efforts. I look forward to continuing to coordinate the FCC's efforts with our partners in Puerto Rico and the U.S. Virgin Islands as we keep working on this important issue.

Finally, I want to mention the Commission's efforts to end 911 fee diversion at the state level. Over this past year, Commissioner O'Rielly has taken the lead in highlighting the problem of 911 fee diversion—a practice that saps funding from the ongoing work of public safety answering points and first responders and undermines our nation's investments in next-generation 911. And his use of the bully pulpit has already gotten real results, leading some states to change their practices and others to grapple with the steps needed to end diversion.

* * *

Before concluding, I would like to thank the outstanding, professional, and hardworking staff at the Commission. In the year and a half that I've led the agency, the FCC has been exceptionally productive. For example, we've adopted 119 items at our monthly meetings, compared to 100 items in the three years before I became Chairman. None of this would have happened without the hard work, expertise, and professionalism of our staff. Whether we are discussing making more spectrum available for advanced wireless services, reforming our infrastructure rules, closing the digital divide, protecting public safety, or promoting American leadership abroad, our staff are the ones who deserve the credit for all that we've been able to achieve in just 18 months.

Chairman Blackburn, Ranking Member Doyle, and the Members of this Subcommittee, thank you once again for the opportunity to testify this afternoon, and I look forward to the opportunity to answer your questions.



May 25, 2018

Senator Patrick Leahy
437 Russell Senate Building
United States Senate
Washington, DC 20510

Dear Senator Leahy,

I hope this note finds you and Marcela well.

I feel compelled to write after seeing a video clip of your questions to FCC Chairman Ajit Pai during the recent Senate Appropriations Subcommittee hearing. While I understand your interest in seeking to quantify the effects of the FCC's policies on broadband investment and deployment – no easy task to be sure – I can offer the experiences of Vermont Telephone and VTel Wireless (collectively, VTel), which Chairman Pai mentioned in his testimony, as a testament to the positive impacts of the current FCC's regulatory policies.

As you know, VTel was the first company to offer Internet access in Vermont. We were first in Vermont with GigE to homes. We built America's first 100% 4G LTE wireless broadband network, integrating voice and data while also supporting E911. We routinely post some of the fastest Internet speeds and highest customer satisfaction ratings in the State.

Each year, VTel must invest to operate and grow its wireline and mobile broadband networks. The FCC under Chairman Pai's leadership has created a positive regulatory climate for VTel to make such investments. For example, the FCC has taken steps to reduce regulatory barriers to the installation of cell towers and smaller cell sites. These policies encouraged VTel to commit to build a new cell tower in March 2018, which will improve wireless broadband service to Whitingham, Vermont. Similarly, in April 2018, VTel turned up three new 500 Mbps microwave paths to boost wireless backhaul to Wardsboro and Dover, Vermont.

Later this year, the FCC will conduct its Connect America Fund Phase II reverse auction in which VTel seeks to participate. If successful in that auction, VTel will be able to use auction funds to help subsidize the cost of extending the reach of its networks to deploy higher speed broadband and voice services in additional rural areas of Vermont that are otherwise uneconomic for most wired and wireless carriers to serve. Importantly, there are relatively few areas in rural

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Vermont where broadband service is not currently available, primarily because of the federal American Recovery and Reinvestment Act of 2009 (ARRA), pursuant to which VTel received awards allowing the company to deploy state-of-the art wireline and mobile broadband networks where such deployment would not otherwise be possible.

Chairman Pai's FCC also has eliminated the overhang associated with a number of heavy-handed regulatory initiatives launched by the FCC under then Chairman Wheeler, such as regulating competitive business data services and imposing onerous service discontinuance rules. These initiatives frustrated the deployment of IP technologies and required that VTel spend significant sums on regulatory lawyers and personnel to ensure compliance – sums that would be unavailable to VTel to invest in its broadband network and services.

As far as net neutrality is concerned, which was a subject of your questioning of Chairman Pai, VTel is committed to an open Internet. However, whatever your views on the need for or wisdom of net neutrality rules, I can assure that regulating broadband like legacy telephone service would not create any incentives for VTel to invest in its broadband network. In fact, it would have precisely the opposite effect.

You asked Chairman Pai to give tangible examples of investment into rural broadband as a result of recent FCC policies. I can tell you that, just days ago, VTel committed $4 million to purchase equipment and services from Ericsson to upgrade its 4G LTE core to enable voice roaming and Wi-Fi calling to all our Vermont rural subscribers and to simultaneously begin rolling out faster mobile broadband that will start our transition to 5G. This commitment represents VTel's largest single technology investment since the capital invested in connection with VTel's ARRA awards, and one of the largest in the history of our company.

There is never enough capital, and the challenges of competing against larger and more established companies in rural Vermont remain enormous. However, VTel is quite optimistic about the future, and the current FCC is a significant reason for our optimism.

I hope it is clear this note is sent with the deepest respect I have long held for you personally, and for your decades of commitment to the development of rural Vermont broadband. If you would like to discuss any of these matters, it would be a pleasure to come to Washington at your convenience.

Sincerely,

Dr. Michel Guité
Chairman and CEO

Mrs. BLACKBURN. The gentleman yields back.
Mr. O'Rielly, you are recognized.

STATEMENT OF MICHAEL O'RIELLY

Mr. O'RIELLY. Thank you. My thanks to Chairman Blackburn, Ranking Member Doyle, and the members of the subcommittee for the honor to engage with you on so many important communications issues. At the outset, I would like to thank Representatives Lance, Tonko, and Collins and their cosponsors, many on the subcommittee, and the chairman and ranking member for their leadership on the PIRATE Act.

Under Chairman Pai's leadership, the Commission has made great strides in terminating unlawful pirate radioactivity, but without additional tools provided by Congress, we can only go so far to eliminate this harmful practice.

Today, I would like to highlight a few critical issues that have been a focus of mine. First, I firmly believe that the ongoing problem of 9-1-1 feed diversion by certain States and territories must end once and for all. Such diversion, beyond deceiving ratepayers, has real consequences for the public safety community and the American people in need of critical emergency assistance at some of the darkest moments in their lives.

The Commission's ninth annual report to this committee, which relied on self-reporting by States and territories, showed five States diverted almost $130 million away from 9-1-1 enhancements and towards other unrelated purposes. Moreover, seven States and territories figured out that, instead of being labeled a diverter, they would rather just not submit the necessary paperwork. Take New York, a previously self-admitted diverter, which failed to respond to the Commission's data collection inquiries, but sufficient public record information supported a finding that it is a substantial diverter of funds for non-public safety purposes.

There is some good news to report in that several States and territories have clarified their reported diversion or made commitments to prevent a reoccurrence. These include Illinois, New Mexico, Oklahoma, and Puerto Rico. However, not every State or territory has been a success story. Accordingly, I suggest additional Federal action, such as legislation proposed by Representatives Collins, Eshoo, and Lance, is necessary to address recalcitrant States and territories, like New York, New Jersey, Rhode Island and Guam. Identifying and shaming these States has not adequately worked.

Second, the Commission is focused on taking every necessary and appropriate step to provide all Americans the opportunity to access broadband services. At the same time, the Commission's efforts should be examined in parallel with programs by other Federal agencies. Congress recently allocated as part of last year's Consolidated Appropriations Act 2018 an additional $600 million for a new broadband pilot program to be administered by the Rural Utility Service, or RUS, and additional broadband funding is being considered as part of the Senate and House farm bills.

While efforts to provide RUS with new Federal money are commendable, there is a potential for certain problems to arise. In particular, there is a significant possibility that RUS funding could be

used to subsidize areas that already have broadband or support providers in competition with those that currently receive FCC subsidies or may have build-out plans that require them to provide service in the future. Additionally, the RUS program could be used to allow providers to serve favored institutions without serving more costly nearby areas.

Fundamentally, Federal funding should be targeted to addressing the $14 million plus Americans without any broadband today. I would humbly suggest that only the proper direction from the right leadership such as this subcommittee can prevent a bad outcome. As Congress concludes the farm bill this fall, I hope you will consider additional safeguards, including strict prohibitions on duplication with other existing programs, alignment of speed requirements, and a focus on the truly unserved.

Lastly, turning to spectrum policy, the Commission has been hard at work ensuring that sufficient spectrum is available for next generation wireless services. I recognized years ago that there was a need for a solid mid-band play for wireless carriers to offer 5G services both domestically and internationally. The 3.7 to 4.2 gigahertz band, or C-band downlink, is an attractive option for this purpose, as it provides significant continuous spectrum, and the largest satellite operators are receptive to reducing their spectrum footprint using a market-based spectrum reallocation approach. I also agree with Representatives Guthrie and Matsui, who recently noted to the Commission that the 6 gigahertz band is a necessary ingredient to address the need for more unlicensed spectrum and must be part of our final rules.

With that, I want to thank the subcommittee for holding this hearing. And I look forward to answering any questions you may have.

[The prepared statement of Mr. O'Rielly follows:]

Statement of FCC Commissioner Michael O'Rielly

Before the
Subcommittee on Communications and Technology
Committee on Energy and Commerce
U.S. House of Representatives

Hearing on
"Oversight of the Federal Communications Commission"
July 25, 2018

Thank you for the honor to appear before you today. My thanks to Chairman Blackburn, Ranking Member Doyle, and the members of this Subcommittee for the opportunity to engage with you on many important issues and answer any questions you may have about the decisions and workings of the Federal Communications Commission.

At the outset, I want to congratulate this Subcommittee on the passage of the RAY BAUM'S Act of 2018, which contains thoughtful communications policy reform in several areas. Of particular importance, the provisions confirm the commitment made by many of us in 2012 that broadcasters would be held harmless throughout the broadcast incentive auction repack process. With the additional $1 billion Congress allocated for this purpose, including $50 million for affected radio stations, broadcasters are in a much better position to relocate their systems without facing uncompensated expenses. The Commission is currently considering multiple rulemakings to implement the entirety of the related provisions in the law, including one scheduled for our August Open Meeting.

Let me also take this opportunity to applaud Representatives Lance, Tonko, and Collins, along with their 11 cosponsors – many on this subcommittee – for their leadership on the "Preventing Illegal Radio Abuse Through Enforcement Act," or PIRATE Act. This bill rightfully increases the penalties, requires regular enforcement sweeps, and augments the tools available to the Commission to stop illegal pirate broadcasters. Under Chairman Pai's leadership the Commission has made tremendous strides in terminating unlawful pirate activity. But, without additional tools provided by Congress, we can only go so far to eliminate the harmful practice of pirate radio.

Additionally, I want to thank Representatives Brooks and Eshoo for introducing the National Non-Emergency Mobile Number Act. This is a commonsense bill that will bring uniformity to wireless short codes used today by states to redirect non-emergency calls on the highway away from 9-1-1 call centers and to state highway patrols. Just as we have one, unified number to call in times of need, it is logical to have one unified wireless short code to call when travelers see car malfunctions or suspected drunk drivers along the highway. This bill is an important first step in eliminating traveler confusion and potentially saving lives.

Finally, I commend Representative Kinzinger for reintroducing the Federal Communications Commission Transparency Act. This legislation codifies the current and critical Commission practice, which I advocated for last Commission and Chairman Pai rightly instituted early in his tenure, of publicly posting items three weeks in advance of their consideration at monthly Commission meetings. As a result of this practice, unnecessary discussions of non-existent issues have been eliminated; conversations are more productive; Commissioners are still speaking their minds and negotiating internally on items; and work product has greatly improved. I have also seen comments from all Commissioner offices — Republicans and Democrats — in favor of the practice. Despite the broad support for this reform, I believe codifying this practice is important to ensure it will continue long after those of us here today depart the Commission.

Federal Broadband Efforts & Potential Pitfalls

The Commission is focused on taking every necessary and appropriate step to provide all Americans the opportunity to access broadband services. According to the last FCC report, at least 14 million Americans do not have access to broadband of sufficient quality to meet our standards. From our subsidy programs to removing deployment barriers to reducing unnecessary regulatory burdens, the Commission is working very hard to address these unserved households.

At the same time, the Commission's efforts should be examined in parallel with programs by other Federal entities. Today, there are three primary Federal agencies that provide funding to aid the private sector expansion or maintenance of broadband offerings: the FCC, the Department of Agriculture's Rural Utility Service (RUS), and the Department of Commerce's National Telecommunications and Information Administration (NTIA). On an annual basis, the Commission provides, from ratepayer collected funds, over $4.5 billion for the Connect America Fund (CAF) to support direct and measurable broadband buildout in high-cost areas. Further, the Commission has authorized approximately $6.5 billion for our other three universal service fund (USF) programs that can facilitate the distribution of additional broadband services. Meanwhile, Congress recently allocated, as part of last year's Consolidated Appropriations Act, 2018, an additional $600 million for a new broadband pilot program, governed by certain conditions, to be administered by RUS. Finally, additional broadband funding is being considered as part of both Senate and House Farm bills.

While efforts to provide RUS with new Federal money are commendable, there is a potential for certain problems to arise. In particular, there is a significant possibility that the RUS program could be used to subsidize areas that already have broadband or fund providers in competition with those that either currently receive FCC subsidies or may have buildout plans that require them to provide service in the future. Additionally, the RUS program could be used to allow providers to serve favored institutions without serving more costly, nearby areas. Either situation could cause enormous financial strain on those existing providers trying to bring broadband to sparsely populated areas.

Risk of harm from RUS spending exists for several reasons. Part of the problem stems from the potential to allow RUS funding to be used for fully served or what some consider underserved areas. Regrettably, "unserved" is essentially defined as an area already having service or multiple broadband providers. Having travelled this great nation, I have met with Americans in truly unserved areas as they

live with zero providers, not one or two existing ones hoping the Federal government will fund another. To accurately reflect this reality, I urge Congress to consider modifying this definition.

Moreover, there is a major disagreement over what should qualify as broadband for purposes of Federal funding. I certainly would like for all Americans to have sufficient broadband speeds for whatever tasks they seek to accomplish. However, there is simply not sufficient funds to subsidize "fiber" broadband builds, either wired or wireless, to every household nationwide, which would cost hundreds of billions of dollars. This is why the Commission has focused its CAF funds on broadband projects with speeds above 10/1 Mbps, and even at that level there is tremendous demand to add additional budgetary resources to reach more households. Although not ideal, the intent is to, at least, ensure every household has this level of service before focusing on increasing speeds further. Allowing the different funding programs to have their own speed requirements greatly increases the likelihood that a tremendous effort will go to overbuilding areas with service today, including areas funded or expected to be funded by the Commission.

Fundamentally, Federal funding should be targeted to addressing those 14 million-plus Americans without any broadband today. Among other ideas, I have advocated having RUS, NTIA, and the Commission coordinate actual implementation of the differing programs. In other words, the program rules need to be written with strict prohibitions on duplication with other existing programs, alignment of speed requirements, and a focus on the truly unserved. Unfortunately, some people see coordination as merely having discussions between bureaucrats. That is not sufficient. While I have little doubt that added dialogue between our three entities could be helpful, it does not solve the standing problem of these programs leading to duplication, wasted spending, or worse. Only the proper direction from the right leadership, such as this Subcommittee, can prevent a bad outcome. As Congress concludes the Farm bill this fall, I hope you will consider these safeguards.

9-1-1 Fee Diversion

I firmly believe that the ongoing problem of 9-1-1 fee diversion by certain states and territories must be addressed. Such diversion has real consequences for the public safety community and the American people. Underfunding Public Service Answering Points (PSAPs) can lead to significant public safety problems, including longer wait times, fewer or overworked personnel, or outdated or inferior equipment to handle the call loads. It can also prevent 9-1-1 call centers from modernizing to NG9-1-1 technologies. At a minimum, allowing states to deceive consumers into paying fees for the 9-1-1 system and transferring the money elsewhere undermines the system's integrity. I thank my colleague, Commissioner Rosenworcel, for working with me to address this issue.

In December, the Commission submitted its ninth annual report to this Committee showing that, in 2016, five states and territories diverted almost $130 million away from 9-1-1 enhancements and towards other, unrelated purposes. Unfortunately, the FCC must rely on self-reporting by states and territories. This can lead to underreporting or a complete failure to respond altogether. In fact, seven states and territories did just that. It seems some states have figured out that instead of being labelled a diverter, they would rather just be known as a state that didn't submit the necessary paperwork. Take New York, for example, which failed to submit a report in response to the Commission's data collection, but sufficient public record information existed to support a finding that New York diverted "substantial" funds for non-public safety purposes. Moreover, since looking into this matter, my office has uncovered that Puerto Rico and Guam – both of which failed to respond to Commission inquiries – diverted 9-1-1 funds in 2016.

Fortunately, there is some good news to report. It turns out that Illinois, though labeled a diverter in 2016, actually did not divert 9-1-1 funding that year and has certified to my office that it does not plan to divert such funding in the future. Further, New Mexico, one of the largest diverters in 2016, has explained that such diversion was due to a unique situation in which the state faced extreme

insolvency that has since been resolved. New Mexico had not diverted funds prior to 2016 and has explained it will not divert these funds again. Oklahoma also confirmed to me that it did not divert funds in 2016, despite failing to submit initial documents to the Commission. Finally, Puerto Rico, in receiving additional USF support to rebuild its communications networks, has committed to rectify its diversion by the Commission's 2018 report.

But, not every state has been a success story. While initial momentum in Rhode Island was encouraging, the state ultimately doubled down on its diversion practices and simply renamed its 9-1-1 fee. Moreover, in New York and New Jersey, state officials have shown no interest in eliminating this practice. The result? As Representative Collins and I heard in New York, in the last five years Niagara County citizens with a wireless device paid $10.2 million in 9-1-1 fees, with only $2.2 million returned to the County PSAP center. Local budgets consisting mostly of property taxes had to make up the shortfall. And, in Guam, state officials appear more interested in debating the legality of their fee diversion than actually recognizing the harm diversion causes to its people and discussing ways to eliminate the practice.

On this note, we must be more aggressive with recalcitrant states, as, for the most part, identifying and shaming such states has not sufficiently worked. That is why I would like to thank Representatives Collins, Eshoo, and Lance for their leadership in introducing the 9-1-1 Fee Integrity Act. In what is an important first step to correcting the problem, this legislation assigns the process to designate acceptable purposes and functions for 9-1-1 funds to the Commission, rather than the states as allowed under current law. This is key, as states like Rhode Island, New York, and New Jersey, and territories like Puerto Rico and Guam, have passed statutes over the years actually requiring the diversion of 9-1-1 funds for non-public safety related purposes. In the case of New Jersey, lawmakers have claimed it will take a constitutional amendment to end the practice. This is absurd and highlights the importance of further Congressional action to bring consistency and clarity to this matter.

Spectrum Policy

The Commission has been hard at work ensuring that sufficient spectrum is available for next-generation wireless services. More than two years ago, I started focusing my attention on the mid bands, after it became apparent that a global shift in spectrum policy had occurred and the world was eyeing these frequencies as a component for 5G deployment. Thus, it became vital for the United States to have a serious mid-band play to complement our spectrum work in the low and high bands.

As you are well aware, there are no greenfield mid-band frequencies available for 5G. The 3.7 to 4.2 GHz band, or C-band downlink, is attractive, however, because it provides significant contiguous spectrum and the largest satellite operators are receptive to reducing their spectrum footprint using a market-based spectrum reallocation approach. The Commission must conclude the proceeding for determining how to reallocate this band promptly given its importance both domestically and internationally for future wireless offerings. In doing so, I believe that any reallocation plan must be completed fairly quickly; release a sufficient amount of spectrum, such as 200 to 300 megahertz or more; and ensure that current users of the C-band satellite services – primarily broadcasters and cable providers – will be accommodated on the remaining C-band, other satellite spectrum, or through different technologies.

This plan must also permit unlicensed use of the C-band uplink spectrum, or 6 GHz band. As Representatives Guthrie and Matsui recently noted to the Commission, the 6 GHz band is a necessary ingredient to address the need for more unlicensed spectrum. While I wanted the Commission to pursue this issue in last month's mid-band spectrum notice of proposed rulemaking, the Chairman assured me that there would be a follow-up item in the fall. This spectrum, along with the potential opening of the 5.9 GHz band and combined with the existing 5 GHz band, will provide the unlicensed

community with access to a significant swath of spectrum, creating wide channels for Gigabit services. Moreover, it will enable us to meet our statutory obligations under the RAY BAUM'S Act of 2018.

The last piece of the mid-band puzzle is permitting additional wireless operations in the frequencies below 3.5 GHz. Fortunately, the review to ensure that the 3.5 GHz licensing structure is attractive to as many users and use cases as possible and the work on the databases that will enable maximum use of 3.5 GHz is wrapping up. We must now turn to 3450-3550 MHz, which NTIA is currently reviewing for reallocation for commercial wireless use. NTIA should complete this work expeditiously and clear this band. But, we also cannot stop at just 100 megahertz. We must look to those frequencies right below 3450 MHz, along with any others that can be put to more efficient use.

To facilitate the reallocation of Federal government spectrum, I have suggested adding appropriate sticks to the current carrot approach contained in law and suggested by others. Besides Congress statutorily requiring agencies to surrender spectrum, which is always challenging, I have proposed establishing agency spectrum fees as a means to reduce the Federal government's spectrum footprint. Basically, if an agency must pay an annual price for its spectrum, impacting its budget, there is an incentive to minimize holdings and only pay for the spectrum used. I can think of few instances in which the Federal government is allowed to commandeer or stranglehold a resource while ignoring any budgetary implications.

Since this view may not garner unanimous approval immediately, another option is to allow agencies to free up spectrum in exchange for budgetary relief. Under this approach, a federal agency could substitute the market value of their surrendered spectrum to offset budgetary limits or cuts or even expand its spending options. As an added benefit, this option could also incentivize agencies, such as the Department of Defense with its remaining statutory budget caps, to modernize their equipment, as the budgetary relief received from the resulting cleared spectrum would cover the cost of the new

equipment and generate a surplus that could be used elsewhere. Basically, it amounts to a spectrum-for-cash swap.

At a minimum, as both Commissioner Rosenworcel and I have stated, there is an opportunity to put a market value on current federal spectrum holdings in order to ensure that they are appropriately quantified. Once implemented, it allows policymakers to make judgments based on an additional factor when considering and reviewing the spectrum holdings of the Federal government. I would argue that any valuations can rely initially on conservative estimates as they will be quickly adjusted over time by market forces.

* * *

I thank the Subcommittee for holding this hearing and look forward to any questions you may have.

Mrs. BLACKBURN. The gentleman yields back.
Mr. Carr, you are recognized.

STATEMENT OF BRENDAN CARR

Mr. CARR. Thank you.

Chairman Blackburn, Ranking Member Doyle, distinguished members of the subcommittee, thank you for the invitation to testify. I have had the honor of working with you and your staffs as a commissioner for nearly a year. It has been a tremendously rewarding and productive time. I am proud of the work that the agency has accomplished. And I want to commend this subcommittee on its own notable achievements, from identifying additional spectrum in the RAY BAUM'S Act, enhancing public safety through the SANDy Act, to encouraging broadband deployment, including through the Precision Ag Act.

At the FCC, I focused on work we can do to help bring more broadband to more Americans. This has meant working closely with my colleagues at the Commission, but it has also meant spending time outside of D.C. to see firsthand how our policies impact communities across the country.

Over the past 11 months, I have visited 17 States. I have benefited from perspectives gained on the road, whether at a townhall in Chelsea, Michigan; a roundtable in Stanton, Nebraska; or at the kitchen table of family that wanted better, faster broadband. I've also spent time with the construction crews that are doing the hard, often gritty, work that goes into deploying broadband networks. In fact, in Arcadia, Indiana, Congresswoman Susan Brooks introduced me to two Hoosiers, Mark and Scott; they are brothers. They run a small fixed wireless provider. They are a scrappy bunch, having climbed everything from barns to grain elevators to attach the antennas needed to bring broadband to Indiana's farmlands.

I have seen similar efforts in communities across the country. And it only underscores why the work of this subcommittee and the FCC is so important. We want every community to get a fair shot at next generation connectivity. One year ago, I noted the challenge we faced in extending American leadership in wireless as we moved from 4G to 5G networks. I testified about the need for the FCC to focus on two things: spectrum and infrastructure. The Commission has made substantial progress on both.

I want to focus this afternoon on the second part, on infrastructure. I appreciate that Chairman Pai asked me to lead the FCC's efforts on wireless infrastructure. We have already taken several steps to ensure our regulatory structures are 5G ready. As you know, 5G networks are going to look very different than the 3G and 4G deployments of the past. And the regulatory framework that worked for 100-foot towers won't work for new small cell deployments.

So we are working to modernize our approach. In March, we exempted small cells from certain Federal review procedures designed for those large 100-foot towers. This one step is expected to cut about 30 percent of the total cost of deploying small cells. This reform can help flip the business case for thousands of commu-

nities, particularly in rural areas that might otherwise miss out on next gen connectivity.

And one place where increased deployment will pay off is in healthcare. For years, the FCC has been supporting broadband deployment to healthcare facilities, but there is a new trend in telehealth, a trend toward connected care everywhere. The delivery of high-tech, high-quality care is no longer limited to the confines of connected brick-and-mortar facilities. With remote patient monitoring and mobile health applications, we now have the technology to deliver healthcare directly to patients, regardless of where they are located.

I saw this 2 weeks ago in the Mississippi Delta, which is ground zero for the country's diabetes epidemic. The delta is also a place where connected care is already making a difference. It is where I met Ms. Annie. She noticed the first signs of diabetes when she woke up one morning with blurred vision. After seeing a little progress with traditional care options, Ms. Annie signed up for a remote patient monitoring program. She showed me the iPad and the Bluetooth-enabled blood glucose monitor that she uses to track her care on a daily basis. She can check her blood sugar levels, and an app gives her instant feedback, including the steps she can take that day to stay healthy. With this technology, Ms. Annie's A1C levels have gone down, and she says she has never felt better. And research backs up Ms. Annie's results, showing significant cost savings and improved outcomes with connected care. So we should align public policy in support of this movement in telehealth.

That is why I am glad Chairman Pai asked me to lead the FCC's new telehealth initiative, which we will consider at our August meeting. The connected care pilot program aims to provide up to $100 million to support connected care deployments for low-income patients.

I look forward to working with all stakeholders as we seek comment on establishing the program. Chairman Blackburn, Ranking Member Doyle, members of this committee, thank you again for holding this hearing. I welcome your questions.

[The prepared statement of Mr. Carr follows:]

TESTIMONY OF BRENDAN CARR
COMMISSIONER, FEDERAL COMMUNICATIONS COMMISSION

BEFORE THE SUBCOMMITTEE ON COMMUNICATIONS AND TECHNOLOGY
OF THE UNITED STATES HOUSE OF REPRESENTATIVES
COMMITTEE ON ENERGY AND COMMERCE

"OVERSIGHT OF THE FEDERAL COMMUNICATIONS COMMISSION"

JULY 25, 2018

Chairman Blackburn, Ranking Member Doyle, and distinguished Members of the Subcommittee, thank you for the invitation to testify this afternoon. It is a privilege to appear before you again.

I have had the honor of working with you and your staffs as a Commissioner for nearly a year. It has been a tremendously rewarding and productive time. I am proud of the work the agency has accomplished. And I want to commend the Subcommittee on its own notable achievements—from identifying additional spectrum for consumer use in the RAY BAUM'S Act and enhancing public safety through the SANDy Act to encouraging broadband deployment in unserved areas, including through the Precision Agriculture and Connectivity Act.

Over the past year, I have focused on the work the FCC can do to bring more broadband to more Americans. This has meant working with my colleagues at the Commission on the regulatory reforms needed to maintain the United States' leadership in wireless as we transition to next-generation 5G technologies. This has meant working to remove barriers to the deployment of the wireline and wireless networks needed to support this transition. And this has meant spending time outside of D.C. to see firsthand how our policies impact communities across the country.

Over the past 11 months, I have had the chance to visit 17 states—from Massachusetts to California, from the Gulf Coast of Louisiana to the Great Plains of South Dakota. I have benefited from the diverse views and perspectives shared at these events, whether at a town hall in Chelsea, Michigan, a roundtable in Stanton, Nebraska, or on a tour of a manufacturing facility in Sioux City, Iowa. I have met with local officials about our common goal of promoting broadband deployment. I have sat at the kitchen table of a family that wanted better, faster, and more affordable broadband. And I have spent time with the construction crews that do the hard, often gritty work needed to bring more broadband to more Americans.

These experiences have stuck with me. In Arcadia, Indiana (pop. 1,653), Congresswoman Susan Brooks introduced me to two Hoosiers, Mark and Scott. They are brothers, and they run a small fixed wireless provider called On-Ramp Indiana. They are a one-stop shop dedicated to bringing broadband to the rural communities of central Indiana. As their story makes clear, it sometimes takes the modern-day version of duct tape and bailing wire to get the job done in these hard-to-serve communities. Mark and Scott set up a series of small antennas and radios that ultimately create 30 miles of line-of-sight links from Arcadia all the way to Indianapolis, where the data can be offloaded to a fiber network. Mark and Scott used what was available to them. As they drove from Indy through farm towns and open fields, they looked for any tall structure they could climb to attach the next link in their wireless chain. Barns and grain elevators are among their favorite structures because they're often the tallest perch in town.

Mark and Scott's hard work helped bring broadband to Beck's Hybrids, a family-run farming operation in Arcadia that dates back to 1901. 78-year-old Sonny Beck said that broadband is essential to his operation. It allows him to combine gigabytes of data—from connected tractors and drones to online soil histories and DNA files on crops—and then analyze all of this information in the cloud where algorithms help Beck's and other farmers make precision adjustments to seeding and real-time modifications in soil treatments.

From little Arcadia to big city Philadelphia, broadband is giving families a chance to change their lives. Just a few weeks ago in Philly, I had the privilege of meeting someone who used her mobile broadband connection—and a whole bunch of grit and determination—to bring her family out of poverty and into a new life. Her name is Tommi. She's the mom to five kids, and there's no doubt that many people have had an easier path in life. Tommi grew up in public housing. She dropped out of high school after having her first child. For the next 16 years, she made calls for a debt collection agency, which she described as a "dead end job." Tommi knew that she could do more with her life. So she enrolled in Philadelphia's Orleans Technical College. It was "four years of peanut butter and jelly sandwiches—often made for me by my kids," she said.

Tommi earned a perfect 4.0 GPA. She got a job at the Public Housing Authority, and she just bought her first home. Now she's starting a master's program in mental health so that she can give back to her community. None of this, Tommi told me, would have been possible without a mobile broadband connection. "Broadband is the backbone of a community—for finding a job, for education," she said. A mobile hotspot that she shared with her neighbors let her finish her homework, which she had to complete online. A mobile connection enabled her to apply for jobs and for admission to school. And a mobile connection enabled Tommi to stay in touch with her kids when they spent time with her family.

Tommi is an inspiration. But in a lot of ways, Tommi's story is not unique. At the school in Philadelphia's Sharswood neighborhood where we met, I spoke with kids that are in much the same position Tommi was in just a few years ago. Today, the Public Housing Authority is partnering with a wireless carrier to give each student at that school a tablet and a mobile connection. The Public Housing Authority did this because digital literacy is no longer optional for the next generation.

This is why the work of this Subcommittee and the FCC is so important. As legislators and regulators, we can help ensure that every community—from Arcadia to Philadelphia—has a fair shot at the opportunity that broadband can enable. This is particularly important as we make the transition to next-generation networks, which can unleash a new cycle of innovation and entrepreneurship in the country. We do not want to see any community get left behind.

Indeed, one year ago, I talked about the challenge we faced in extending American leadership in wireless as we move from 4G to 5G networks. I testified about the need for the FCC to focus on two things: freeing up more spectrum and removing barriers to infrastructure deployment. The Commission has made substantial progress on both fronts.

On the spectrum side, the Commission has taken a number of concrete steps in the past few months alone. In February, we paved the way for opening up spectrum above 95 GHz. In March, we sought comment on designating the 4.9 GHz band for flexible use. In April, we made progress towards bringing over 1.5 GHz of millimeter wave spectrum to auction. In May, we started a proceeding to put spectrum in the 2.5 GHz band to even more productive use. In June, we finalized rules for the 24 GHz

band and sought comment on opening up the 26 GHz and 42 GHz bands for flexible use. Last month, Chairman Pai announced that we're moving forward with the auction of spectrum in the 37 GHz, 39 GHz, and 47 GHz. And at our July meeting, the Commission voted unanimously to begin the process of clearing up to 500 MHz of mid-band spectrum for 5G.

On the wireless infrastructure side, I appreciate that Chairman Pai asked me to lead the FCC's efforts. And we have already made significant progress in ensuring that our regulatory structures are 5G Ready.

As you know, 5G networks are going to look very different than the 3G and 4G deployments of the past. While hundred-foot towers accounted for the lion's share of prior deployments, up to 80% of new cell sites will be small cells with antennas no larger than a backpack plus associated equipment. But a year ago, our regulatory structures were threatening to hold us back—to limit 5G deployments to only the most profitable to serve areas. The problem was that our regulations assumed that every new cell site was a hundred-foot tower. So in the intervening months, we have worked with stakeholders to update and modernize our approach—to ensure the United States wins the race to 5G.

In March, for instance, we adopted an order that exempts small cells from certain federal historical and environmental review procedures that were designed for those large, hundred-foot towers. This decision extended the same regulatory treatment to small cells that the Commission has always applied to the deployment of other types of infrastructure, including Wi-Fi routers and consumer signal boosters. This one step is expected to cut about 30% of the total cost of deploying small cells. In fact, an Accenture study determined that our action could save $1.56 billion, which could be used to deploy 55,000 new cell sites and create more than 17,000 jobs.

This reform alone could flip the business case for thousands of communities, particularly in rural and disadvantaged parts of the country. Almost no matter what we do, 5G and next-gen networks will be deployed in New York and San Francisco. But there are thousands of other communities that might lose out if we do not modernize our approach to broadband infrastructure. So the FCC is continuing to work with all stakeholders as we move to further update our approach to infrastructure deployment.

We know that broadband deployment can create jobs, but it can also save lives. I have seen it in places like Beatty, Nevada, where a rural health care clinic is staying open because a new broadband connection allows patients to visit virtually with a doctor located in a much larger town. I have seen it in Lennox, South Dakota, where a skilled nursing facility is using a broadband connection to provide quality care to patients in their own community, rather than transferring them to a larger facility located miles away. For years, the FCC has been playing a key role in supporting the deployment of broadband to these facilities through our Rural Health Care Program.

But there's a new trend in telehealth—a trend towards connected care everywhere. The delivery of high-tech, high-quality health care is no longer limited to the confines of connected, brick-and-mortar facilities. With remote patient monitoring and mobile health applications that can be accessed on a smartphone or tablet, we now have the technology to deliver high-quality care directly to patients, regardless of where they are located—places like the Mississippi Delta.

The Delta is ground zero for the country's diabetes epidemic. It sees diabetes at rates that are about twice the national average. Ruleville, Mississippi (pop. 3,234) is no exception to this trend. In

addition to having one of the highest rates of diabetes in the state, more than half of all children in this area live in poverty. That only adds to the challenge of finding and accessing affordable health care. But the Delta is also a place where remote patient monitoring technology is already making a difference.

And it's where I met Ms. Annie, a patient of the North Sunflower Medical Center. Ms. Annie noticed the first signs of her diabetes when she woke up one day with blurred vision. After seeing little progress in managing her diabetes with traditional care options, Ms. Annie signed up for a remote patient monitoring pilot program. She walked me through the iPad & blue-tooth enabled blood glucose monitors that patients use in their homes to track and control their own care on a daily basis. The tablet chimes every morning as a reminder. Ms. Annie then pricks her finger and her A1C level is displayed on screen. Based on that, the app suggests appropriate actions—from a particular food or exercise, to watching a relevant video. If she forgets to enter her numbers that day, she'll get a phone call from a nurse. With this technology, Ms. Annie's A1C levels have gone down and she says she's never felt better.

A few weeks earlier, at the University of Virginia's Children's Hospital, Dr. Karen Rheuban talked about the role that these new telehealth technologies are playing in saving lives. A connected tablet helps parents whose babies have heart problems. An app called Locus Health tracks a baby's weight, heart rate, and oxygen levels and sends the data to the hospital. The data provide early warning signs that can head off problems that might result in ICU stays and invasive procedures.

Finding ways to use remote patient monitoring technologies to manage chronic diseases, which account for over 85% of direct health care spending, is a challenge that merits our attention.

The relatively limited trials to date are showing significant cost savings:

- A remote patient monitoring program run by the Veterans Health Administration costs $1,600 per patient—an 88% savings from VHA's home-based primary services.

- Another telehealth project found that every $1 spent on remote monitoring resulted in a $3.30 return in savings.

- The Mississippi Delta trial resulted in nearly $700,000 in annual savings due to reductions in hospital readmissions alone, which, assuming just 20% of Mississippi's diabetic population enrolled in this program, Medicaid savings in the state would be $189 million per year.

And these connected care technologies are improving health outcomes:

- A study of 20 remote patient monitoring trials found a 20% reduction in mortality and a 15% reduction in hospitalizations related to heart failure.

- The Veterans Health Administration's remote patient monitoring program resulted in a 25% reduction in days of inpatient care and a 19% reduction in hospital admission.

- Another remote patient monitoring initiative showed a 46% reduction in ER visits, a 53% reduction in hospital admissions, and a 25% shorter length of in-patient stay.

Given the significant cost savings and improved patient outcomes associated with connected care, we should align public policy in support of this movement in telehealth. At the FCC, we can play a constructive role by helping to support the connectivity and deployments needed to ensure that all communities get a fair shot at benefiting from new telehealth technologies.

So I am glad that Chairman Pai asked me to lead the FCC's new telehealth initiative, which we will consider at our August meeting. The Connected Care Pilot Program would aim provide up to $100 million for connected care benefiting low-income patients, including those eligible for Medicaid and veterans. It would support a limited number of projects over a two- or three-year period with controls in place to measure and verify the benefits, costs, and savings associated with connected care. It could take the results we've already seen in the limited trials to date and help replicate those results in communities across the country.

From chronic disease management to pediatric cardiology, from PTSD to opioid dependency, this pilot has the potential to make a real difference for low-income individuals that currently lack access to quality health-care. I look forward to working with my colleagues at the FCC, federal and state partners that are active on these issues, Members of this Subcommittee, and all stakeholders as we seek comment on establishing the Connected Care Pilot Program.

* * *

It has been an honor over the last year to work on connecting more Americans to opportunity and to each other. Chairman Blackburn, Ranking Member Doyle, and Members of the Subcommittee, thank you again for holding this hearing and for the invitation to testify. I welcome your questions.

Mrs. BLACKBURN. The gentleman yields back.
Ms. Rosenworcel, you are recognized.

STATEMENT OF JESSICA ROSENWORCEL

Ms. ROSENWORCEL. Good afternoon, Chairman Blackburn, Ranking Member Doyle, and the other members of this subcommittee. Thank you for the opportunity to appear before you today. I believe the future belongs to the connected. No matter who you are or where you live in this country, you need access to modern communications to have a fair shot at 21st century success. Clearing the way for this connected future should be at the heart of everything we do at the Federal Communications Commission.

It has been 9 months to the day since we last appeared before you for an oversight hearing. Nine months is a long time. It is the equivalent of a school year so let me offer the equivalent of a quick year-end report. Too many Americans still lack access to broadband. Let me put a number on it. Right now, 24 million Americans do not have access to high-speed service. That is not acceptable. We need to do better. Too often during the last 9 months, the agency acted at the behest of corporate forces that surround it, shortchanging the American people. You can see that clearly with our rollback of net neutrality. You see it too with our efforts to foster the deployment of new networks but failure to fully engage those who need a voice in our policies, the cities and towns that should be our partner in the process, the Tribal communities that are entitled to government-to-government consultation, and the Department of Commerce, which just last week expressed concern about how our rushed reform could harm national security and public safety services.

Likewise, you see it in proposed reforms that undermine our lifeline program and the populations that rely on it, including those served by domestic violence shelters, military veterans, homeless youth, and the residents of Puerto Rico, who are still recovering from a harrowing storm and a grave humanitarian crisis.

Too often our procedures fall short of what good governance requires. Our mapping practices for broadband do not accurately reflect the state of connectivity on the ground. Our claim that the agency suffered a distributed denial of service attack following John Oliver's report on our net neutrality plan is just not credible.

In the meantime, the agency has ignored the fact that this public docket is flooded with fraud, including half a million comments from Russia and 2 million individuals with stolen identities. I believe these things need to be fixed.

So many people think that Washington is rigged against them. It saddens me when, on too many occasions during the last 9 months, this agency proved them right. But good report cards do not only look to the past; they also offer an eye to the future and take on what is possible.

I believe at this table, there is a desire to extend the reach of broadband service, lead the world in 5G wireless deployment, and bring the opportunities of the digital age to more people and more places. I see this same desire everywhere I go. In the last few weeks, I have been in rural New Mexico and urban New York. In both places, I have visited schools with students who lack

broadband at home and, as a result, struggle with nightly school work. There are 12 million children in every State across the country with this problem. They fall into a homework gap that is the cruelest part of our digital divide.

But I also saw that these communities are trying to address their gap so that every student has a decent chance at digital age success. They are experimenting with connective school busses. They are looking at loaning out hotspots in library, and they are exploring public Wi-Fi in their communities. They deserve our support and a plan to address the homework gap so that know child is left offline. I still believe it is within our capability to produce one.

Finally, I would be remiss if I did not mention the agency's recent decision regarding Sinclair broadcasting. When I last appeared before you 9 months ago, I alone expressed concern about how the agency had bent and twisted so many of its media policies to serve the business plans of this one company. This changed last week when the agency adopted an order designating the proposed Sinclair Tribune transaction for hearing. I want to thank my colleagues and the chairman in particular for the effort to reach consensus on this matter.

Let me close by saying thank you for having me at this hearing, and I look forward to any questions you may have.

[The prepared statement of Ms. Rosenworcel follows:]

STATEMENT OF
JESSICA ROSENWORCEL
COMMISSIONER
FEDERAL COMMUNICATIONS COMMISSION
BEFORE THE
SUBCOMMITTEE ON COMMUNICATIONS AND TECHNOLOGY
COMMITTEE ON ENERGY & COMMERCE
UNITED STATES HOUSE OF REPRESENTATIVES
OVERSIGHT OF THE FEDERAL COMMUNICATIONS COMMISSION
WASHINGTON, DC
JULY 25, 2018

Good afternoon, Chairman Walden, Ranking Member Pallone, Chairman Blackburn, Ranking Member Doyle, and Members of the Committee. Thank you for the opportunity to appear before you today.

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meantime, the agency has ignored the fact that this public docket is flooded with fraud—including half a million comments from Russia and two million individuals with stolen identities.

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I believe that at this table there is a desire to extend the reach of broadband service, lead the world in 5G wireless deployment, and bring the opportunities of the digital age to more people in more places.

I see the same desire everywhere I go. In the last few weeks I have been in rural New Mexico and urban New York. In both places, I visited schools with students who lack broadband at home and as result struggle with nightly schoolwork. There are 12 million children across the country with this problem. They fall into a Homework Gap that is the cruelest part of our digital divide. But I also saw that these communities are trying to address this gap so that every student has a decent chance at digital age success. They are experimenting with connected school buses. They are looking at loaning out hotspots in libraries. They are exploring public wi-fi in their communities. And they are pulling together information they can about low-cost service that can help low-income households get online. They deserve our support and a plan to address the Homework Gap—so that no child is left offline. I believe it is still within our capability to produce one.

Finally, I would be remiss if I did not mention the agency's recent decision regarding Sinclair Broadcasting. When I last appeared before you nine months ago, I alone expressed concern about how the agency had bent and twisted so many of its media policies to serve the business plans of this one company. This changed last week when the agency adopted an order designating the proposed Sinclair-Tribune transaction for hearing. I want thank my colleagues—and the Chairman in particular—for the effort to reach consensus on this matter.

Let me close by saying thank you for having me at this hearing. I look forward to answering any questions you may have.

Mrs. BLACKBURN. I thank each of you for your testimony, and we are now going to move into our questions. And I am going to begin and recognize myself for 5 minutes for questions.

And, Chairman Pai, I am going to come to you. Public safety is something that we are focused on in the emergency alerts and our 9-1-1 systems. As you know, our Ranking Member Pallone's SANDy Act was included in the RAY BAUM'S Act, and it is a good solid bipartisan initiative to help with Wi-Fi resources, bringing those to bear during an emergency. And while the EAS system is typically the primary tool, we saw the resiliency of cellular infrastructure in the aftermath of Hurricane Harvey and the widespread use of the WEA alerts. And how will the addition of opening up Wi-Fi access points in times of emergency in addition to carrier location information and other inputs help a device create more precise location information to better enable our first responders to reach those that are in need of that emergency help?

Mr. PAI. Thank you, Chairman Blackburn, for the question, and to you and to Ranking Member Pallone for your leadership on that legislation. One of the most critical elements of information that a first responder needs when a 9-1-1 call is placed is where is the caller. And I think that the addition of more Wi-Fi access points could help introduce even more detailed granular information about where that caller is. In combination with GPS information and cellular information, Wi-Fi access points can give a more textured view to 9-1-1 call centers and help them pinpoint exactly where somebody is to be able dispatch help quicker.

Additionally, I think it is interesting that a lot of companies are thinking very forward, as is this subcommittee. For example, Apple recently announced in iOS 12 that it would incorporate the technology from a small startup called RapidSOS. One of my predecessors, Chairman Dennis Patrick, has talked about the fact that this technology could use things like Wi-Fi access points and other information to more accurately and quickly target people who are in a situation of need.

Mrs. BLACKBURN. And then looking at States and localities using the WEA system, you think this is going to help——

Mr. PAI. Absolutely.

Mrs. BLACKBURN [continuing]. Encourage that? When you think about needing that help that quickly and responders who are working so diligently to get resources to people, one of the things is we have worked on this issue—and Ms. Brooks has worked on it some too with the Next Gen 9-1-1—is making certain that it is more reliable and more widely used. So——

Mr. PAI. Absolutely. I will give one quick example of why that is so. Recently, I visited the D.C. Office of Communications that handles 9-1-1 calls that are common to the District. And Karima Holmes, the director, told me that, every year, the District of Columbia gets approximately 10,000 emergency calls that are more properly routed to Maryland, and vice versa, Maryland gets 10,000 calls or more properly routed to the District because the caller is very near that border.

Imagine ubiquitous Wi-Fi access points that could allow emergency responders to know when they have received that call in the 9-1-1 call center: OK, we are getting a call from the District. We

don't waste precious seconds trying to figure out exactly which jurisdiction needs to get that call. That could really save lives in a pinch.

Mrs. BLACKBURN. Commissioner Rosenworcel, I want to come to you on something. As you know, I have worked for years on the privacy issue, and I assume that you saw the letters that we sent to LocationSmart and Securus and 3C Interactive inquiring about the reports of the unauthorized disclosure of wireless subscribers' real-time location information. And I am pleased that you all are investigating this as well as we all are concerned about protecting consumer privacy. And on this broader topic, last night, I received a letter from our friends at the Electronic Privacy Information Center, and to quote from the letter, it says: It is clear that the FCC has the ability to enact internet privacy rules. The FCC has the authority to regulate companies such as Facebook and Google through ancillary jurisdiction.

Do you agree with that assertion?

Ms. ROSENWORCEL. No, I don't agree with that assertion.

Mrs. BLACKBURN. OK. Do you believe that section 706 of the Telecommunications Act, or any other provision, gives the authority to the FCC to also regulate edge providers?

Ms. ROSENWORCEL. I don't believe it clearly gives us that authority, no.

Mrs. BLACKBURN. You do not. Thank you.

The gentlelady yields back, and I yield back, and I recognize Mr. Doyle for 5 minute.

Mr. DOYLE. Thank you, Madam Chair.

Welcome back. It is good to see all of you.

I want to talk a little bit about rural broadband. The Commission received a letter on July 23rd from a group of 182 fixed wireless providers regarding the CBRS band. And they noted that, "Without census track sized licenses, we will have virtually no ability to acquire protected spectrum in this band." That would be an intolerable outcome that would harm our rural broadband businesses and inhibit our ability to grow. But worse, it would harm the millions of consumers for whom mid-band spectrum is the key to high-speed fixed broadband access.

I would note that, Chairman Pai, you tweeted that your parents are served by Wave Wireless, and, Commissioner Carr, in your testimony you referred to the good work of On-Ramp Indiana that serves Ms. Brooks' district. Both of these companies were part of the 182 companies that sent you that letter. So I would like to ask each of the Commissioners—and this is just a simple yes-or-no question—will you commit to maintaining census track licenses in this band?

Mr. PAI. Ranking Member Doyle, I have delegated this issue to Commissioner O'Rielly. He has recently provided a lot of analysis on this question so I don't want to presuppose what direction he wants to recommend for the full commission.

Mr. DOYLE. As chair of the Commission, would you commit to having census track size license?

Mr. PAI. Frankly, Member Doyle, we don't want to presuppose the results. We are still studying the issue. And I am looking at the issue along with Commissioner O'Rielly.

Mr. DOYLE. OK. Commissioner O'Rielly, he has dumped it on you, so what do you say?

Mr. O'RIELLY. No.

Mr. DOYLE. You do not support doing—I like that direct answer. I don't agree with it, but I like it.

Yes, Commissioner Carr?

Mr. CARR. I haven't made my decision up yet on how to cast a vote in this proceeding.

Mr. DOYLE. Thank you.

Ms. ROSENWORCEL. Yes, we are going to need smaller license sizes if we want wireless providers to serve rural America with this band.

Mr. DOYLE. So one yes, one undecided, one no, and one abstention or——

Mr. PAI. I am still looking at the issue, Congressman.

Mr. DOYLE. Undecided.

Mr. PAI. We haven't reached the end points. We are still in the sixth or seventh inning.

Mr. DOYLE. OK. Chairman Pai, I mentioned in my opening statement that many stakeholders, including the Federal Government, are very concerned about your plans regarding the discontinuance of service and changes to the BDS market could place our national security and public safety operations in an untenable position. Are you concerned that, in addition to the potential loss of service, that some BDS customers are telling us that they have had their bills increase by 175 percent? I am kind of concerned that it is not only putting the carriers interest over the public's, but it is endangering our public safety, our national security, and leading to the huge rate increases for people to have this service. How do you respond to that?

Mr. PAI. Sorry, Congressman, I was thrown off there.

Mr. DOYLE. That was strange; is that a phone ring?

VOICE. It is a rattlesnake.

Mrs. BLACKBURN. It is Mr. Olson trying to play with new technology in the Communications and Technology Committee.

Mr. OLSON. Guilty as charged.

Mrs. BLACKBURN. The gentleman apologizes. It is accepted.

And, Mr. Doyle, you are reclaiming your time.

Mr. DOYLE. Thank you, Madam Chair.

Would you address some of the concerns that we are hearing about the BDS market?

Mr. PAI. Sure, and I will try to address those in turn. So, with respect to NTIA, we certainly welcome the submission. That is part of the reason why we have an open notice and comment process to take public input. If you look at the overall tenor of the NTIA letter, it is quite supportive of our approach, unless we do want to take those concerns into account.

Secondly, with respect to BDS overall, the price increases you described are precisely the reason why it was important to us in the BDS order last year to preserve FCC authority under section 201 and 202, as well as the ability of private companies to complain directly to the FCC under section 208. We will adjudicate any complaints we get about price discrimination that might be in violation of our rules.

Thirdly, if you look at the overall gist of our BDS approach, the notion is that price regulation deters fiber deployment. It does that for two different reasons. Number one, if you are an owner of that infrastructure and there is heavy privacy regulation, you would have less incentive to build out additional infrastructure. Why would you? It is price regulated. Similarly, if you are a competitive entrant relying on that infrastructure, you would be less likely to build that infrastructure of your own. Why would you? The FCC has put a finger on the scale in terms of price regulation.

Our goal is to preserve that ability of competitive entrants—people have complained to the FCC about unreasonable charges—while also promoting an incentive to get more fiber out. And the results speak for themselves. If you looked at my opening statement, for the first time, over 50 percent of mid and large size commercial buildings in the United States are connected with fiber. We want every one of those buildings to be connected with fiber. We think this light-touch, market-based approach that started with Chairman Kennard back in the late 1990s is the right way to go.

Mr. DOYLE. Let me ask you one last question, Chairman Pai, you are aware of Senator Wyden's letter to the FCC regarding the real-time location data and the company Securus Technologies.

Mr. PAI. Yes.

Mr. DOYLE. On May 18th, Senator Wyden called on you to recuse yourself from the investigation based on your past work representing Securus. Have you recused yourself?

Mr. PAI. I have not, in consultation with the Office of General Counsel.

Mr. DOYLE. And that was my next question, did you get an opinion from the FCC ethics office as to whether or not you should recuse yourself?

Mr. PAI. Yes, I did.

Mr. DOYLE. OK. Thank you.

Mrs. BLACKBURN. The gentleman's time has expired.

Mr. Walden, you are recognized for 5 minutes.

Mr. WALDEN. Thank you, Madam Chair.

I appreciate again the Commissioners being here. And I believe we have sent a letter as well to companies regarding the same issue. Obviously, we all care about privacy and about data location issues, something we have been pursuing for some time.

Chairman Pai, let's switch to the C-band. It is our understanding the National Public Radio, commercial broadcasters, and cable companies depend on it for content distribution to about 100 million households. That is obviously a lot of people in every State, probably every congressional district. But one of the challenges to ensure noninterference with C-band downlinks is to know the exact location of hundreds and potentially thousands of unregistered receive-only Earth stations. What is the Commission doing to identify the location of these Earth stations and ensure they are protected from potential harmful interference? And what steps is the Commission taking to balance these two goals of ensuring we win the race to 5G, which requires for mid-band spectrum, and the protection of the downlink the broadcasters and cable companies depend upon?

Mr. PAI. Thank you for the question, Chairman Walden. And I think you have put your finger on the two goals that we need to pair in this proceeding. And we tried to address the concern you have identified about the need to figure out where the stations are in a few different ways. For example, we have reduced the fees that are required to file some of these reports. Additionally, we have extended the timeframe by 90 days. So I believe October 17th now is when the deadline is for reporting.

In addition to that, we recognize that some of these entities are smaller; they might not have the resources to compile a full study that is required traditionally under FCC rules. And so it is important to me to streamline that process to allow them to get as much information as they can into the record.

At the end of day, we are confident that steps like these will enable us to get a robust level of participation from those entities and enable us thereafter to make a fully informed decision about the appropriate disposition of the C-band.

Mr. WALDEN. All right. Thank you. As you have heard from many members on both sides of the aisle up here, we need to do more as a country to connect each other with high-speed data and broadband connections. So what can you tell us, Chairman, about the work the FCC is doing today to close this digital divide? What should we look forward to going forward? And what do you need from us?

Mr. PAI. Chairman Walden, I appreciate the question. We are doing a lot. And I don't want to use the remainder of your time, but what I will say is with the two critical tools in the toolbox that we have—that is, modernization of our regulations and the wiser distribution of universal service funding—we are making major steps towards closing the digital divide: The $2 billion fixed broadband program that just started yesterday, the reverse auction for Connect America and Fund Phase II, the $4.5 billion Mobility Fund Phase II that will start next year, and some of the initiatives that may appear smaller, but I can tell you, when I am on the ground in places like Pendleton, Oregon, and Oldsmar, Florida, and McClure, Ohio, they are not small. Telemedicine, this is one of things that American people just understand, especially in rural communities where it is hard to attract a specialist, like my parents—who formerly were customers of Wave Wireless—it is very difficult in some cases to get specialists. The only way that some of these folks in rural communities will get adequate healthcare is through telemedicine. And you saw the response for yourself, as did I, at Mirasol health clinic in Oregon when the heard the news that we are proposing to increase by 40 percent the budget for the rural healthcare. If you remember, they broke out into applause——

Mr. WALDEN. Yes.

Mr. PAI [continuing]. Because they recognize that this is a lifeline, quite literally, for some of these communities. Pendleton and Hermiston are big cities in your district. There are a lot of smaller towns that will never see a specialist. I am really proud of the steps we have taken on the funding side to close the digital divide.

In terms of modernization, too, we have done a lot to promote more infrastructure in rural areas, making it easier to build the towers, for example, in rural areas or lay fiber in cases where there

might be not be a business case for deployment. And I think often about some of the visits I have had, including your district. I popped into Baker City, Oregon, where GeoNet told me that some of the steps we are taking, in terms of making it easier to gain access to poles or get more spectrum, those are the tools that are necessary for the smaller companies in particular, the ones that don't make the headlines, that nobody knows about; those are the things that will help them close the digital divide.

Mr. WALDEN. And 5G, as it rolls out, what do we need to be doing there?

Mr. PAI. I think for us that spectrum and infrastructure are the critical inputs. With respect to spectrum, I outlined some of the steps we are taking to move very quickly. And having just come from a couple of conferences, where I can tell you that my counterparts abroad are both envious and interested about how quickly we are moving on the 5G, the United States is in the lead in terms of spectrum leadership.

As far as infrastructure goes, Commissioner Carr has done an able job in leading our wireless infrastructure efforts. We need to think nimbly and progressively about how to modernize our regulations. The world of a few very sparsely populated cell towers is fading away. The era of the small cell, hundreds of thousands of small cells being deployed, is almost here. And so our regulatory approach needs to be as nimble as the industry that we are seeking to regulate.

Mr. WALDEN. My time has expired.

Madam Chair, thank you for having this hearing.

And to all the Commissioners, thank you for your participation and counsel.

Mrs. BLACKBURN. The gentleman yields back.

For everyone's awareness, votes have been called. Mr. Pallone is going to ask his questions. Then I will move to recess the subcommittee until we return from votes.

Mr. Pallone, you are recognized for 5 minutes.

Mr. PALLONE. Thank you, Madam Chair.

Chairman Pai, I was glad to see the Commission vote to send the Sinclair-Tribune transaction to an Administrative Law Judge for review, despite the wishes of the President. And I have long had serious concerns about this merger, including the sham agreements Sinclair used to try and hide the scope of this transaction. That is why Ranking Member Doyle and I wrote to the GAO 2 weeks ago, asking them to review how these sham agreements affect localism, diversity, and competition. However, last night, President Trump tweeted "So sad and unfair that the FCC wouldn't approve the Sinclair Broadcast merger with Tribune. This would have been a great and much needed conservative voice for and of the People. Liberal Fake News NBC and Comcast gets approved, much bigger, but not Sinclair. Disgraceful!"

The only thing that I find disgraceful is that the President is still trying to undermine the integrity of dedicated journalists by blatantly trying to enrich his friends and amplify his message at the expense of local news across the country.

So let me just ask you, yes or no—we are running out of time—if I can ask each of the panel, do you agree with the President's tweet? Yes or no? We will start with the Chairman.

Mr. PAI. Congressman, I stand by our decision.

Mr. PALLONE. OK.

Mr. O'RIELLY. Congressman, that issue has been referred. I have to not answer that question.

Mr. PALLONE. You don't want to answer. OK.

Mr. Carr.

Mr. CARR. Congressman, thank you. I think the hearing designation order lays out the facts and the law as applied, in our view.

Mr. PALLONE. All right.

And, Commissioner Rosenworcel.

Ms. ROSENWORCEL. I do not agree with that.

Mr. PALLONE. All right.

Now, let me ask those questions of Chairman Pai. I know we only have 3 minutes or so.

Given the President's politicalization of the Sinclair merger, will you commit to ensuring that a comprehensive and thorough review is conducted by the ALJ, insulated from the President or anyone purporting to speak on his behalf, yes or no?

Mr. PAI. Congressman, we have already issued the hearing designation order, and my understanding is that it is now within the purview of the administrative law judge under our rules.

Mr. PALLONE. But, you are going to ensure that a comprehensive and thorough review is conducted by ALJ?

Mr. PAI. Consistent with the HDO. Those are the issues that have been referred to the ALJ, yes.

Mr. PALLONE. OK. If the President or anyone in the White House discusses or has discussed the Sinclair-Tribune merger with you or anyone at the FCC, will you commit to disclosing that in the public docket, yes or no?

Mr. PAI. Yes, except, Congressman, we have ex parte rules, because this is now a restricted proceeding. We are limited in what information we can receive and what we can put on the record. But consistent with our restricted ex parte rules, we would be happy to accommodate to the extent we can.

Mr. PALLONE. Yes, basically. All right.

The President cites the need for a conservative voice. That is the thing that is most disconcerting to me, because I don't believe the FCC is supposed to make decisions based on what is conservative or liberal or Democrat or Republican or just be independent of the President.

So does the FCC consider conservative or liberal viewpoints as part of its merger review? In other words, do you care whether it is a conservative voice or not?

Mr. PAI. Congressman, I stick with the answer I gave on November 30, 2011, when I testified as a nominee. For every transaction that is before me, I will look at the facts, I will apply the law, and I will reach the judgment that is in the public interest. Nothing more, nothing less.

Mr. PALLONE. I would just hope that we are not looking at this from an ideological point of view, which the President is trying to achieve.

The hearing designation order that the FCC unanimously voted to approve notes that Sinclair may have engaged in misrepresentations or a lack of candor in its statements to the Commission about the merger. Whether a licensee is lying to the Commission is a serious allegation and stations have had their license revoked for making misrepresentations to the FCC.

So again to you, Chairman Pai, without commenting on the current proceeding, I am not asking you to do that, will the Commission conduct a factual inquiry into Sinclair's lack of candor regarding the licenses it currently holds either now or at the time of the renewal, yes or no?

Mr. PAI. Congressman, we have referred certain issues to the ALJ in the HDO. I can't comment, under advice of our General Counsel, on anything having to do with that. And I view your question as being inextricably linked to some of the issues that we have referred to the ALJ.

Mr. PALLONE. OK. So the answer is no.

Commissioner Rosenworcel, would you like to add anything to that?

Ms. ROSENWORCEL. Well, I would point out that we have raised issues about the candor of this company before the FCC, the misrepresentations they made in the context of this transaction. And I think those are serious issues of character qualification under Title III of our statute. And to the extent that they have been identified as a problem here, we should be open to investigation in other contexts as well.

Mr. PALLONE. All right. Thank you.

Thank you, Madam Chair.

Mrs. BLACKBURN. The gentleman yields back.

The committee stands in recess.

[Recess.]

Mrs. BLACKBURN. The committee will come to order.

Mr. Lance, you are recognized for 5 minutes for questions.

Mr. LANCE. Thank you, Chairman.

Commissioner O'Rielly, in order to be the first in the world to deploy 5G, we need to set an aggressive schedule of auctions to make more low- and mid- and high-band spectrum commercially available. That is why Ranking Member Doyle and I have introduced the AIRWAVES Act, which does just that.

However, it is my understanding that no matter how ambitious we are in setting a schedule, there may be certain technological impediments to auctioning off spectrum in a timely fashion.

Is the FCC's auction IT out of date? And, if so, what effect does that have on the Commission's ability to keep up with the rest of the world in bringing more spectrum to market?

Mr. O'RIELLY. Thank you for the question.

I don't know if I would use the word out of date or just not as advanced as it should be. It has limitations.

And to the question that Congressman Doyle raised regarding 3.5, part of the reason why I had to answer no in terms of census tracts is because there was not going to be an actual auction that we were supposedly going to conduct on the census tracts. It was actually going to be a sealed bid for 74,000 licenses times 7, or half

a million licenses, which we were not capable of running with our auction software.

And it gets to the question, to your point, number of bands, people have asked for 24, 28, 37, 39, 47 all at once. We weren't and don't have the capability to run all of those at once.

The Chairman has done a yeoman's job of scheduling spectrum auctions, and I appreciate the work he has done. We will auction two bands this fall and three next fall. That is great. But in terms of what we are capable of doing with auction software, it should be much more advanced for the money that we are spending on it.

Mr. LANCE. Thank you.

Do other members of the Commission have thoughts on this?

Commissioner Rosenworcel.

Ms. ROSENWORCEL. We all know that we want to lead the world in the wireless economy and in 5G, and I think it is a shame if our bureaucratic auction software doesn't allow us to do that. If that is a problem, we need to commit time, energy, and resources to fixing it. We shouldn't allow that to be an impediment.

Mr. LANCE. Thank you.

Mr. Chairman.

Mr. PAI. I couldn't agree more with Commissioner Rosenworcel. That is why a few months ago I testified before the House and the Senate and asked for resources specifically devoted, in part, toward upgrading our IT infrastructure to allow us to do much more, much more quickly, with this software.

Mr. LANCE. Thank you.

Chairman Pai, the Commission has had a petition from a New Jersey-based company, pdvWireless, and Enterprise Wireless Alliance before the Commission since the fall of 2014. The petition asks the Commission to update the rules around the lower 900-megahertz band to support broadband.

To your credit, you put the item out as an NOI last August. I, of course, take no position on the merits of that, that is for the Commission to decide. But as we approach the 1-year mark since the NOI, can you, Mr. Chairman, commit to moving the item to notice of proposed rulemaking soon?

Mr. PAI. Congressman, thank you for the question.

I can say that I am working with our staff, and we are drafting a notice of proposed rulemaking to follow up on the NOI that you have inquired about.

Mr. LANCE. Thank you very much.

Mr. Chairman, from a global competitiveness perspective, we need to ensure that the U.S. wins the race to 5G. We can all agree on that. However, at the same time, we need to ensure we are bringing connectivity to rural America as well. We have made great strides, but clearly more needs to be done.

The AIRWAVES Act includes a rural dividend, setting aside 10 percent of proceeds from future spectrum auctions to deploy wireless in unserved and underserved, often rural areas. If this rural dividend were in place for the last two auctions, over $6 billion would be used to fund rural deployment. And this funding would not come from taxpayers or be added to consumers' telephone bills.

Do you agree that this provides a creative solution to the challenges of deploying rural broadband?

Mr. PAI. Congressman, I commend you for your leadership on that issue. I agree with you 100 percent, so much so that in September of 2016, I gave a speech in which I outlined my agreement with the rural dividend proposal. Redirecting that money to rural broadband could have a major impact on closing that digital divide.

Mr. LANCE. Thank you. I want to continue to work with all members of the Commission. I commend you for your public service.

I apologize for leaving. Congresswoman Brooks and I are on the Ethics Committee and the Ethics Committee is meeting now. Not about you, Congressman Shimkus, and not about me either.

But I want you to know that I commend the work of this very fine Commission, one of the most important agencies of the Federal Government.

Thank you, Chairman Blackburn.

Mrs. BLACKBURN. The gentleman yields back.

Mr. Welch is not here.

So, Mr. Loebsack, you are recognized.

Mr. LOEBSACK. Thank you, Madam Chair.

It is great to be here today with all these folks.

It is good to see you back on the Commission, Commissioner Rosenworcel. I really appreciate the time when you came into Iowa, to Newton and Baxter, Iowa, to talk about rural broadband. That was really a great opportunity for me to have you there.

I am happy to have the opportunity to have all of you here to testify, because I am always eager to discuss, of course, how we can build out rural broadband in Iowa and across the country and how we can improve mapping data—that is my big topic today—to ensure we are getting resources to the right places.

I am sure you know my bill that I worked on with Representative Costello over here. The Rural Wireless Access Act passed into law earlier this year and it directs you folks to improve and standardize the way the FCC collects wireless coverage data so that maps will accurately reflect wireless coverage.

We talked about this before when you were in northwest Iowa and some of the problems you had when you were losing coverage traveling to northwest Iowa.

I always like to say that better data means better maps and better resources and policies for the areas that are truly in need. And this isn't only about cell phones. Mobile broadband is particularly important in areas that lack fixed broadband services. With the passage of the Rural Wireless Access Act, Congress is speaking, I think, and we are saying that we need to get better maps and better data.

So I am sure you all know that the FCC will have 180 days after the conclusion of the Mobility Fund Phase II auction to promulgate regulations in accordance with the Rural Wireless Access Act. But nothing really is stopping you from doing that now, I would argue, or at least sooner. And that is important, because the Mobility II auction will send more than $4 billion, I think it is about $4.5 billion out the door, and primarily to rural areas.

So to me, this seems like a real missed opportunity. We have got to act now, it seems to me. The FCC has heard from industry that we need better maps. They heard from Congress that we need bet-

ter maps. But the work to create better maps hasn't happened yet, and I think there is some frustration out there about that.

I understand that the Commission has agreed—I think this was back a couple months back maybe—to push back the Mobility Fund II auction by 90 days to allow the current data challenge process to continue. But I am concerned that because of the incredible burdens with that process, the FCC's data still may not be fixed.

And I can tell you, rural America needs this broadband funding as quickly as possible. I think we can all agree with that.

Rather, I think the Commission could take this time to make the important fundamental reforms called for by my Rural Wireless Access Act ahead of schedule.

And, Commissioner Rosenworcel, you say in your testimony that, "Too often our procedures fall short of what good governance requires. Our mapping practices for broadband do not accurately reflect the state of connectivity on the ground." And I think that is absolutely right.

So my question is to you, really, Commissioner Rosenworcel. When working to advance good governance and best practices, do you think it makes sense for the FCC to move forward with a challenge process that isn't working, or should we be making the real overhaul necessary to fix this problem in a more expedited way?

Ms. ROSENWORCEL. We have a problem with wireless service in rural America, and you cannot manage problems that you do not measure.

Right now, the FCC's mapping process for wireless service is basically asking the largest carriers whether or not they provide service in an area. And then we have invited local officials and small wireless carriers to contest that data.

But the process of contesting that data is cumbersome, it is difficult, it is long. It entails setting up an account, downloading 50 pages of information, getting multiple handsets, walking around in cornfields and elsewhere every half a kilometer and taking down information about signal strength and latency, then uploading that with the certification of an engineer and returning it to the FCC for our assessment.

I am going to argue that that process is too burdensome for most wireless communities to undertake. And as a result, I am worried about our Mobility Fund mapping as it stands today.

Mr. LOEBSACK. And, Chairman Pai, I would like you to respond as well, give you that opportunity, if you would like to respond to that.

Mr. PAI. Thank you, Congressman.

The system we inherited when I came into office in January 2017 was a free-for-all, frankly. Any carrier could use whatever technical standards it wanted to supply whatever information it wanted.

That wasn't good enough for me. If we were going to distribute $4.5 billion of funding, I wanted to close the digital divide to serve unserved areas.

That is why, under my leadership, we started, on a unanimous basis, a bespoke one-time data collection for mobility to see exactly where coverage was and where it wasn't, with a standardized set of rules. And that is why I appreciate the concept behind your legislation.

We have extended the deadline, as you pointed out, for the challenge process, to give all types of entities the ability to challenge. We have broadened the categories that can challenge. It is not just rural carriers, but State and local governments.

We have also extended waivers to everyone from Senator Joe Manchin of West Virginia to the Kansas Farm Bureau to be able to participate. Our own staff has done a lot of road shows, and I believe it is nine States currently and a number of webinars.

We have also created a map with just one unsubsidized competitor to allow companies, anybody, an easier way to pinpoint those areas that are ripe for challenge.

All of these steps, I agree, are complex. Nonetheless, something is better than nothing, and nothing is what we started with.

We are making progress slowly but surely, and I am confident when we hold that Mobility Fund auction, folks in Woden, folks in my home State, everyone will be able to get coverage ultimately because we did the very hard and dirty work collecting this data as best we could.

Mr. LOEBSACK. Well, thanks to all of you. And we will be staying in touch, I can promise. Thanks very much. Thank you.

Thank you, Madam Chair.

Mrs. BLACKBURN. And Broadband Loebsack, as we have come to know him at this committee, does yield back his time.

Mr. Shimkus, you are recognized.

Mr. SHIMKUS. Thank you, Madam Chairman.

Welcome, everybody. It is great to have you back.

I want to start with Commissioner O'Rielly. I want to just thank you for raising and addressing the 9-1-1 fee diversion issue. It is hard to talk about that when your State—my State was good. Then it was bad. Now I think it is good again.

But as Congresswoman Eshoo and I have worked on 9-1-1, as many of you know, for a long time, States diverting that money is, in essence, stealing from the fund in which they were paying into. So I just want to publicly thank you for that.

But sticking with you, I have been named to the farm bill as a conferee.

Mr. O'RIELLY. Congratulations.

Mr. SHIMKUS. Yes. Get my pitchforks out.

But one of the things that we want to—one of the reasons why we are on there is the broadband deployment, and there are U.S. issues.

So how can we get the FCC, the RUS, and NTIA to work together so we are not duplicating functions or are actually working together to address—everyone is talking about, right, rural broadband, connectivity. And so every member has mentioned that as part of their discussion. So I am looking for some advice and some consultation so that when I go in I can be an impact.

Mr. O'RIELLY. I would be more than pleased to provide more technical advice to you. There are extensive provisions in both the House and Senate farm bill. There is also the pilot program that was created as part of last year's budget bill. And they all have the potential, as I read them now, to provide duplication with existing programs we have at the FCC.

The chairman has done a wonderful job in working with different agencies. I was looking at language in terms of consultation. It requires consultation. So basically they will talk to us before the—RUS, for instance, would talk to the FCC before a decision is made. But that doesn't get you a prohibition on duplication. It just requires a consultation.

Mr. SHIMKUS. So we then know about the duplication instead of being surprised about it.

Mr. O'RIELLY. Yes, we know where the limitations are.

And if you look at the House bill, for instance, it has different speed thresholds. It wants 25/3 compared to where we are trying to fund. And I recognize our speeds in the funding that we do are less than what people would like, but we are trying to stretch our dollars as far as we possibly can with 14 million people—or 24 million, depending if you count satellite or not—unserved households today. That has been my primary concern.

So I would be more than pleased to work with you to try and figure out how to tighten the language to make sure we have duplication, that we do not have coordination throughout, rather than consultation.

Mr. SHIMKUS. I appreciate that.

And let me go to Commissioner Carr. And then if I have time I can open it up for other folks.

You have done some work already doing what we are trying to do in the SPEED Act, which is address on the deployment rightsizing historic and environmental rules, not reinventing the wheel if the siting tower is the same siting tower, but then you are going to put a 5G system on there.

Can you talk about what you have done in the Commission so far on that aspect?

Mr. CARR. Sure. Thank you, Congressman, for your leadership on these issues.

Some of the legislation that you have mentioned contains a lot of really great ideas. There is this global race that is ongoing to 5G. And winning that race isn't just about getting next-gen connectivity in New York or San Francisco. There are thousands of other communities that need their fair shot at 5G.

A big portion of 5G is going to be small cells. One of the challenges there is how do we make the economic case to get small cells everywhere? So by removing regulations that were really designed for 200-foot macro towers, having them continue to apply to those towers, but putting an updated approach for these small cells can make a big difference in extending 5G everywhere.

Mr. SHIMKUS. So then let's just finish with this part of the debate. In our language, we are directed to Federal property, parklands and issues, because there is a perceived concern by smaller municipalities and stuff that you are going to—we could, in the guise of rolling out 5G, that we are going to take away their rights to help in the local decisions.

Have you had any of those debates and discussions? And what are your thoughts about that?

Mr. CARR. We have had a lot of really good, really productive meetings with local elected officials, whether it is county commis-

sioners. As I have been on the road, I was in Boston at the U.S. Conference of Mayors conference.

These local officials deal with issues that we at the FCC will never deal with. If there is an ugly small cell that goes up somewhere, those local officials are the ones that are going to get the call about it, not us.

So I think at the end of the day, we can look to try to find some common ground because we share the same goal of getting more broadband deployed.

Mr. SHIMKUS. Again, my time has expired. I wish I would have had more time to talk to everybody.

And I yield back. Thanks.

Mrs. BLACKBURN. The gentleman yields back.

Mr. Welch, you are recognized.

Mr. WELCH. Thank you very much.

I want to make three comments and then discuss two topics, rural broadband and the homework gap.

The comments are, number one, thank you for your help on the passage of the RAY BAUM'S Act.

Number two, I do commend you for your decision on Sinclair. Number one, you did it together. It is so, so important for us to find ways we can do things together. Number two, if we are going to have strong rural communities, we have to have local institutions, and there is no institution more important locally than local news.

And then three, Commissioner Carr, telehealth, that is a big opportunity for us and really, really essential.

The two topics I want to speak about are the rural buildout, and I am going to talk to you, Chairman Pai, a little bit about this. Commissioner Rosenworcel said you can't assess something if you can't measure it. You can't challenge rural broadband or make it universal unless we acknowledge that there is a real problem.

And what Congress said in 1996, it required the FCC to report annually on whether advanced telecommunication capability is being deployed to all Americans in a reasonable and timely fashion. In 2016, the Broadband Deployment Report, and you were serving on the Commission then, said, and you concurred with it, where it was critical of the buildout.

You said: I agree, "This administration's policies have failed to deliver 'advanced telecommunications capability'—broadband—to the American people in a reasonable and timely fashion." And you were explicit: "The standard set forth by Congress is not being met. Rural America is being left behind."

Fast forward to 2018. In the Broadband Deployment Report, this is under your leadership, there was a determination that "broadband services are now being deployed to all Americans on a reasonable and timely basis." And what you said in your statement is the current FCC is now meeting its statutory mandate to encourage the deployment of broadband on a reasonable and timely basis.

That is not what Congress is requiring. It is not to encourage; it is to get the job done.

I want to spell out some of the facts that I understand to be the case, and you can tell me whether you agree or disagree.

Twenty-four million Americans lack access to fixed broadband at speeds of 25/3, the FCC standard. Do you agree with that or not?

Mr. PAI. I do.

Mr. WELCH. Great.

Thirty-one percent of Americans in rural areas lack access to the broadband service. Do you agree with that?

Mr. PAI. I do.

Mr. WELCH. All right.

Forty-four million Americans lack access to both fixed broadband at 25/3 speeds and mobile LTE broadband at 10/3 speeds.

Mr. PAI. I would have to double-check that number, but I don't have any reason to suspect it is incorrect.

Mr. WELCH. OK. So we are in agreement that there is a problem.

Mr. PAI. Correct.

Mr. WELCH. And I hope we are in agreement that your job, FCC, all of you, is not to encourage, it is to get it done.

Mr. PAI. Absolutely.

Mr. WELCH. Great. That is good.

Now, in listening to you—not just today, but other times—I have heard you talk about what you see as the benefits of deregulation, including the elimination of net neutrality, correct?

Mr. PAI. Correct.

Mr. WELCH. Let me be explicit. We could give you a pen and you could write a revocation of every single regulation that exists. Will that provide the financial incentive for broadband carriers to build out on dirt roads in Vermont and Iowa and Kansas where there is one house every half mile?

Mr. PAI. Congressman, this is the central problem. In too many parts of this country there is no private business case for deployment. That is why our job——

Mr. WELCH. That is my point. Deregulation won't get it done where there is no market opportunity.

Mr. PAI. That is not correct, Congressman. Look at the letter from VTel, which I appended to my testimony. VTel stated specifically that they are spending millions of dollars more because of these regulatory modifications.

Mr. WELCH. Thank you. And thank you for bringing up VTel. And, in fact, I happen to be a VTel customer. And what they said in that letter is they are going to invest $4 million more. We have got 100,000 people underserved in Vermont.

What you didn't indicate was that VTel was the recipient of a $130 million ARRA grant. So that is kind of relevant. There was actual public money that went into helping the broadband buildout.

So the fundamental question here, OK, because we have got agreement that we have got to get rural America wired, and every single day it is more important that we do that, but it is not going to happen just with deregulation. There has got to be some mapping. There has got to be a bolstered Universal Fund. There has got to be promotion of local competition. We had some people in here from rural communities that were having local companies that were doing really hard things and getting it done, because their investment was in the community.

So I see my time is up and I didn't even get to the homework gap, Commissioner, which I applaud you for your work on. But this is a real ongoing problem.

I yield back.

Mrs. BLACKBURN. The gentleman yields back.

Mr. Latta, you are recognized.

Mr. LATTA. Thank you, Madam Chair.

And thank you very much, FCC Commissioners, for being with us today.

Chairman Pai, technology such as the Internet of Things, artificial intelligence, blockchain are disrupting the markets and even changing our everyday lives. We need widespread broadband connectivity to drive these technologies to their potential.

Is the Commission focusing resources on learning more about these emerging technologies and how critical broadband access is to this discussion?

Mr. PAI. We are, Congressman. And thank you for that thoughtful question. I have personally spent, both because of professional obligations and personal interest, a lot of time thinking about these issues starting in the fall of 2017.

And that is part of the reason why recently I announced that the FCC would be hosting a forum later this year on the impact of artificial intelligence and machine learning, in particular on the communications sector, because I think we are simply scratching the surface in terms of the potential of some of these technologies. They have obviously disrupted a number of industries, and I think there is a useful focus for the FCC in thinking about how it could disrupt communications.

Similarly, I have been looking at a number of other technologies, virtual reality and augmented reality, blockchain, connected vehicles, and the like. I think we need to make sure that we are always keeping track of some of these technologies. It is hard, because of both the depth and the breadth of some of these innovations.

But nonetheless, I have been talking to a number of experts, including our own chief technology officer, companies in Silicon Valley, and the like, about how to make sure that we are aware of some of these changes. And the transformation thus far has been tremendous, but I think over the next 5 to 10 years, it is going to be even more mind-blowing.

Mr. LATTA. Thank you.

Commissioner O'Rielly, the RAY BAUM'S Act calls for the FCC and the NTIA to identify 100 megahertz of new unlicensed spectrum under 8 gigahertz by the end of 2022. What steps will the Commission take to free up much-needed unlicensed spectrum to support growing consumer demand for existing technologies and to provide innovation space for the technologies of the future?

Mr. O'RIELLY. Absolutely. Thank you, Congressman.

I would only answer your previous question to Chairman Pai, I would say also don't forget about narrow band. Narrow Band-IoT, very important. But I don't want to get sidetracked.

To your point on unlicensed, the Commission, and with the Chairman's great leadership, is going to move forward on a number of things, including in 6 gigahertz, where we are going to hopefully, assuming that an NPRM is adopted later this fall and moved to order sometime next year, provide additional spectrum for unlicensed purposes.

We have also been working, Commissioner Rosenworcel and I have been working extensively on 5.9. And I have also raised the

question of whether 4.9 may be a place that we can work with to have unlicensed bands and services, because we have reached a maximum capacity. Five gigahertz is getting rather full in terms of services; 2.4 is already full.

So unlicensed is going to have to be a very big portion of our consideration going forward.

Mr. LATTA. Thank you.

Commissioner Carr, earlier this week the House passed the Precision Connectivity Act, and you have all been hearing a lot of questions coming from us, and especially when we are talking about rural broadband and getting that access out there.

This is a bipartisan bill that I authored with my friend, the gentleman from Iowa, Mr. Loebsack, which directs the Commission to set up a task force in collaboration with the Secretary of Agriculture, identify and measure gaps in broadband availability, and develop policy recommendations to promote rapid broadband expansion on agricultural land.

Do you believe the Commission can execute the requirements of the Precision Agriculture Connectivity Act?

Mr. CARR. Thank you, Congressman.

Yes, I do. I think it is an important issue, as you point out. The intensive amount of data and broadband that is used in agriculture today is quite mind-blowing. When you get outside of D.C.—I was in Moline, Michigan—you see the high bandwidth uses, from connected combines to drones that are taking detailed images down to the tiny dots of a leaf on a crop.

We need to find ways to get high-speed broadband for farmers and ranchers. I think this bill is one way that is going to do it.

Mr. LATTA. Let me follow up with that. To what degree will it require a combination of the technologies in the wireline and wireless to meet that broadband challenge for the precision agriculture?

Mr. CARR. Ultimately, it is going to require a mix of technologies. Fiber is going to work in some places, fixed wireless in other places. We are seeing a new generation of satellite technologies that can also help. So we are going to have a lot of different technologies that are making that last mile work.

Mr. LATTA. Thank you very much.

And, Madam Chair, I yield back the balance of my time.

Mrs. BLACKBURN. The gentleman yields back.

Mrs. Dingell, you are recognized.

Mrs. DINGELL. Thank you, Madam Chair.

Thank you, all of you, for being here this afternoon.

Chairman Pai, I want to begin with you and ask about your response—or lack thereof—to a letter that Mr. McNerney and myself sent regarding the DDoS attack that crashed the FCC's website during the net neutrality comment period, or what you told us had crashed it.

Last year, during a hearing that we were having, you indicated that you would follow up with the committee to provide information on what had actually happened. Then, in another hearing in October, you said—and this is directly from the transcript—you had provided a detailed response to the committee and, "I would be happy to provide that to you with some of the particulars in that regard."

The committee has never received it. We have not received it. And then you responded to a question for the record by saying you couldn't release the information to the committee. Now, since then, we have learned some information from the press about this, but we still have a lot more questions than answers and are still waiting for a response.

Would you agree, Chairman Pai, that there is something wrong when members of the committee tasked with oversight of the FCC learn about issues from the press when we have been asking about them for more than a year?

Mr. PAI. Thank you for the question, Congresswoman.

In consultation with the Office of General Counsel following that particular hearing that you referenced, the General Counsel opined that we require a letter from the Committee in order to share certain information because of some of the sensitivity of that information. Should the Committee issue such a letter, again, we would be happy to accommodate.

Additionally, I want you to know that we have been working with both the General Accountability Office—of course, Congress' investigative arm—as well as the Office of Inspector General at the FCC on these issues. And that has been ongoing for a number of different months. And so the fact that you might not have heard a lot of news from the FCC does not mean we haven't been working with these independent bodies to investigate these particular issues.

Mrs. DINGELL. Well, I think this committee would think that we should have some information on this. And so you are saying from the subcommittee chair, the full committee? Who do you need to receive that letter from, since you haven't been asked enough by enough of us?

Mr. PAI. My understanding from the General Counsel is that the Committee——

Mrs. DINGELL. What is your definition of committee? Does that mean Mr. Walden and Mr. Pallone need to send you a letter?

Mr. PAI. I believe that is correct.

Mrs. DINGELL. OK.

Madam Chair, can we talk to the full chair about this? Thank you.

All right. So then I would like to continue. Since there is already some public information about the attack, will you commit to finally following up with the committee if we get this letter, to provide us with reports, requests, memoranda, service logs related to the DDoS attack, the FCC's protocol for documenting it, and what steps you are taking to mitigate events like this going forward?

Mr. PAI. Congresswoman, what I can tell you is that, again, we have been working cooperatively with the Office of Inspector General. The Inspector General has done a fantastic job investigating this issue. And I don't want to speak for him, but what I can say is that I would expect him to issue more information on this in the very near future.

Mrs. DINGELL. Hopefully, to the committee that has jurisdiction.

Chairman Pai, let me also ask you about a letter that you were sent asking for an investigation into whether companies improperly sold TV viewer data to Cambridge Analytica. You punted this mat-

ter to the FTC, which I disagree with. But we did a followup letter asking further questions about this decision. It is critical that the FCC enforce privacy protections of the communications sector to the fullest extent.

When can we expect a response to this letter? And why did the FCC decline to conduct an investigation into this?

Mr. PAI. I appreciate the question, Congresswoman.

The agency is a creature of Congress. We can only exercise authority that Congress has delegated to the agency.

In this particular case, there are two specific authorities: Section 338 and Section 631. Those authorities extend to cable operators and satellite systems. Neither TiVo nor comScore is a satellite operator or a cable system. So we cannot exercise jurisdiction under them in the manner in which you requested.

Additionally, to the extent that you were asking about the company DISH and its provision of aggregate data, that is a specific exception from the statutory authority that does not allow us to exercise jurisdiction.

And so it wasn't simply a punt, but a recognition of reality under the current law that the Federal Trade Commission can be and is expressly authorized under Section 5 of the FTC Act and other authorities to investigate this particular matter, and that is why we referred it to them. They are the primary privacy cop on the beat, and we want them to be able to look at this issue, consistent with your request.

Mrs. DINGELL. I am out of time, so I can't keep asking. I had more.

Thank you. I yield back.

Mrs. BLACKBURN. The gentlelady yields back.

Mr. Guthrie, you are recognized.

Mr. GUTHRIE. Thank you.

Commissioner Carr, first, I want to talk to—this isn't necessarily directly FCC, but it is something you have been working on I am very interested in here, and it is the skills gap and apprenticeships. I work with Susan Davis from California on another committee.

And I had the Wireless Infrastructure Association come to see me. And I don't know if you were with them or somebody else—that you actually climbed a tower recently. And they were trying to figure out how 5G deployment could be held up just by not having the skills of people able, men and women, to be able to go out and deploy 5G.

And I know I have like 6,500 open jobs in my community. If you show up with some skill it is easy to do a living wage. If you show up with skills, you have a career.

And so I know that is an interest of you, in terms of this area. Could you talk about things that you have worked in, in this area, what the skills gap is, and some things you think we should be able to do to help close that?

Mr. CARR. Yes. Thank you, Congressman, and thank you for your leadership on this issue. You mentioned I climbed a cell tower in Sioux Falls, California, and I demonstrated my own skills gap attempting to keep up with the people doing that.

But to your point, the skills gap, in my view, comes in two places. One, when you look at the deployment of next-generation

network, 5G, these thousands of small cells, right now we potentially don't have the workforce in place that can do that work, the deployment of it, the consideration of the RF implications, in terms of where you set an antenna up to get coverage.

And then we also see it in communities being able to have the skills, take advantage once those connections are in place. I was in Detroit at a school that is trying to give either low-income people, people recently released from prison, the training and the job skills they need to take advantage of the digital economy.

To your point, I think there is more we can do on the apprenticeship side with streamlining those efforts to make it easier for people to move into this space. I have done some events with the Department of Labor geared towards that.

Mr. GUTHRIE. Thank you very much. And as I said, that moves toward careers instead of just jobs, and that is what we really want to reach out to help people with.

Also, Chairman Pai, in the RAY BAUM'S Act, Congresswoman Matsui and myself had the auction deposits bill that was included into that area.

My question is for you and Commissioner O'Rielly, I think Commissioner O'Rielly, you both brought that to our attention. Are you seeing any other barriers in the auction mechanics that may need statutory fix to streamline to make the auctions go smoother or better, both of you or either of you?

Mr. PAI. Thank you for the question, Congressman. Before I do that, I want to assure the subcommittee that we consulted with the General Counsel, and had something happened to Commissioner Carr on that tower climb, the FCC still would have had a quorum sufficient to discharge its duties as prescribed by Congress.

But more seriously, we are so grateful to you, to Congresswoman Matsui, and to the entire subcommittee for your leadership in fixing that problem.

As I look at the lay of the land in terms of our legal authority, we have sufficient authority at this point, with the exception of the budgeting, the issues that I talked about earlier, to make sure that we can conduct auctions in an expeditious and productive way.

Mr. GUTHRIE. Thank you.

Mr. O'Rielly, I have another question for you if you want to answer that.

Mr. O'RIELLY. I was going to answer to the point. I don't think it is a question of authority. I think it is a question of what this committee does very well, which is oversight and following up to make sure that the auction software is advanced to meet the goals for the future.

Mr. GUTHRIE. OK, thank you.

And also for you, Commissioner O'Rielly.

Thank you for your support on the 6 gigahertz proceeding and your testimony. As you know, this is an important issue for the Spectrum Caucus.

Would you like to elaborate on the need for this spectrum and what timeframe you expect to see for the expected NPRM? If you could be more specific than maybe the fall or something like that.

Mr. O'RIELLY. Absolutely.

So the predominant bands that I mentioned before, 2.4 and 5 gigahertz, are congested. And so we need to add more unlicensed spectrum to the portfolio, for all the benefits that they bring that I have talked about in the past. Commissioner Rosenworcel and I have worked together on this issue.

Six gigahertz is what I consider the second best option for additional unlicensed spectrum next to 5.9. We are working hard on that. It has been a very difficult slog to try and come to resolution.

But 6 gigahertz may be something we can move forward quicker. It is the uplink to C-band. C-band has the other component that the subcommittee has talked about a little bit earlier.

In terms of the point on the timing, that is something that the Chairman—I don't want to get ahead of him, but I think that the goal is to have an NPRM this fall timeframe.

Mr. GUTHRIE. Commissioner Rosenworcel, do you have any comments on that?

Ms. ROSENWORCEL. No. I agree with much of what my colleague Commissioner O'Rielly said.

Unlicensed spectrum has historically been scraps in our airwaves. We have got to be intentional about it. We need more Wi-Fi in our skies, and we have got opportunities in the 5.9 gigahertz span and 6 gigahertz span, and it is time to pursue them.

Mr. GUTHRIE. Well, thank you very much.

And my time is almost expired, so I will stop there. I yield back 15 seconds.

Mrs. BLACKBURN. The gentleman yields back.

Mr. McNerney, you are recognized.

Mr. MCNERNEY. I thank the chair.

And I thank the Commissioners for your work. It can't be that easy, but hopefully rewarding.

Chairman Pai, it has been 2 months since we learned about the VPNFilter, the Russian-linked malware that can be used to steal users' information, exploit devices, and block network traffic. Hundreds of thousands or more routers have been compromised. Yet consumers either know nothing about it or they have been left wondering if their router is affected and how to take action. And these are routers that are being rented from their ISPs.

Do you agree that the ISPs have a responsibility to inform consumers they lease routers to about known vulnerabilities? Can you answer yes or no?

Mr. PAI. Congressman, we do want to ensure that consumers get the information they need about the security of their equipment.

Mr. MCNERNEY. Do the ISPs have a responsibility here?

Mr. PAI. Legally, I would have to look into it. But certainly, as a general business matter, I would hope that they would inform consumers about any risks to that equipment.

Mr. MCNERNEY. Is the FCC doing anything to encourage ISPs to inform customers about this malware and how to update their routers or if their routers have been compromised?

Mr. PAI. Congressman, I have to be a little bit circumspect on this issue. I can't comment on things that might have some classification to them. But we would be happy to work with you to provide what information we can on the subject.

Mr. MCNERNEY. Well, is the FCC doing anything at all to help protect customers against malware from their routers?

Mr. PAI. Again, there are certain issues I can't discuss. But generally speaking, yes, we do monitor any potential threats to equipment, and we work with the industry to make sure that they apprise customers about it.

Mr. MCNERNEY. Commissioner Rosenworcel, do you think the FCC has a role in protecting consumers from cybersecurity threats?

Ms. ROSENWORCEL. Yes, I think the FCC has a role in protecting consumers from cybersecurity threats.

I also think our equipment authorization process is of note here. Those routers have to be authorized by the agency, because they use radio frequency. We could certainly look into using our Part 15 process to certify that they will notify consumers of any malware or cyber risks associated with their use.

Mr. MCNERNEY. Thank you for that answer.

The GAO has committed to investigating fake comments submitted to the FCC in the net neutrality repeal proceeding, and I understand that the New York attorney general is investigating as well. As it stands, we know that at least 2 million of these comments are fake, some even coming from Russian email addresses.

Commissioner Rosenworcel, is it your view that the FCC has been cooperating with law enforcement agencies?

Ms. ROSENWORCEL. I do not believe we have been cooperating with law enforcement agencies. I think that is a problem. Two million peoples' identities were stolen in our record. That is a Federal crime under Title 18. It is also a crime in many States. We should be referring these matters to State attorneys general and the Department of Justice.

Mr. MCNERNEY. Thank you.

Chairman Pai, can you commit to ensuring that your office and the FCC as a whole will cooperate with these investigations?

Mr. PAI. Congressman, we have been cooperating with the General Accountability Office. As I said, the Office of Inspector General is looking into this issue.

In addition, I proactively have announced recently in a letter in response to Senators Merkley and Toomey that we would be changing our process to ensure that some of the issues that arose last time, for example, 7.5 million comments in support of Title II using fakemailgenerator.com, 400,000 pro-Title II comments from a single address in Chelyabinsk, Russia, that those things don't happen.

As we are exploring the use of CAPTCHA and other potential solutions, assuming we get authorization from our appropriations committees, we are reprogramming of certain funds.

Mr. MCNERNEY. Well, I am still waiting for a response for the report's—and this is following up on Mrs. Dingell's comments—request memoranda related to the alleged DDoS attack on the comment system, requesting these documents multiple times now, and hope that you will provide them sometime soon.

Mr. PAI. Congressman, again, to follow up on my response to Congresswoman Dingell, we have been working with the Inspector General. He has done a fantastic job on this. And stay tuned, they will be issuing information.

In the meantime, additionally, as I said, in consultation with the General Counsel, we require a letter from the Committee in order to supply certain types of information that you are seeking.

Mr. MCNERNEY. Are there any steps you are taking now to prevent comments from being filed in a manner that would impact your proceedings?

Mr. PAI. Yes, sir. So we are, as I said, exploring, in consultation with our career staff and the Office of Managing Director and others, solutions like CAPTCHA or other similar mechanisms to ensure the integrity of our proceedings.

The system we inherited in January 2017 was designed to be a fully open process that anyone can participate in, but we want to make sure that it is one that, again, respects the integrity of the FCC's processes and confirms the seriousness of our work.

Mr. MCNERNEY. Thank you.

Commissioner Rosenworcel, last question. I am concerned about the proposed changes to the Lifeline Program. I am worried that, if adopted, it will only further widen the digital divide and be a major setback for vulnerable populations like veterans.

The proposed changes, could you give me an idea how that might affect veterans?

Ms. ROSENWORCEL. I appreciate the question. I am, in fact, the daughter of an Air Force veteran.

There are 1.3 million veterans in this country that rely on the Lifeline Program today. And, in fact, at the behest of Senator McCain and Senator Blumenthal, we expanded the program to include the Veterans Pension program so that more veterans could apply and participate, so that when they finish their service they can reacclimate to civilian life and have communications necessary to do so. I think it would be offensive if this agency decided to cut them off from communication service.

Mr. MCNERNEY. I yield back.

Mrs. BLACKBURN. The gentleman yields back.

Mr. Olson, you are recognized.

Mr. OLSON. I thank the chair.

And welcome to our four leaders of the FCC.

Chairman Pai, Texans back home in Texas 22 want me to thank you for standing up for a thriving internet. They are grateful for your actions to stop the false net neutrality rules of the previous administration.

You found out firsthand what my former boss, Texas Senator Phil Gramm, found out about killing a bad government program or rule: It is easier to kill a vampire than a bad government program. Yet you persevered. And now again to channel Phil Gramm: The previous rule is deader than Elvis.

It is again hurricane season. I would like to also thank you for coming down within days after Harvey hit Houston to help us on the ground recover with our telecommunication systems. I am hopeful this year is not like last year: Harvey, Irma, Maria, fires. We have to make sure we are prepared.

Can you update us on what the FCC has done to prepare for hurricanes and other disasters this year?

Mr. PAI. Thanks so much for the question, Congressman, and thank you and the folks in your district for hosting me when I was in Houston after Hurricane Harvey.

We are doing a number of things to make sure that our networks are as resilient as possible and that restoration is as quick as possible.

In terms of funding, we have extended funding to make sure in Puerto Rico and the Virgin Islands, for instance, that we can restore those networks as quickly as possible. And we have also extended a number of different waivers and streamlining orders to make sure that carriers can focus on rebuilding networks instead of paperwork to the FCC.

Additionally, we have engaged in a number of different experiments, for example, granting an experimental license to Google to use Project Loon to beam internet access from balloons. In a situation like that, we don't care what technology is used to get people back on the grid, we want them to get back on.

Additionally, we have been working to make sure that our wireless emergency system is much more resilient. I would be happy to talk about some of the different steps there, but the bottom line is we are making sure that these alerts are more targeted, are more informational, and the consumers don't tune them out.

An additional one that is specific to you that I thought I would mention, because a lot of people don't think about this, some 33 trillion gallons of water were dumped on your part of Texas in the wake of Hurricane Harvey. That had a huge impact on those parts of the area that only had copper lines in the ground.

Copper degrades when it is under severe water pressure, and if it is exposed to water it is utterly useless. And those areas of Houston that had fiber were much more resilient. Either the cell towers didn't go down or the networks stayed up altogether.

And so I think that it is important when we talk about some of our copper retirement rules and other nitty-gritty wireline reforms that we have got is that there is a huge public safety benefit to doing this, NG9-1-1 and the rest. I think it is very important to keep that in mind.

All of these issues that we have been talking about previously have a public safety dimension that I think we should all recognize.

Mr. OLSON. By the way, thank you for all those emergency messages that came over, warning tornado, warning floods, warnings swamped the whole system. With your work, it is targeted now to where it actually is. As opposed to hitting a whole county, it is hitting a city. And that is a big deal, because we were bombed. We got spammed by all these. It just became nothing after days of these buzzers going off. So thank you for acting quickly to make that happen.

Commissioner Carr, you have been leading the FCC in finding new ways to reduce government red tape that slows 5G deployment. Verizon has just announced it plans to launch 5G in Houston, Texas, later this year.

Can you tell me how your work will help expedite this rollout quickly in Houston?

Mr. CARR. Thanks very much, Congressman, for the question. I am glad to see that Houston is going to be on the leading edge of getting 5G.

That is something that we want to replicate across the country. So we have a number of reforms that we have already taken. That is going to reduce the cost of deployment. That is going to make a big difference, particularly in costly, difficult-to-serve areas. We have a number of ideas that we are continuing to look at, at the Commission.

I also wanted to follow up on your earlier question. I was also in Houston at the Harris County 9-1-1 Center and saw the great work that they were able to do there in response to Hurricane Harvey.

Mr. OLSON. And one last question. I am running out of time here, but this is for you, Chairman Pai.

As you probably know from my biography, I spent 9 years in the Navy, lieutenant commander, a leader in the Navy. You are the leader of this FCC, this Commission. You have a member who has climbed up a cell tower. As leader, don't you think you should follow his lead and climb up a cell tower as well, somewhere in South Dakota maybe?

Mr. PAI. That was a curve ball I had not prepared for, Congressman. Although Commissioner Carr is far younger and more nimble than I am, nonetheless, I will put my own life at risk to ascend perhaps a 10-foot tower to inspect a small cell somewhere in Houston once the deployment is ready.

Mr. OLSON. I will go with you.

I yield back.

Mrs. BLACKBURN. And the gentleman will not only go with you, he will climb the tower.

Ms. Matsui, you are recognized.

Ms. MATSUI. Thank you very much, Madam Chair.

And welcome to all the panelists. I don't have a climb-the-tower question here.

So but anyway, I want to follow up on my Spectrum Caucus co-chair, who is Brett Guthrie, talking about 6 gigahertz. I understand the Commission is planning to move forward with NPRM to explore the possibility of opening the bands known as collectively 6-gigahertz band for unlicensed use in the fall.

Commissioner O'Rielly and Commissioner Rosenworcel, what interference protection to mitigation techniques, such as frequency coordination, could protect incumbents and allow unlicensed operations in this band?

Mr. O'RIELLY. Well, thank you.

So those that have been interested in making 6 gigahertz available for unlicensed use have put forward engineering studies to show that the interference, harmful interference, would be minimal, and they have recommended a number of mitigation efforts. They will all have to be explored as part of the NPRM this fall.

Ms. MATSUI. OK.

Ms. ROSENWORCEL. We do have before us some engineering studies like my colleague referenced. The most important thing we can do is put this out for a rulemaking so that we make it possible for

the 6-gigahertz band to be used for unlicensed service in the near future.

Ms. MATSUI. Right. Great. Thank you.

Last week, I announced that I am working on legislation to direct the Department of Commerce to convene a working group of Federal and industry stakeholders to develop a consensus-based definition of blockchain.

Distributed ledger systems such as blockchain have particularly interesting potential applications in communication networks, including in IoT deployments and spectrum sharing. Next-generation networks, including 5G-capable radios, have the opportunity to ensure spectrum is being used as efficiently as possible.

But there currently is no common definition of blockchain, which could potentially hinder it in its deployment, especially in those cases where sharing may be the only viable option.

Commissioner Rosenworcel, so what potential could blockchain have in increasing spectrum efficiency?

Ms. ROSENWORCEL. Thank you for the question and being so forward-thinking about this.

I have written some pieces for Wired and elsewhere where I have pointed out that spectrum is a scarce resource. We need to come up with more efficient ways to distribute it other than just traditional licensed and unlicensed regimes.

And using distributed ledger technology like blockchain could make that possible. We could see dynamic leasing. We could see lightweight leasing. We could see a lot more innovative uses of this scarce resource.

So I think what you are describing is the right way to go.

Ms. MATSUI. OK, thank you.

I want to move on to the C-band. I commend the FCC's work to identify the 3.7 to 4.2 gigahertz band as a potential core midrange band for next-generation networks. This band has propagation characteristics that make it ideal for reliable satellite distribution and particularly valuable for IG mobile networks.

The NPRM that you unanimously approved earlier this month appropriately recognized that the Commission has insufficient information on incumbent operations that may need to be protected in the band. I appreciate the NPRM sought additional information on existing Earth station uses of C-band satellites as well as the previous application filing freeze.

Chairman Pai, how is the work to gather additional information on incumbent users going?

Mr. PAI. Thank you for the question, Congresswoman.

It is going well, in part because we have extended the time and the latitude that some of these folks have to register with us. We have extended the timeframe by 90 days, until October 17. We have streamlined the fees and the reports that are required for them to be able to report.

And so at the end of the day, this fall we hope to be able to come to you just to let you know that we have a much more robust picture of where these stations are in order to allow us to proceed to a fully informed decision about the fate of the C-band.

Ms. MATSUI. OK, fine. Thank you.

Mindful that clearing federally held spectrum is both critical in our effort to facilitate deployment of next-generation networks and a congressionally mandated preference, I am interested in new ways to ensure we are using spectrum more efficiently and innovatively.

Back in 2004, for instance, the FCC considered the role that opportunistic technologies and access systems could play in promoting leasing arrangements between commercial users and license holders.

Specifically, I am interested in a legislative framework that would further facilitate the opportunity for NTIA to coordinate with the FCC and allow Federal agencies to lease spectrum to commercial users.

Commissioner Carr, I know there is not much time, but how do you believe additional spectrum-sharing arrangements could balance the certainty and deployment needs of both commercial providers and government users?

Mr. CARR. Congresswoman, thank you for the question and thank you for your longstanding leadership on spectrum issues.

I think you are right. I think we need to put even more tools on the table, even more options on the table, and we should be exploring all ways to get more spectrum out there for consumer use.

Ms. MATSUI. Thank you.

And I just want to make a comment. In my work on this committee I have been focused on expanding access to telehealth services. So I thank you, Commissioner Carr, for your focus on them.

And with that, I yield back.

Mrs. BLACKBURN. The gentlelady's time has expired.

Mr. Johnson, you are recognized.

Mr. JOHNSON. Thank you, Madam Chairman.

And to our Commissioners, thank you all very much for being here.

Chairman Pai, earlier this year Congress provided funding to NTIA. We have talked a little bit about the mapping issue. We provided that funding to NTIA to update the national broadband map in coordination with the FCC.

How is that coordination effort going? And do you believe that a process that uses State and commercial data in addition to the material the Commission collects from the Form 477 process will render a more accurate and useful map?

Mr. PAI. I appreciate the question, Congressman, and your leadership on this issue.

I have personally spoken to the Administrator of NTIA about this issue. In addition to that, our staffs have been in touch to share expertise to make sure that they aren't reinventing any wheels and that we are all on the same page in terms of the need for mapping.

In terms of the second part of your question, which of course now I have forgotten. Sorry.

Mr. JOHNSON. It was, do you believe the process that uses State and commercial data in addition to the material from the 477 process will render a more accurate and useful map?

Mr. PAI. Our hope is that it will. And in the meantime, what we have done under my leadership over the last year and a half is to start a comprehensive review of the Form 477 process, to make

sure that the information that we get is as granular, is as feasible, and is as usable as possible for all of the folks who need it, including NTIA, Congress, the FCC, and others.

Mr. JOHNSON. I know you know, and I think the other Commissioners agree, too, that an accurate map is important, and I appreciate what you said about not reinventing the wheel.

This is not rocket science. We ought to be able to produce a map and we ought to be able to produce a map very, very quickly. An accurate map is the starting point for solving this problem. And it has been an issue that has just been dragging and dragging and dragging.

So whatever you folks can do to encourage and push that along, it really is important to rural areas where we are suffering with intellectual capital loss, the rural-urban divide being very real. You guys know that. I appreciate that.

Chairman Pai, cybersecurity is obviously a very important issue as well for our country, and there continues to be debate over which agency or which commission should take the lead on cybersecurity.

I know that the telecommunications industry works routinely with the Department of Homeland Security, and conversations that occur with DHS are held in confidence, and that is required by statute.

Obviously, that kind of protection of information encourages sharing of critical and confidential information, which we all agree is the best way to safeguard our communication systems. I understand.

However, those same statutory protections do not exist at the FCC. So are you concerned that the FCC and DHS could work at cross-purposes, which may undermine cybersecurity?

Mr. PAI. Great question, Congressman. Cybersecurity is a critical issue, and it seems like every week there is a new story that draws our attention to that fact.

I am happy to report that over the last year and a half, we have had a very close and productive working relationship with the Department of Homeland Security. In fact, this very morning I spoke with DHS about some cybersecurity issues that have popped up.

And so we certainly want to make sure we are on the same page there. Our role under current law is to act in more of a consultative fashion with DHS, which has the lead in terms of cybersecurity.

Should Congress see fit to change the law—currently, the only arguable source of authority would be Section 1 of the Communications Act, which is a very high-level, broad statement, which doesn't give us operative authority there, as well as arguably Section 222, which is more consumer proprietary network information. But should Congress change the law, we would dutifully administer it to make sure that our networks are secure.

And in the meantime, I will continue to work collaboratively with DHS and other Federal partners, including the intelligence community, to make sure that cybersecurity is reinforced as an important issue.

Mr. JOHNSON. OK. And I can't get two questions in here, but I am going to try.

5G. The United States won the race to 4G, increased our economy, according to some reports, by nearly $100 billion and drove an 84 percent increase in wireless-related jobs.

Because of that leadership, the wireless industry now supports over 4.7 million jobs and contributes $475 billion annually to the U.S. economy, according to that Accenture report.

What should the FCC do to ensure that we maintain our global lead in 5G so that all of those economic and job benefits continue to occur here in the U.S.?

Mr. PAI. Congressman, exactly what we are doing. Being very aggressive on spectrum, holding the 28 and 24 gigahertz auctions this fall, 37, 39, and 47 gigahertz next year, in addition to looking at other bands, 3.7, 6 gigahertz, and others.

In terms of infrastructure, we need to make sure that we continue to modernize our regulations to incentivize the construction and use of the small cells and distributed antenna systems and other guts of the future 5G networks.

And I can tell you our work is having an impact not just on my own word, but I recently came from two conferences, one in Switzerland, one in Panama. And to hear from regulators everywhere around the world, from Algeria to Guyana, to even Trinidad and Tobago to Fiji, tell us they are looking to the United States for leadership because, as one regulator put it to me: You guys are doing it right and we follow your lead on this 5G issue.

That is something that I think reinforces the fact that we are doing the right thing.

Mr. JOHNSON. Let us know how we can help.

And with that, I yield back.

Mrs. BLACKBURN. The gentleman yields back.

Ms. Eshoo, you are recognized.

Ms. ESHOO. Thank you, Madam Chairwoman.

And welcome to the entire Commission.

Commissioner Rosenworcel said 9 months is a school year. It is also the length of time that it takes for a child to come into this world. So it has been a while. It has been a while. Welcome back.

I want to set the record straight on a couple of things first. It has been said that people are entitled to their opinions, but not their own facts. It has been cast about here today that it is somehow a fiction that my Republican friends destroyed net neutrality and wiped out privacy on the internet. That is not fiction; it is a fact.

On December 14, 2017, the Commission voted to upend the net neutrality rules that were in place and that had been tested in court. Nonetheless, that was rescinded.

On March 28, 2017, a CRA went sweeping through this committee. It was authored by our chairwoman, went through the full committee, went like a prairie fire through the House of Representatives, and removed all privacy protections from the internet. I know what I voted on. Obviously, I voted no. Others voted yes.

But to say that these things somehow are a rumor where people are referring to them and they are not so is simply not a fact. So I want to really set that down, because I think it is important too.

Mr. Chairman, I want to quickly follow up on Congressman McNerney's question where he specifically asked whether the FCC

is cooperating with law enforcement agencies, et cetera, et cetera. Is that referred to the Bureau or to the Commission?

Mr. PAI. Sorry, Congresswoman, is what referred?

Ms. ESHOO. The investigations, referring the violations. Does the Bureau act on that or does the full Commission act on that?

Mr. PAI. If we are talking about the same thing, the letter was referred to our Office of General Counsel.

Ms. ESHOO. So what does that mean? What I want to know is, has there been a referral to a law enforcement agency? That is what I think Congressman McNerney was asking you, but you talked about the GAO, I think the FTC, the I don't know whatnot, the IG, the FC.

So have you referred these violations to a law enforcement agency? That is what I would like to know. Yes or no?

Mr. PAI. Congresswoman, we have consulted with the Department of Justice.

Ms. ESHOO. No, no, no, no, no.

Mr. PAI. We don't have jurisdiction——

Mr. ESHOO. Has it been referred to? Has it been referred to for examination? Have you asked for an investigation of it?

Mr. PAI. Congresswoman, it is not our role to administer Title 18. That is a Department of Justice issue.

Ms. ESHOO. Well, I think you don't want to answer the question. I don't want to litigate it with you. I just want a yes or no.

Mr. PAI. Congresswoman, it is very simple. To the extent that we have jurisdiction here, we have worked with the Office of Inspector General. We have worked with the General Accountability Office.

Ms. ESHOO. I think I know what your "answer" is.

I want to get to something, and I don't have much time. It probably is going to be more of a statement than anything else.

It has been said that we have 24 million Americans that either have no broadband service or very slow broadband service in the country. Shame on all of us.

Is there a 5-year plan at the FCC on this? Some of it may belong in the private sector. Some of it you need authority from the Congress and our subcommittee. Other actions the Commission can take. But when that is stitched together, we have solved this issue.

Every time the Commission comes here, all of our subcommittee hearings, we go over and over and over and over this issue, and it is not getting any better.

So can someone enlighten me on this?

Yes, Commissioner.

Mr. O'RIELLY. So, in fairness, the Commission has spent an incredible amount of work on this.

Ms. ESHOO. I think we all have, but I don't sense we are making progress.

Mr. O'RIELLY. We have done the easy stuff, the easy locations. We are working on what I would consider the medium locations. We have an ongoing auction right now for the CAF Phase II auction.

What is left over from that and what is left over from our remote area—or from our rate of return areas that don't get served under our program—that is what is going to be the hardest——

Ms. ESHOO. So what will that knock out of the park, what you just described, of the 24 million?

Mr. O'RIELLY. It is 14 million if you don't—it is 24 million only if you don't count satellite that is serving 10 million people today with 25/3.

But it is important. I don't mean to say that 14 million should be ignored. But we are working on the really hard area. The Remote Areas Fund needs to be set up, and we are going to need additional funding that we don't have today.

And it will either require contributions from Congress in Federal dollars, which I have testified in favor of and the dollars went to other Federal agencies——

Ms. ESHOO. I backed you up on it.

Mr. O'RIELLY [continuing]. Or it is going to require additional contributions from ratepayers to the likes we haven't seen before.

Mrs. BLACKBURN. The gentlelady's time has expired.

Ms. ESHOO. Thank you very much.

Mrs. BLACKBURN. The gentlelady yields back.

Mr. Bilirakis, you are recognized.

Mr. BILIRAKIS. Thank you, Madam Chair, appreciate it so very much. And I welcome the Commission and the Chairman.

And, Chairman, thank you very much for coming to my area and speaking to my constituents. I really appreciate it very much.

Chairman Pai, again, while you were in the Tampa Bay area, you were able to review the testing that Charter Communications was doing in and around the district. In particular, they are conducting trials in the 3.5 band, which is showing promise for better and faster rural coverage. At the same time, the 3.5 band is utilized by Federal radar systems, which is used by the Navy and Coast Guard on the Gulf Coast of Florida as well as other areas.

The Environmental Sensing Capability, ESC, has been created to ensure these Federal uses are not interfered with, while also allowing shared spectrum with industry in preparing the 5G-enabled technology. This band provides a great opportunity for industry and competition as long as we ensure Federal systems remain secure.

What is the status of ESC implementation and interference sensitivity standards, please?

Mr. PAI. Thank you for the question, Congressman. And first and foremost, thank you for the hospitality you showed me, both in Tampa and in Oldsmar. It was a terrific visit to the district.

I am very excited about the possibilities of 3.5 gigahertz spectrum, in part because of that trial you showed. To be able to see how Charter is using and how others potentially could use the spectrum to provide a seamless high-definition video experience as you are driving down the road. Very simple application, but a very powerful one nonetheless for consumers.

The ESC is a critical part of that, and so I am happy to report that we are actively working with both NTIA and the Department of Defense on the testing. The testing is very complex, and so I can't give you a definitive timeframe on when it is going to be completed or what the results might show. But do know that we are working as quickly as possible to wrap that testing up to enable ESC to allow shared use of this valuable resource.

Mr. BILIRAKIS. Very good.

Commissioner O'Rielly, I know you are leading the charge on the 3.5. Do you have anything to add to that?

Mr. O'RIELLY. I would agree with the Chairman on this, but I would say there are two parts. There is the SAS, which deals with the commercial users, and the ESC, which deals with the Federal users, and how we make sure we don't cause interference.

Those things, a couple months ago we thought we might separate them time-wise. I was briefed yesterday that it looks like things are lining up nicely. And I don't want to get ahead of myself, but I think Q1 of next year is not irrational, if not earlier.

We are hoping to do some things that I can't speak of, but hopefully will be able to announce some things regarding the SAS later this year and then the ESCs really soon after. So I think things are lining up pretty nicely along those decisions.

But can I go back to your earlier question? And I don't want to use your time.

Mr. BILIRAKIS. Please.

Mr. O'RIELLY. But you mentioned the point regarding Charter. To get back to Congressman Doyle's point regarding census tracts, Charter has advocated a different position, in terms of they haven't favored census tracts, they have favored county-sized licenses. And so there are different positions than just census tracts, and I am trying to work out and try and find a commonality of the different entities that are seeking this.

I will tell you, those that have favored census tracts have not moved or advocated 1 inch from where they have been for the last number of years. They will not yield anything to where they have been. So it has been hard to try and find commonality among all these different positions. And you mentioned Charter, so I thought I would bring that up.

Mr. BILIRAKIS. Thank you very much. Thanks for the update.

Back in March, after a very long wait, the D.C. Circuit Court issued its opinion on the Telephone Consumer Protection Act. In particular, this ruling invalidated the definition of an auto dialer and also did away with the Commission's reassigned number and safe harbor rules.

In light of this opinion, what action is the FCC taking to establish valid TCPA definitions and rules that target bad actors, but do not put everyday Americans at risk to lawsuits?

Commissioner, Mr. Chairman, can you address that?

Mr. PAI. I would be happy to, Congressman.

We are still actively studying the results of the opinion in ACA International, and we are working with our staff on the way forward on some of the key issues they identified: the definition of auto dialer, the reassigned number database, revocation of consent, and the like.

So, again, I can't give you a specific timeframe, but we are actively looking at a variety of TCPA issues as a result of the D.C. Circuit's opinion.

Mr. BILIRAKIS. Well, Madam Chair, I have got one more question, but I will go ahead and yield back my time and I will submit it for the record. I appreciate it. Thank you.

Mrs. BLACKBURN. I thank the gentleman. The gentleman yields back.

And, Mr. Flores, you are recognized.

Mr. FLORES. Thank you, Madam Chairman.

Also, I want to thank all the members of the Commission for being with us today.

Let me compliment you on something. I think that the Commission has done an excellent job of taking the statutory authorities that you have gotten from Congress and to effectuate the rollout of 5G.

Based on what I have seen from the stakeholders in this space, we are moving much more quickly than I would have envisioned. We are going to have fixed wireless 5G in Houston as a test case at the end of this year.

That is amazing when you can talk about speeds up to 3 to 10 gigabits. That is amazing. So good work on getting that done. And that also, I think, sets the stage for a cost-effective way to roll out rural broadband eventually. And I appreciate the work on that, to take care of the 24 million people that have been widely talked about during this hearing.

Commissioners Pai and O'Rielly, you both touched in your testimony about what you are doing in terms of making spectrum available for 5G, and part of that entails dealing with the FM radio stations that were left out during the original legislation.

My bill that deals with that was addressed in the RAY BAUM'S Act, and also we set aside the appropriations for you to do that. You have moved quickly to have an NPRM at your next hearing on August the 2nd. Can you give us a preview of what we can expect in that regard, just in a few seconds?

Mr. PAI. Congressman, I certainly hope we will see a unanimous vote next week on my proposal, but I don't want to speak for my colleagues. But it is important for us to take that authority you gave us and run with it as quickly as possible, get public input on what the right procedures should be to protect full power/Class A TV stations, FM radio stations, and others as a result of the incentive auction.

Mr. FLORES. OK. Thank you.

Moving on to another subject, believe it or not, one of the biggest complaints that I am receiving from my constituency, which is generally happy, is that they are upset about robocalls. And I don't think that has come up today. And I know you all are taking steps in terms of stopping the spoofing of phone numbers and so forth.

Can you give us an update on where we stand in that regard? I guess who owns that among this group? Chairman Pai?

Mr. PAI. I drew the short straw.

Mr. FLORES. You get all the big ones, don't you?

Mr. PAI. We are doing a lot, Congressman. Thanks for the question. This is an issue that frustrates me. Even last week when I was on vacation, I spent several minutes on a phone with several robocallers, trying to figure out who they were, how they got my information, and the like.

We are doing a lot. So over the last year and a half since I have been in office we have adopted a Notice of Inquiry on call authentication, essentially digital fingerprints for every single phone call.

We have also in that regard blessed the private sector group called the NANC, which is looking at call authentication.

Mr. FLORES. Good.

Mr. PAI. Secondly, we are taking steps to allow carriers to block spoofed calls, that is, calls that obviously aren't from your area code but nonetheless appear to be.

Additionally, we are taking very aggressive action in terms of enforcement. Oh, sorry, I should mention also the reassigned number database, to allow those legitimate callers to know whether or not a number has been reassigned to somebody who doesn't want to be called.

Additionally, on the back end, so to speak, taking very aggressive enforcement action. The largest fine ever imposed in the FCC's entire history was against a robocaller in Florida, about $120 million. Additional multimillion dollar fines there, too.

I personally have spoken with some of my counterparts abroad, because a lot of these robocaller operations come from other countries and our jurisdiction only stops at the water's edge. And largely, they have been very willing to cooperate with us on that.

Mr. FLORES. Good.

Do you need additional statutory authority at this stage of the game to be able to fight this epidemic?

Mr. PAI. I think we have a fairly broad authority, but to the extent that Congress is willing to give us more tools in terms of statutes of limitations or the like, we would love to work with you on that.

Mr. FLORES. OK. Let us know what you think you need.

I want to move to the mid-band spectrum in just the remaining minute that I have. Part of the mid-band spectrum of 5.9 gigahertz was set aside for what was called dedicated short-range communications, or DSRC. That is a part of the spectrum that could be used for autonomous trucking, autonomous vehicles. You can have vehicle-to-vehicle communications, vehicle-to-infrastructure communications.

Let me say this. Other people want to use that for unlicensed Wi-Fi and things like that to try to offload some data transmission from the SDR bands. This section seems to be congested or subject to future congestion. What do you see for the future of the 5.9 gigahertz part of the spectrum?

Mr. PAI. It is a good question, Congressman. And Commissioners O'Rielly and Rosenworcel have long been advocating for this, as have Congresswoman Eshoo and I, in an op-ed we did a few years ago.

We are working actively with our Office of Engineering and Technology at the FCC, along with the NTIA and NHTSA, the Department of Transportation and others, to figure out the way forward. So right now we are in phase I of testing. There has been a report that is in draft mode that we have shared with our Federal partners. We hope to be able to move forward on that soon.

Ultimately, this has to be a collaborative effort. There are a lot of different agencies with different equities here. But ultimately, we want to make the highest-valued use of this spectrum.

Mr. FLORES. OK.

I have some more stakeholders at home that are working on this. The Texas Transportation Institute is trying to design the trucking system of the future, and so they are pretty worried about what happens in this band. So we will send some supplemental questions for you.

Mr. PAI. OK. Thank you.

Mr. FLORES. Thank you.

Mrs. BLACKBURN. The gentleman yields back.

Mr. Collins, you are recognized.

Mr. COLLINS. Thank you, Madam Chair.

Commissioner O'Rielly, I will maybe spend my time talking about the, what do we want to call it, the 9-1-1 diversion, the Fee Integrity Act that we are putting forward. You were kind enough to come visit.

In my area, we went to a PSAP in Niagara County, which does not have the latest technology. They are quite frustrated. They don't have the moneys to get there. And because of your visit, we got a lot of press on this, we shined the light on New York State's diversion.

So maybe just for the record to get this out there, New York has about 13 million cell phones. With 20 million people, that kind of makes sense. Little kids may not have them. The States set their own fee, which in this case New York set the highest fee in the Nation at $1.20 per month for the cell phones, raising $185 million for the 9-1-1, what is supposed to be for the 9-1-1 service.

But, as our bill would forbid, New York State is diverting about 40 percent of that money to the general fund to be wasted in Albany. And that is about $75 million a year that should be going to upgrade PSAPs, like we have in Niagara County that are in woeful need of it. Instead, the money is just being frittered away in Albany.

So our bill would put that $75 million back on the table, not only for New York, New Jersey, Guam and a few others that seem to have no interest short of some laws that would forbid this.

And I will tell you, most of the folks in our district were astounded to know that the 9-1-1 service charge that is on their cell phone bill every day was not all going for 9-1-1 service. They did not have a subtraction for New York State diversion, a 9-1-1 fee and then New York State diversion.

So your visit was well-received in a bipartisan way. Certainly, all of the counties which are struggling for funds and want to update, they want to know when a call comes in who is calling, where they are instantly so they can dispatch the people, that everything is moving together.

And some of these PSAPs are decades old. And in some cases, Erie County where I live, there are literally a dozen or more PSAPs. They aren't even consolidated within a county, because this sheriff's department wants theirs, this city police wants theirs, some fire issues. Even though all the cell phone calls go to one place and there are not too many land lines, people are somewhat protective of it.

So, again, I want to thank you for helping us shine a light on this. And to further put this forward, Niagara County, where we were, we have done some research since then, over the last 5 years

they have paid $10 million—this is not a large county—$10 million have gone into Albany as part of the $1.20 per phone.

And while New York State diverted 40 percent, that still should have left $6 million to come back to Niagara County. But since each State makes its own rules—New York State I think tends to favor the downstate areas—only $2 million came back to Niagara County.

So they paid in $10 million, with their residents thinking this $10 million is supposed to help our PSAP in Niagara County. Lo and behold, only $2 million came in.

I can assure you, if that other $8 million, or even if the State diverted, if the remaining $4 million had come in, they would have upgraded that PSAP. Residents would be safer. Those working in those PSAPs, which is a very hard, frustrating job, would feel better when they go home at night.

So with your input, I just want to point out again one of the things that this bill would do is to have the States not only stop diverting, but we would have the FCC better define what would be a use, because the minute they stop diverting they may say: Well, for public safety we are going to fix that pothole over here. Well, no, this is in need of some Federal oversight.

And, again, if you want to make a couple of comments. I know I burned up most of the clock, but I wanted to get this all on the record.

So Commissioner O'Rielly.

Mr. O'RIELLY. I can't thank you enough for your leadership on this issue. It was great to be home in Niagara County.

Your point is well-taken in terms of the $10 million and only receiving back $2 million. So the consumers in my hometown are paying for it twice. Not only are they paying the 9-1-1 fees that are being diverted, but then they are having to pay higher local residential taxes where the budgets are coming from. And so Niagara County, property taxes went up to fund the extra $8 million shortfall. And so they are being hit twice on this.

And the New York government has made clear that they have no intention of changing this. Rhode Island has no interest right now in terms of solving their problem. New Jersey has the same problem. I was just talking to some folks from Guam with the same issues. We have some work to do on this front. I would love to continue to work with you under your leadershipon this.

Mr. COLLINS. You shined a light on it. You were very helpful in that. Thank you all for your time today. This is also not a partisan issue whatsoever.

So, Madam Chair, I yield back.

Mr. O'RIELLY. Public safety issue.

Mrs. BLACKBURN. The gentleman yields back.

Mr. Costello, you are recognized.

Mr. COSTELLO. Thank you, Madam Chair.

I want to first just say, since I have been on this committee, I have done my best to delve into these issues, and they are very sophisticated, the things that each of you deal with on a day-to-day basis. And I just want to commend each of you for your expertise and the time that you dedicate to our country and to the FCC and to the industry for trying to get it right.

With that, I want to ask Commissioner O'Rielly a question. Some of my colleagues on the other side of the dais today have articulated their interest in giving the FCC more of a presence on cybersecurity issues. While the concern over cybersecurity and supply chain vulnerability is certainly well-founded, it is my understanding that the FCC is not and should not play a lead role—I emphasize lead role—on identifying and mitigating these vulnerabilities. The FCC has a long tradition of deferring to expert agencies in the executive branch with the relevant intelligence and national security expertise. For example, the FCC routinely refers applications for transfers of certain licenses to an informal working group in the executive branch known as Team Telecom to review the national security implications of each such transaction.

Do you believe the FCC has anything new or unique to add to our nation's cybersecurity work, or do the intelligence and national security agencies currently have a good handle on these issues?

Mr. O'RIELLY. So I have to be careful in terms of what I can say in the public, but I do believe that the authority has been provided by Congress—so it is not my opinion; it is in the statute, who the Congress gave authority to was to other agencies besides the FCC on the issue of cybersecurity. And so that is not something that I believe we have great authority to act on. If Congress changes that authority, that is one thing. But I do believe that we work well with what you reference Team Telecom. There is a need to reform Team Telecom, and I have advocated some reforms to that. But I do believe that we do not have the primary role. We do have functions that we can add to that conversation.

Mr. COSTELLO. And that is why I direct the question. The reforms that you have advocated, does that contemplate that you do have existing expertise that could be lent if the statute was broadened to enable you to do that?

Mr. O'RIELLY. The changes that I am seeking is a more formal structure for Team Telecom and addressing the timing of the decisions that are made by them and making sure that interaction between the FCC and Team Telecom actually is beneficial. We had applications that sat at Team Telecom under the last administration for quite a long time period. That is problematic for those that have applied. It doesn't mean we are undermining our national security one iota; it means we have a better, more efficient government.

Mr. COSTELLO. So, if I were to characterize while you agree that cybersecurity is a deeply serious issue, you do not feel that placing more jurisdiction within the FCC or having the FCC exercise additional jurisdiction, be it within the statute or broadening the statute, would be well placed because we have existing intelligence agencies that are already fully capable of doing that, and the FCC does not have anything additional to add. Is that correct? Did I just, like, say too much?

Mr. O'RIELLY. I would agree with an awful lot of what you said. We will continue to have conversations with those entities, but I think that they have a great deal of authority and are capable of providing us the information as it relates to applications that are submitted for our consideration.

Mr. COSTELLO. OK. I do have a question for Commissioner Carr, but does anyone have anything to add to that real briefly?

OK. Telehealth, as you are aware, the prospect of telehealth holds exponential benefits for patients, families, and the healthcare system at large. But on the issue of access for rural America, Commissioner Carr, what can we expect to come out of the 3-year pilot program? What sort of job creation can rural communities expect from increased investment of the development of telehealth technologies?

Mr. CARR. Thanks so much for the question.

These are some of the things that we want to tee up in this notice of inquiry that is up for a vote. We have seen some great examples of telehealth, remote patient monitoring technologies, and a significantly improved outcome for low-income patients, including in rural America, as I mentioned in my testimony, in the Mississippi Delta.

We have also seen significant cost savings. One program I mentioned in the Mississippi Delta, if just 20 percent of the diabetic population in the Magnolia State enrolled in that type of a program, we would be projected to save about $189 million in terms of the State's Medicaid expenses.

Mr. COSTELLO. Very good. Anyone else to add on that? Yes.

Mr. PAI. I will simply add that I agree with everything Commissioner Carr said. A few months ago, President Kennedy's first FCC chairman, Newt Minow, and I wrote an op-ed, a bipartisan op-ed that emphasized the importance of telemedicine. And Commissioner Carr has expounded these principles very well. And if you look at some of the cases we identified—schools in Scottsville, Kentucky, that for the first time are able to treat students because there is no pediatrician in all of Allen County, Kentucky; if you look at the Veterans Affairs facilities in Lecanto, Florida, and Boise, Idaho, where they are providing veterans mental health consultations and experts around the country—if you look at all of these great things that the FCC is doing in collaboration with the public and private sectors, we could really dramatically improve health outcomes for millions of Americans. And here too I think we are only scratching the surface of its potential.

And that has a direct impact on you as well. Instead of spending a lot of money on an emergency room visit, if we do proactive health treatments for some of these folks, we can save a lot of money for the system but, more importantly, save lives and improve health outcomes.

Mr. COSTELLO. Thank you.

I yield back.

Mrs. BLACKBURN. The gentleman yields back.

Seeing that there are no further—oh, Kinzinger came in. Oh, hi.

Mr. KINZINGER. I bought you guys another 5 minutes. You are welcome.

Thank you.

Mrs. BLACKBURN. There you go. You are recognized.

Mr. KINZINGER. Thank you, Madam Chair.

And thank you all for being here and all your service to the country and what you do. And I really appreciate it.

I recently reintroduced the FCC Transparency Act, which would require the Commission to publish on its website any documents to be considered and voted upon at least 21 days in advance. In reality, it is simply a codification of the most importation aspects of the transparency process currently in place at the FCC.

I realize that most of the Commission has weighed in publicly on my bill. But just to have your opinions as part of the record for this, I want to ask each of you, do you support the current transparency processes in place at the FCC, and by extension, do you support the FCC Transparency Act?

We will start with you, Mr. Chairman.

Mr. PAI. Absolutely, Congressman. Thank you for your leadership.

Mr. O'RIELLY. Yes. I concur. I agree wholeheartedly with your bill.

Mr. CARR. Yes and yes. I think it codifies good government, and it is a step in the right direction.

Ms. ROSENWORCEL. Yes, for items that are placed on our monthly agenda meeting.

Mr. KINZINGER. Thank you.

Commissioner O'Rielly, your actions to roll back the so called kid vid rules is born out of recognition that there is so much choice today in terms of children's programming. Whether it is on a tablet, an Apple TV, a Roku, or traditional broadcast TV service, you argue that the government need not mandate specific programing to any one outlet. And to be clear, I support families and children having access to good educational programing, but I do watch some TV, and I would argue that competition and consumer choice have never been greater, not only for children's programming but for all audiences.

If you don't mind, briefly summarize your assessment of the video marketplace and choices available to consumers.

Mr. O'RIELLY. Well, thank you. I will say I only take issue with your use of the word rollback. We are trying to provide greater flexibility on the kid vid issue. As you highlighted, the marketplace has changed incredibly since 1990 when the statute, the Children's Television Act, was enacted, in 1996, when the rules by the FCC were put in place, and 2004, when they were modified extensively. So the world has changed, and we have a much broader marketplace. It is not just your three broadcast channels on Saturday morning. It is a plethora of cable options, and it is a ton of options for those over the top.

Now there has been concern, what happens for the family that doesn't have any of that except broadcast television? And we have tried to address that in the NPRM and are going to take comments on giving the opportunity and the flexibility for broadcasters to move that signal that they have on a primary channel today to a multicast channel so programming will still be available to those over-the-air-only households. So I would argue it is to provide flexibility without harming children that we are seeking to do hopefully later this year.

Mr. KINZINGER. Thank you.

Also, as a co-chair of the bipartisan Rural Broadband Caucus, my colleagues and I have worked diligently to close the digital divide

between urban and rural. In the 21st century, broadband access is vital for employers, and employees, educators, and students, doctors, and patients and ag. Broadband access also allows people to participate in digital commerce, which provides a convenience to our rural constituents while bolstering both their local economy and the national economy.

I am proud that my provisions and others I supported, including the Rural Spectrum Accessibility Act and the Improving Broadband Access for Veterans Act, were included in the RAY BAUM'S Act and signed into law in March. And I am also proud that my fellow caucus co-chairs and I asked for and received robust resources for rural broadband infrastructure in the fiscal year 2018 omni, to the tune of $600 million in new money.

While broadband and telecom work continues, we are taking big steps toward ensuring rural Americans have the tools that they need to flourish. So, Commissioner O'Rielly, you focused in your testimony on the various funding streams being allocated toward rural broadband. We all want to bridge the digital divide, but I share your concern about the coordination of funding between agencies. We have to ensure that we are not being redundant resources by pouring money into the same areas from different agencies.

Do you have ideas on how these agencies can better coordinate and how best to prevent the government from subsidizing the overbuilding of areas that are currently served?

Mr. O'RIELLY. I do, and I would love to provide technical advice to your team to help. I really appreciate the commendable efforts in terms of the pilot program that was created as part of the consolidated appropriations and efforts that are ongoing in the farm bills today, very beneficial. We want to get to exactly what you highlighted—there is not the duplication, make sure the speeds do not become a mechanism to overbuild—and I think there are ways to draft that and include helpful language. It hasn't been adopted. In past efforts, people have asked for language to be provided; didn't quite get there. And I think there is that opportunity to correct that going forward.

Mr. KINZINGER. In the last 30 seconds, I will just make a point, versus ask a question, which is, on the issue of stingrays or IMSI: There has been a lot of ink lately about the fact that some of these devices have been located around sensitive areas. We made multiple requests to multiple agencies about how do we deal with this issue.

I would like to make the point that, whether it is FCC or other agencies, we will encourage everybody to work together to figure out how to address this situation because I think it is a concern from a national security perspective and something that ought to be addressed.

So, with that, Madam Chair, I thank you. And I yield back the balance of my time.

Mrs. BLACKBURN. The gentleman yields back. And now there are no further members, and we thank you all very much.

Before we conclude, I ask unanimous consent to enter the following documents into the record: A letter from the Credit Union National Association; a letter from the Utilities Technology Coun-

cil; a letter to the FCC on 9-1-1 fee diversion; a U.S. Telecom blog post; a letter to the FCC on TCPA; a letter from Anthem and its affiliated health plans; a GAO report on Lifeline*.

Without objection so ordered and Mr. Doyle.

[The information appears at the conclusion of the hearing.]

Mr. DOYLE. Thank you, Madam Chair.

I would like to make unanimous consent to add to the record the letter from wireless ISPs to the FCC regarding the CBRS band; Chairman Pai's tweet with the CEO of Wave Wireless; an article from Ars Technica regarding a letter and tweet made part of record; NTIA's letter to the FCC regarding copper retirement; and a letter from Senator Wyden to the FCC regarding Securus.

Mrs. BLACKBURN. Without objection so ordered.

[The information appears at the conclusion of the hearing.]

Mrs. BLACKBURN. Pursuant to committee rules, members are reminded that they have 10 business days in which to submit additional questions.

And we remind you that you have 10 business days in which to respond.

Seeing no further business to come before the committee, the committee is adjourned.

[Whereupon, at 3:59 p.m., the subcommittee was adjourned.]

[Material submitted for inclusion in the record follows:]

PREPARED STATEMENT OF HON. SUSAN W. BROOKS

I'd like to thank Chairman Blackburn, Ranking Member Doyle, and all of the FCC Commissioners for being here today. Over the course of this year, this subcommittee has examined several areas that play a large role in the FCC's work to empower broadband and 5G deployment, streamline regulatory approaches, and ultimately reach our shared goal of closing the digital divide.

I've been fortunate to have both Chairman Pai and Commissioner Carr visit my district. Chairman Pai and I visited a PSAP in Noblesville, Indiana, just outside of Indianapolis, last fall and discussed challenges and opportunities around NG9-1-1. I'm proud that Indiana is a leader in public safety communications. We already have text-to-9-1-1 statewide and our PSAPs are very engaged on NG9-1-1 efforts. Chairman Pai and I participated in a roundtable with 9-1-1 telecommunicators, public safety officials, first responders, and local elected officials where we discussed how Indiana can continue to enhance 9-1-1 systems and serve as a model for other states as we work to realize true Next Generation 9-1-1.

Additionally, Commissioner Carr visited this past May and we visited Beck's Hybrids in small rural town in northern Hamilton County called Atlanta, Indiana. Becks' is the largest family-owned retail seed company in the Nation and are doing great work to deploy and pilot 5G in rural Indiana. 5G will start in more urban areas, but it has huge potential to help with rural broadband as well. We learned about how Beck's is collaborating with On-Ramp Indiana, a WISP based out of Noblesville, to bring 5G to rural areas and research exactly how 5G might work to help bridge the digital divide. Beck's built a precision ag management platform called Farm Server and worked with On-Ramp Indiana to build a wireless network from the ground up to power the Farm Server. It was a cool opportunity to see work like this being done! So again, thanks to both of you for coming to Indiana's Fifth District.

I'd also like to thank Commissioner O'Rielly and his staff for working with me and my staff on the introduction of H.R. 5700, the National Non-Emergency Mobile Number Act. A small, but important, provision that moves us one step closer to better interoperability between states with regard to public safety communications. I hope to see this commonsense, bipartisan bill pass into law.

From 5G to NG9-1-1 to rural broadband, at the heart of innovation is the need for sound telecommunications policy. I'd like to thank Chairman Pai and the Com-

*The information has been retained in committee files and can be found at: https://docs.house.gov/meetings/IF/IF16/20180725/108599/HHRG-115-IF16-20180725-SD010-U10.pdf.

mission for the steps you have already taken to modernize the FCC, increase transparency and accountability at the agency, free up spectrum, and all that you do. I look forward to our continued work together.

PREPARED STATEMENT OF HON. ANNA G. ESHOO

Madame Chairwoman, thank you for holding this hearing today, and welcome to the full Commission.

As Commissioner Rosenworcel pointed out in her testimony, it's been 9 months to the day since the FCC last testified before this Committee. A lot can happen in nine months, especially in the critically important and rapidly evolving tech sector.

I want to set the record straight on a few things. It was stated today by the Chairman of the full Committee that it's fiction that the Republican majority has done great harm to the Internet and the consumers who rely on it. Each of us can hold an opinion, but we're not entitled to our own facts.

Here are the facts: the FCC's majority spent the last year gutting communications consumer protections across the board. On December 14, 2017, the Commission voted to upend the net neutrality rules that had been tested in the Court twice. Those rules were supported on a bipartisan basis by the American people and businesses, but they were rescinded by the FCC.

Similarly, in March 2017, a CRA swept through this Committee, authored by Chairwoman Blackburn, and then spread like a prairie fire through the rest of Congress, which removed all privacy protections on the Internet.

The majority has done this harm not only by revoking high-profile policies like net neutrality, but also through quieter actions such as roll-backs of multiple media ownership rules and reducing eligibility for Lifeline beneficiaries at the behest of incumbent corporate interests.

With each rollback of consumer protections, we've seen providers announce more mergers, increased price hikes, and more limited choices. Where choice does exist, consumers must rely on increasingly consolidated incumbent companies. And ultimately, consumers will pay the price.

I believe, as many of my colleagues do, that recent actions by the FCC have prioritized corporations over consumers, undermining the fundamental public interest mission of the FCC.

Congress has oversight jurisdiction of the Federal Communications Commission, pursuant to the Communications Act, which is an Act of Congress. This is an FCC oversight hearing which means that as Members of Congress, we must ensure that the Commission is doing its job—and that job first and foremost is to advance the public interest.

Is Chairman Pai's FCC advancing the public interest of the United States of America? I believe that is the question that should be at the forefront of today's hearing.

Credit Union National Association
CUNA

Jim Nussle
President & CEO

Phone: 202-508-6745
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99 M Street SE
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July 24, 2018

The Honorable Marsha Blackburn
Chairman
Subcommittee on Communications and Technology
Committee on Energy and Commerce
United States House of Representatives
Washington, DC 20515

The Honorable Michael Doyle
Ranking Member
Subcommittee on Communications and Technology
Committee on Energy and Commerce
United States House of Representatives
Washington, DC 20515

Dear Chairman Blackburn and Ranking Member Doyle:

On behalf of America's credit unions, I am writing today to thank you for holding an oversight hearing for the Federal Communications Commission (FCC). The Credit Union National Association (CUNA) represents America's credit unions and their 110 million members.

As the Subcommittee examines the FCC's priorities and functions, we respectfully request you to press upon the Commission the need to revise its implementation of the Telephone Consumer Protection Act (TCPA) and create a robust, comprehensive reassigned numbers database to combat illegal robocalls from bad actors. Credit unions are member-owned, not-for-profit community-based financial institutions. This unique structure provides members a voice in the policy setting and decision-making of their credit union. As a result, communications between a credit union and its members are responsible and focused on providing members with crucial, time-sensitive financial information, such as account balances and fraud alerts. In addition, many credit unions provide important information related to credit union governance and voting issues through these direct communications. Clearly, these communications do not fall into the same class of annoying and invasive telemarketing calls that the TCPA was intended to prevent. However, due to outdated and unclear legal requirements, some credit unions have found themselves the target of frivolous TCPA litigation.

CUNA has consistently pressed upon the Commission the urgent need to modernize its approach to the TCPA. Our efforts included filing a petition in September 2017 outlining how the FCC could provide credit unions with TCPA relief. Specifically, we proposed several approaches the Commission could adopt to provide credit unions with greater ability to communicate with member-owners about information they want and need.

Recently, after a long delay, the D.C. Circuit rendered a decision in a case challenging the legality of the 2015 Omnibus TCPA Declaratory Ruling and Order (Omnibus Order) issued by the FCC. The court ruled that a portion of the Omnibus Order was arbitrary and capricious. This decision freed the Commission to reexamine its TCPA interpretation and find a balanced approach that protects consumers while still permitting them to receive timely informational communications from credit unions and other institutions critical to their daily lives.

In response to a recent request for information (RFI) soliciting feedback on the TCPA, we requested the Commission take following actions:

- Revise its reassigned number framework by defining the "called party" as the "intended recipient;"
- Identify reasonable methods to revoke consent;
- Grant the petition filed by the U.S. Chamber Institute for Legal Reform and clarify the definition of an "automatic telephone dialing system;" and
- Grant our petition and eliminate antiquated distinctions between cell phone and landline informational calls.

The Commission adopting these suggestions, among others we have previously provided, would go a long way towards aligning the FCC's interpretation with the intent of Congress. In addition, we strongly support the creation of a single, centralized and comprehensive reassigned numbers database. Such a database, so long as its affordable, easy-to-use, and includes a safe harbor, would provide material relief to credit unions by limiting TCPA liability.

We look forward to continuing our work with both the FCC and Congress to provide additional recommendations on modernizing the TCPA. On behalf of America's credit unions and their 110 million members, thank you for your consideration.

Sincerely,

Jim Nussle
President & CEO

Utilities Technology Council™

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July 25, 2018

The Honorable Marsha Blackburn
Chairman, House Energy and
Commerce Committee Subcommittee on
Communications and Technology

The Honorable Michael Doyle
Ranking Member, House Energy and
Commerce Committee Subcommittee on
Communications and Technology

Re: July 25 Subcommittee on Communications and Technology Oversight Hearing of the Federal Communications Commission

The Utilities Technology Council (UTC) appreciates the opportunity to submit this Statement for the Record in the Subcommittee on Communications and Technology's Oversight Hearing of the Federal Communications Commission (FCC). UTC was established in 1948 and is now the global association representing energy and water utilities in their need for reliable and resilient Information and Communications Technology (ICT). Our members own and operate the infrastructure which, for more than 100 years, has delivered the energy and water services necessary to power our nation's economy and wellbeing. Nearly every level of government considers the energy and water industries as the most critical of all critical industries.

This infrastructure includes transmission towers, power lines, utility poles, and pipelines that Americans see every single day and often take for granted. What most Americans do not see are the ICT networks that underpin this massive infrastructure. These networks are essential for the day-to-day delivery of energy and water services, storm restoration, cyber and physical security, infrastructure modernization, smart cities, smart grid development, and much more.

Spectrum

The key ingredient to maintaining these ICT networks is radio frequency spectrum. Energy and water providers hold spectrum in various bands to operate mission-critical functions like Supervisory Control and Data Acquisition (SCADA) systems used to manage industrial control systems such as electric grids, protective relaying, and smart grid applications. Additionally, utility workers use mobile radio devices to communicate when repairing lines or restoring service after an outage. The inability of utility personnel to communicate in the field could have catastrophic consequences for utility employees and public safety.

The Federal Communications Commission (FCC, the Commission) is responsible for allocating commercial spectrum. Energy and water providers understand that spectrum is a finite resource, and the FCC has the task of allocating and expanding access to spectrum in ways that promote wireless deployment, but do not harm incumbent existing spectrum license holders. Given the criticality of energy and water providers to our nation's wellbeing, spectrum policies implemented by the FCC should reflect this reality. Unfortunately, historically this has not been the case.

FCC Policies

We encourage members of this Subcommittee to focus on the FCC's spectrum policies as they relate to the energy and water industries. Representative Brett Guthrie (R-KY) raised these concerns in his Questions for the Record directed to members of the FCC after this Subcommittee's October 25, 2017, oversight hearing. Rep. Guthrie recognized the criticality of electric utilities and asked FCC

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Commissioners whether they are willing to work with utility officials on ways to harden their networks. We applaud Rep. Guthrie for raising this question and encourage this Subcommittee to follow up on the responses he received. The FCC has several proceedings dealing with spectrum access, most notably in the 4.9 GHz and 6 GHz bands. We applaud the ongoing FCC inquiry into expanding access to the 4.9 GHz band to utilities and other Critical Infrastructure Industries (CII). Currently, this band is reserved for public safety, though it is lightly used. The National Public Safety Telecommunications Council (NPSTC), a coalition of public-safety entities, has proposed a plan to allow utilities and other CII to share in the 4.9 band, and we believe the time has come for this plan to become reality.

The 4.9 GHz band presents a unique opportunity for efficient spectrum usage. The nation's appetite for spectrum is only growing with the proliferation of wireless devices, yet as utilities modernize their systems and make them more resilient and nimble, their need for interference-free spectrum is growing as well. Expanding access to the 4.9 GHz band is one—but only one—avenue to partially meeting utility needs.

Separately, we are aware that the Commission plans on pursuing a rulemaking process to consider expanding the 6 GHz band. Utilities are among the many critical industries with lifeline communications systems located in the 6 GHz, which, unlike the 4.9 GHz band, is already widely used. Allowing commercial wireless users into this band could threaten the reliability of incumbent systems, likely forcing many utilities in the band to relocate—at great cost—because they cannot tolerate interference. The FCC hinted at these actions when its bureaus in early 2017 granted startup firm Higher Ground, LLC, permission to operate mobile devices in the band, disregarding the overwhelming evidence in the record that doing so could cause interference to the crucial incumbent ICT networks. Still, we are hopeful that a full rulemaking process will provide ample evidence demonstrating that access to the 6 GHz band should not be expanded.

Joint FCC-FERC Meetings
We also encourage members of this Subcommittee to consider the merits of directing the FCC to hold regular meetings with the Federal Energy Regulatory Commission, which oversees the reliability of the bulk electric power system. Joint meetings between these agencies will help build understanding surrounding the criticality of electric utilities to our nation's security, economy, and wellbeing. The energy and telecommunications industries are becoming more reliant upon each other, as telecommunications services cannot function without electricity, the reliable delivery of which is aided by wireless technologies.

Going Forward
The energy and water sectors are in the midst of profound change. New technologies could transform the relationship between customers and their electricity, gas, and water providers. Spectrum, which is already essential for day-to-day reliability, is critical to the success of grid modernization as well. The Utilities Technology Council stands ready to work with members of this Subcommittee, full Committee, full House, and any interested stakeholders going forward to help ensure the future of reliable electric, gas, and water services.

We appreciate the opportunity to submit this statement.

GREG WALDEN, OREGON
CHAIRMAN

FRANK PALLONE, JR., NEW JERSEY
RANKING MEMBER

ONE HUNDRED FIFTEENTH CONGRESS

Congress of the United States

House of Representatives

COMMITTEE ON ENERGY AND COMMERCE

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July 23, 2018

The Honorable Ajit Pai
Chairman
Federal Communications Commission
445 12th Street, S.W.
Washington, DC 20554

Dear Chairman Pai:

Pursuant to Rules X and XI of the U.S. House of Representatives, the Committee on Energy and Commerce is examining the diversion of 9-1-1 fees by some states and territories. According to annual reports submitted to Congress by the Federal Communications Commission (FCC), some states divert 9-1-1 fees for unrelated purposes, raising questions about how this practice impacts public safety.[1]

The New and Emerging Technologies 9-1-1 Improvement Act of 2008 (NET 911 Act) requires the FCC to submit annual reports to Congress detailing the collection and distribution of 9-1-1 fees by state.[2] Each state imposes a surcharge on cell phone bills to fund implementation of wireless Enhanced 911 (E911) and reports to the FCC how these funds are spent.[3] Since 2009, 21 states and one territory have reported diverting 9-1-1 funds for other purposes.[4] Moreover, ten states, six territories, and the District of Columbia failed to report expenditure information at least once, raising concerns that 9-1-1 fee diversion may be more prevalent than the FCC's reports indicate.[5] Currently, States are not required to report information about 9-1-1 expenses to the FCC, including how much money, if any, is diverted.

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[1] *See* Federal Communications Commission Report, *Ninth Annual Report to Congress, On State Collection and Distribution of 911 and Enhanced 911 Fees and Charges*, Dec. 29, 2017, *available at* https://www.fcc.gov/files/9thannual911feereportpdf.
[2] *Id.*
[3] *Id.*
[4] *See* Remarks by Hon. Michel O'Rielly, FCC Commissioner, Rhode Island E911 Summit, Mar. 19, 2018, *available at* https://apps.fcc.gov/edocs_public/attachmatch/DOC-349797A1.pdf.
[5] *Id.*

Since 2009, over $1 billion dollars of 9-1-1 funds have been diverted by states and territories for purposes other than 9-1-1.[6] During 2016, five states diverted almost $130 million dollars for other purposes, while seven states and territories failed to submit information about 9-1-1 expenses to the FCC.[7] Similarly, in 2015, eight reporting states and one territory diverted over $220 million dollars in 911 fees, while one state and two territories failed to report any information.[8] In the last two reporting periods alone, at least $350 million dollars collected for 9-1-1 has been used for other purposes.[9] A recent update provided by FCC Commissioner Michael O'Rielly shows efforts to end 9-1-1 fee diversion have had "mixed results" and there is still significant work to be done.[10] However, some progress has been made, including two states correcting filing errors from the last reporting period showing they are not diverters and other states committing to end the practice of diverting.[11]

The amount of 9-1-1 funds that have been diverted for nearly a decade is troubling. When critical moments occur, all Americans rely on 9-1-1 to provide emergency services. Diverting 9-1-1 fees may result in understaffed calling centers, training issues, longer wait times during an emergency, and inhibit the transition to Next Generation 9-1-1 systems so 9-1-1 call centers can flourish with digital age technologies to pinpoint the location of mobile device user.[12] In order to learn more about 9-1-1 fee diversion, including how it impacts public safety and what may be done to curtail this practice in the future, we request that FCC staff provide Committee staff with a briefing on the matter. Please make arrangements to schedule this briefing no later than July 30, 2018.

Your assistance is greatly appreciated. If you have any questions, please contact Lamar Echols of the Committee Staff at 202-225-2927. Thank you for your attention to this matter.

Sincerely,

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[6] *See* Letter from Hon. John Shimkus, Member of Congress, to Hon. David Redl, Asst. Sectary for Communications and Information and NTIA Admin., NTIA, Dec. 15, 2017, *available at* https://www.documentcloud.org/documents/4334659-NTIA-Letter.html.

[7] FCC *supra* note 1.

[8] *See* Federal Communications Commission Report, *Eighth Annual Report to Congress, On State Collection and Distribution of 911 and Enhanced 911 Fees and Charges*, Dec. 30, 2016, *available at* https://www.fcc.gov/files/eighthannual911feereport1217pdf.

[9] *Id*; *see also supra* note 1.

[10] Hon. Michael O'Rielly, Commissioner, FCC, *Status Update: Fixing 9-1-1 Fee Diversion*, FCC BLOG, Jun. 8, 2018, *available at* https://www.fcc.gov/news-events/blog/2018/06/08/status-update-fixing-9-1-1-fee-diversion.

[11] *Id.*

[12] *See* Hon. Michael O'Rielly & Jessica Rosenworcel, *States Are Stealing Funds from 9-1-1 Emergency Services—Now They'll Be Punished*, THE HILL, Feb. 9, 2018, *available at* http://thehill.com/opinion/technology/373043-states-are-stealing-funds-from-9-1-1-emergency-services-now-theyll-be.

Greg Walden
Chairman

Gregg Harper
Chairman
Subcommittee on Oversight
and Investigations

Marsha Blackburn
Chairman
Subcommittee on Communications
and Technology

cc: The Honorable Frank J. Pallone, Jr., Ranking Member
Committee on Energy and Commerce

The Honorable Diana DeGette, Ranking Member
Subcommittee on Oversight and Investigations

The Honorable Michael Doyle, Ranking Member
Subcommittee on Communications and Technology

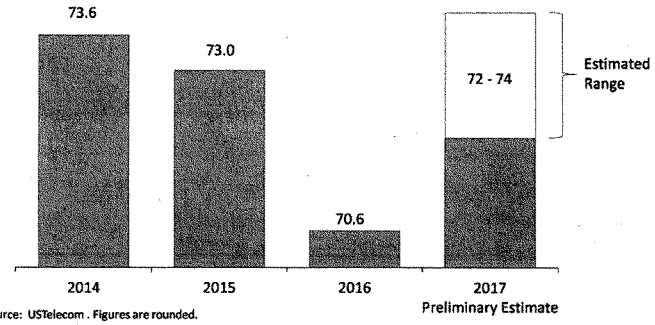
USTELECOM
THE BROADBAND ASSOCIATION

Broadband CapEx Investment Looking Up in 2017
By Jonathan Spalter
July 25, 2018

As pro-consumer policy incentives for broadband innovation and investment continue to take root, the two-year decline in private capital investment in U.S. broadband infrastructure from 2014 to 2016 appears to be in the rearview mirror, according to a preliminary USTelecom analysis of the 2017 capital expenditures of wireline, wireless, and cable broadband service providers[1].

U.S. broadband companies, excluding independent competitive local providers and fiber operators[2], have invested between $72 and $74 billion in network infrastructure in 2017, compared to $70.6 billion in 2016, showing at least an increase of nearly $1.5 billion.

U.S. Non-CLEC Broadband Provider Capital Expenditures, 2014-2017
($ billions)



Source: USTelecom . Figures are rounded.

[1] USTelecom will publish final numbers once it can account for non-reporting companies, including independent competitive local providers and fiber operators, and fine-tune eliminations for certain capex that is not included in the historical series.
[2] USTelecom excluded independent competitive local providers and fiber providers because we have not finalized data for non-reporting private companies. The companies included here represent the vast majority of U.S. broadband capex.

Many factors affect these figures—from the overall health of the economy to intense and rising competition, not only among broadband providers but across the internet with the ongoing convergence of entertainment, media and communications.

But as someone who closely watches and works with the companies that are among the leading investors in our nation's economy, it is essential that we give substantial credit where it is clearly due—restoring U.S. innovation policy to the constructive, nimble and pro-consumer framework that has guided the meteoric rise of our economy since the early days of the internet.

It is no coincidence that the broadband capex slow down coincided with the previous FCC—in its final two years—abruptly shifting course down a sharply more regulatory path headlined by the controversial attempt to subject consumer broadband services to heavy, archaic regulations written nearly a century ago.

Equally true, this capex recovery in 2017 coincides with the current FCC leadership's emphasis on consistent, modern policies that seek to create a more level playing field across the internet ecosystem—ensuring company investments will be treated fairly AND consumers will be protected consistently wherever they go online.

Among the key recent and restorative steps:

- Recognition that the world and technologies have changed and many outdated rules undercut rather than advance the public interest in pro-investment policies.
- Encouraging signals that the federal government aims to be a strong partner in connecting high-cost rural areas, most recently evidenced by this week's launch of the CAF II auction.
- Net neutrality principles without onerous utility regulation—and an insistence that these principles be applied consistently for consumers across the internet and not solely on ISPs.

Of course, the future investment landscape is far from guaranteed. For example, California appears poised to turn back the clock and reinstate heavy, backward looking, internet regulations, jeopardizing the state's status as the crown jewel of the global innovation economy.

But a return to sound federal policy—for rural America, for consumers, for head-to-head competition on a level playing field—is helping revive investment in ever stronger, faster and more innovative networks that continue to bring progress and opportunity home for communities across our nation.

If the recent broadband capex roller coaster teaches us anything, it's that markets, along with consumers and innovators, resist uncertainty and inconsistency. This dip and apparent recovery should be a powerful reminder that not only do policymakers have to get it right—they have to KEEP getting it right—and consistently pull in a constructive direction that benefits us all.

Today, a preliminary look at the data suggests the investment tide may have turned. Now, it's up to all of us to work together to keep it going the right direction.

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SUBCOMMITTEE ON
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VICE CHAIR
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DIGITAL COMMERCE AND CONSUMER PROTECTION

Congress of the United States
House of Representatives

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CONGRESSIONAL HEARING HEALTH CAUCUS
CO-CHAIR
CONGRESSIONAL PENSION PROTECTION CAUCUS

July 10, 2018

The Honorable Ajit Pai
Chairman
Federal Communications Commission
445 12th Street NW
Washington, DC 20554

Dear Chairman Pai:

The Federal Communications Commission's (FCC) recent efforts to update the Telephone Consumer Protection Act (TCPA) and create a safer and more workable environment for communicating with consumers should be commended.

While the FCC is at the forefront of many critical communication issues, its past interpretations of the Telephone Consumer Protection Act (TCPA) have resulted in confusion regarding what is required. This has made it more difficult for consumers to receive the communications they want and need, and for legitimate businesses to understand compliance standards.

In addition, there is legal uncertainty surrounding how consumers can obtain important information. This leads to increasing class action litigation that often does little to help consumers. The FCC must make it more workable for legitimate businesses to stay in communication with consumers in a timely and effective manner, while continuing to fight to eliminate illegal and fraudulent calls and texts to cell phones.

We appreciate the steps the FCC has taken to limit abusive and illegal robocalls, and applaud the enforcement of action taken to end these instances of consumer mistreatment. It is imperative that the FCC continues to develop a modern TCPA framework that provides protection to consumers from bad actors, but allows legitimate business to communicate effectively with their customers. To that end, I request that you please update me on the steps you are taking to establish better protections for consumers and clarify and modernize the rules under TCPA.

Thank you for your attention to this matter. If you have any questions or concerns, please contact my Legislative Assistant, Sydney Pettit, by email at Sydney.Pettit@mail.house.gov or by telephone at (202)-225-4172. I look forward to hearing from you.

Sincerely,

David B. McKinley, P.E.
Member of Congress

PRINTED ON RECYCLED PAPER

July 25, 2018

The Honorable Marsha Blackburn
Chairwoman
Communications and Technology
Subcommittee
2125 Rayburn House Office Building
Washington, DC 20515

The Honorable Mike Doyle
Ranking Member
Communications and Technology
Subcommittee
2125 Rayburn House Office Building
Washington, DC 20515

Dear Chairwoman Blackburn and Ranking Member Doyle:

Thank you for holding a Federal Communications Commission ("FCC") Oversight Hearing on Wednesday, July 25th and for the opportunity to submit this letter for the record on behalf of Anthem, Inc. and its affiliated health plans, Blue Cross Blue Shield Association, WellCare Health Plans, Inc., and the American Association of Healthcare Administrative Management (collectively, the "Healthcare Petitioners").

We respectfully request your assistance with urging the FCC to act quickly and favorably to clarify its earlier guidance addressing whether patients may receive health care related communications in accordance with the Telephone Consumer Protection Act ("TCPA"). In particular, we ask you to encourage the FCC to grant without further delay the pending Petition for Expedited Declaratory Ruling and/or Clarification ("Joint Petition") filed twenty-three months ago by the Healthcare Petitioners.[1] The Joint Petition asks the FCC to clarify certain aspects of the FCC's *2015 Declaratory Order*[2] and to confirm the FCC's longstanding policy of harmonizing its interpretations of the TCPA with the regulation of the use of telephone numbers under the Health Insurance Portability and Accountability Act ("HIPAA").

The *2015 Declaratory Order* provided, in relevant part, that the "provision of a phone number to a *healthcare provider* constitutes prior express consent for *healthcare calls* subject to HIPAA by a HIPAA-covered entity and business associates acting on its behalf."[3] The Healthcare Petitioners have sought clarification of two related aspects of the *2015 Declaratory Order*: (1) *who* may receive the number; and (2) *what* the call must be about. Regarding the "who" question, the Healthcare Petitioners asked the FCC to clarify that the provision of a phone number to a HIPAA "covered entity" or "business associate," whether by an individual, another covered entity, or a party engaged in an interaction subject to HIPAA, constitutes prior express consent calls to the HIPAA-covered entity and business associates acting on its behalf. A critical limitation is that covered entities and business associates must make calls within the scope of the

[1] *See* Joint Petition of Anthem, Inc., Blue Cross Blue Shield Association, WellCare Health Plans, Inc., and the American Association of Healthcare Administrative Management for Expedited Declaratory Ruling and/or Clarification of the 2015 TCPA Omnibus Declaratory Ruling and Order, CG Docket No. 02-278 (filed July 28, 2016) ("Joint Petition").

[2] *Rules and Regulations Implementing the Telephone Consumer Protection Act of 1991 et al.*, Declaratory Ruling and Order, 30 FCC Rcd 7961 (2015) ("*2015 Declaratory Order*").

[3] *Id.* ¶ 141 (emphasis added).

consent given, and absent instructions to the contrary. Regarding the "what" question, the Healthcare Petitioners asked the FCC to clarify that a HIPAA-regulated entity may place "treatment, payment, and operations" calls otherwise allowed under HIPAA. In short, the Joint Petition requested narrow clarifications to bring the FCC's TCPA rules for healthcare-related calls more in line with patient expectations and HIPAA.

The Joint Petition has received strong, bipartisan support in the FCC record and among members of Congress. On October 13, 2017, a bipartisan group of members of the House of Representatives led by Representatives Bilirakis and Cardenas sent a letter asking Chairman Pai to act promptly to "afford clarity to covered entities and business associates making non-marketing communications that benefit patients."[4] As this bipartisan coalition observed, "helpful, important non-marketing communications can be critical safeguards to reaching underserved populations and supporting more effective, efficient health care."[5] Senators Booker and Nelson also sent a bipartisan letter to Chairman Pai on November 3, 2017 noting that calls and text messages subject to the Joint Petition convey "important medical and treatment information" and "improve patient outcomes"[6] They also stated that "time is of the essence to ensure that consumers' access to health care is not jeopardized" and asked the FCC to "resolve these issues as soon as possible (preferably within the next 90 days) and to protect communications allowed under HIPAA in light of their unique value to consumers and their positive impact on Americans' health and well-being."[7] Further, in September of 2016, WellCare was invited to testify before the Energy and Commerce Committee and received strong bipartisan support for its position supporting these reasonable and measured changes that would have a positive impact on their beneficiaries health outcomes by allowing the company to communicate in the most effective and efficient manner possible.

The breadth and depth of support for the Joint Petition is hardly surprising. The communications at stake include onboarding, wellness, informational, and follow-up and calls and texts that, for example: (i) explain coverage and how to get needed care, including providing updates about benefits and/or network changes; (ii) perform health screenings and identify at-risk members; (iii) facilitate selection of primary care provider and schedule appointments; (iv) remind members to get preventive care, such as shots and help ensure medication adherence; (v) notify patients of changes in enrollment or disruptions in coverage due to non-payment and remind members about renewing their benefits; and (vi) solicit member feedback on healthcare quality and other issues and ensure satisfaction.

Patients need and expect these and other non-marketing treatment, payment, and operations calls and texts, irrespective of which party in the HIPAA ecosystem—physicians, health plans, clearinghouses, or business associates—places the communication or initially obtains the patient's telephone number. Nevertheless, the FCC has not yet issued a decision on the Joint Petition. In the meantime, the threat of abusive class-wide litigation has chilled

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[4] *See* Letter from Rep. Gus Bilirakis, *et al.* to FCC Chairman Ajit Pai, at 1 (Oct. 13, 2017).

[5] *Id.* at 2.

[6] *See* Letter from Sens. Corey Booker and Bill Nelson to FCC Chairman Ajit Pai, at 1 (Nov. 3, 2017).

[7] *Id.*

HIPAA-regulated entities from placing non-marketing calls about treatment, payment, or operations that patients want and expect.

Given the fact that the D.C. Circuit's decision was now released several months ago, we ask you to urge the FCC to grant the Joint Petition without delay. Thank you very much for your consideration of this request, and we are available to answer any questions that you or your staff may have about this important issue.

Respectfully submitted,

/s/ Adam Goldberg
Adam Goldberg
Director, Congressional Affairs
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On Behalf of Anthem, Inc.

/s/ Paul Miller
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On behalf of the American Association of Healthcare Administrative Management

/s/ Justine Handelman
Justine Handelman
Senior Vice President, Office of Policy and Representation
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/s/ Michelle Turano
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michelle.turano@wellcare.com
On behalf of WellCare Health Plans, Inc.

July 23, 2018

FILED VIA ECFS

Marlene H. Dortch, Secretary
Federal Communications Commission
445 12th Street, S.W., Room TW-B204
Washington, D.C. 20554

Re: Citizens Broadband Radio Service
Ex Parte Notification
GN Docket No. 17-258

Dear Ms. Dortch:

We are 182 fixed wireless broadband providers. We serve hard-to-reach places that no one else will: remote farms, schools, libraries, healthcare institutions, and other businesses that but for us would have no broadband or no broadband competition. But we are running out of the critical infrastructure we need to serve rural America: spectrum.

For decades, we have served rural families and businesses using unlicensed spectrum. But that spectrum is becoming more crowded with each passing day. We have potential customers within range of our towers that we cannot serve because we do not have access to adequate spectrum to do so.

But the FCC can help. Continued access to Citizens Broadband Radio Service ("CBRS") spectrum is vital to our ability to continue serving rural America. And we write to urge the FCC to ensure that census tracts remain available as bidding units for Priority Access Licenses ("PALs") in the CBRS band. We ask you to reject options that take census tracts off the table and propel rural broadband access backwards instead of forwards. Without census-tract-sized licenses, we will have virtually no ability to acquire protected spectrum in this band. That would be an intolerable outcome that would harm our rural broadband businesses and inhibit our ability to grow, but worse it would harm the millions of consumers for whom mid-band spectrum is the key to high-speed fixed broadband access.

Over the last year, many of us have spoken and written to the FCC to explain why census tract licenses in the CBRS band are critical to rural economic development and our ability to provide broadband to more rural consumers. We've provided maps showing that auctioning larger areas will effectively shut us out of the auction. We've explained that we've already invested in the CBRS band under the current rules by deploying software-defined radios in the 3650-3700 MHz band that can be easily upgraded to operate in the entire 3550-3700 MHz band, reaching more rural consumers within months. And we've explained how we've curtailed our investments based on the threat that we may not be able to bid for census tract PALs. While our businesses and networks are diverse and independent, we are united that census tracts are the only way that we can participate in the CBRS band auction.

We recognize the national priority of promoting 5G wireless technology. But 5G is not for mobile wireless only. We, too, want to deploy 5G to connect more devices and support precision

agriculture and other industrial and enterprise solutions. "Winning the race to 5G" does *not* mean we need to let the most powerful companies in the mobile wireless industry define the rules of the road.

Our economy depends on small businesses like ours, and we are poised to invest – if the FCC gets the rules right.

We reluctantly acknowledge that the rules are likely to be changed, that we will no longer have access to seven census tract PALs. But there is no reason why, out of those seven PALs, that the FCC cannot retain at least two census tract PALs in rural areas to facilitate broadband deployment in the areas where we live and work. We urge the FCC, in the strongest possible terms, to preserve our ability, and the ability of other stakeholders, to bid on census tract PALs in rural areas.

Respectfully submitted,

Galen Manners
President
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Parsons, KS

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Ethoplex
Milwaukee, WI

Chuck Hogg
President
Shelby Broadband
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CEO
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LLP
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AJ Becker
President
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Ajit Pai
@AjitPaiFCC

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Terrific meeting Galen Manners of fixed wireless ISP Wave Wireless! Wave's connecting Parsons (including my parents) & smaller towns nearby.



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@AjitPaiFCC Plenty of time for photo ops, but no time to answer FOIA requests. #VerizonShill #Corrupt

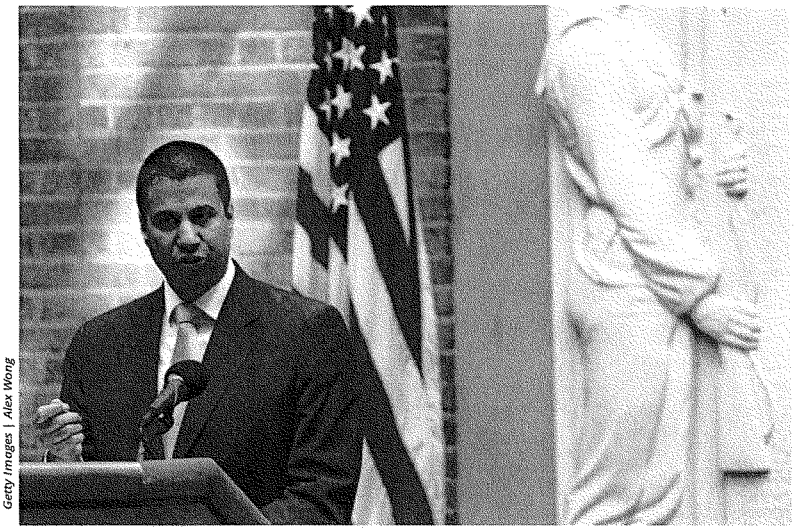
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A PLEA FROM HOME —

Ajit Pai gets message from his hometown ISP: Don't hurt us small ISPs

Pai's spectrum auction plan could make it hard for small ISPs to buy licenses.

JON BRODKIN - 7/24/2018, 2:06 PM



Getty Images | Alex Wong

Enlarge / FCC Chairman Ajit Pai speaks about improving rural connectivity during an Agriculture Department forum on April 18, 2018 in Washington, DC.

A broadband provider from FCC Chairman Ajit Pai's hometown says one of his latest plans could prevent it from purchasing spectrum needed to bolster its network.

Wave Wireless is a locally owned and operated home Internet provider in Parsons, Kansas, where Pai grew up. Last year, Pai met with Wave's owner and wrote in a tweet that Wave is "connecting Parsons (including my parents) & smaller towns nearby."



Ajit Pai
@AjitPaiFCC

Terrific meeting Galen Manners of fixed wireless ISP Wave Wireless! Wave's connecting Parsons (including my parents) & smaller towns nearby.
6:10 PM - Sep 21, 2017

31 See Ajit Pai's other Tweets

Pai heard from his hometown ISP again yesterday when Wave and 181 other fixed wireless broadband providers wrote a letter opposing an FCC plan that could limit the small ISPs' access to wireless spectrum.

ARS TRENDING VIDEO

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"Our economy depends on small businesses like ours, and we are poised to invest—if the FCC gets the rules right," Wave Wireless owner Galen Manners and the other providers wrote.

Pai's primary focus as FCC chairman has been removing or changing regulations in order to encourage ISPs to invest in their networks. But the small providers say that his proposal for a spectrum auction

could make it harder for them to invest, while helping much larger carriers.

The rule changes in question relate to spectrum in the 3.5GHz band that will be auctioned off by the FCC. The Obama-era FCC in 2015 established "a new Citizens Broadband Radio Service (CBRS) for shared wireless broadband" in this band. Crucially, the FCC under then-Chairman Tom Wheeler decided to let operators buy three-year Priority Access Licenses (PALs) in individual census tracts, small areas with between 1,200 and 8,000 people each. Each PAL authorizes a provider to use a 10MHz channel in a single license area.

Allowing ISPs to buy spectrum in small areas would help the smallest broadband providers compete for spectrum against big companies. But the auction hasn't happened yet, giving Pai's FCC time to change the rules.

T-Mobile and other companies asked the FCC to change the licensing areas from census tracts to Partial Economic Areas (PEAs), which are much larger. Pai's proposal from October 2017, which the FCC sought public comment on, could grant T-Mobile's request or change the size of the license areas in some other way.

New license areas could be gigantic

While there are 74,000 census tracts in the US, there are just 416 PEAs. The largest PEA includes more than 25 million people in the New York area; nationwide, there are 62 PEAs with at least 1 million people each and more than 300 with at least 100,000 people each.

Small providers likely wouldn't be able to obtain 3.5GHz spectrum if they have to bid for licenses covering such large areas. Wave Wireless, for example, was created "in 2000 as a response to a need for faster than dial-up Internet for rural citizens of Labette County," the ISP says on its website. "From our first transmitter site, to now 22 and counting, we continue to expand and improve in response to customer needs." (We contacted Wave today and will update this story if we hear back from the company.)

In their letter to the FCC yesterday, Wave Wireless and the other small providers wrote:

> Continued access to Citizens Broadband Radio Service ("CBRS") spectrum is vital to our ability to continue serving rural America. And we write to urge the FCC to ensure that census tracts remain available as bidding units for Priority Access Licenses ("PALs") in the CBRS band. We ask you to reject options that take census tracts off the table and propel rural broadband access backwards instead of forwards. Without census tract-sized licenses, we will have
>
> virtually no ability to acquire protected spectrum in this band. That would be an intolerable outcome that would harm our rural broadband businesses and inhibit our ability to grow, but worse it would harm the millions of consumers for whom mid-band spectrum is the key to high-speed fixed broadband access.

The providers have been pushing the FCC to maintain availability of census tract licenses for the most

The providers have been pushing the FCC to maintain availability of census tract licenses for the past year, and the group gave the commission evidence that increasing the size of license areas would shut them out of the auction. Their new letter to the FCC continued:

> Over the last year, many of us have spoken and written to the FCC to explain why census tract licenses in the CBRS band are critical to rural economic development and our ability to provide broadband to more rural consumers. We've provided maps showing that auctioning larger areas will effectively shut us out of the auction. We've explained that we've already invested in the CBRS band under the current rules by deploying software-defined radios in the 3650-3700 MHz band that can be easily upgraded to operate in the entire 3550-3700 MHz band, reaching more rural consumers within months. And we've explained how we've curtailed our investments based on the threat that we may not be able to bid for census tract PALs. While our businesses and networks are diverse and independent, we are united that census tracts are the only way that we can participate in the CBRS band auction.

The FCC's 2015 decision made up to seven PALs (the priority licenses) available in each census tract, and it let one provider obtain up to four in each tract. The 182 small providers seem resigned to the likelihood that Pai's FCC won't allow seven licenses in each tract, but they urged the FCC to let them bid on at least a couple of licenses in each tract.

"We reluctantly acknowledge that the rules are likely to be changed, that we will no longer have access to seven census tract PALs," the 182 providers wrote. "But there is no reason why, out of those seven PALs, that the FCC cannot retain at least two census tract PALs in rural areas to facilitate broadband deployment in the areas where we live and work. We urge the FCC, in the strongest possible terms, to preserve our ability, and the ability of other stakeholders, to bid on census tract PALs in rural areas."

"The rules are working"

Pai's Notice of Proposed Rulemaking (NPRM) doesn't endorse any specific license area size, instead asking the public for input on a variety of possibilities. But it's clear that Pai's Republican majority wants to change the Obama-era rules that were designed to help small ISPs obtain spectrum.

Mignon Clyburn, a Democrat who was on the commission when Pai's NPRM was approved in October, tried to stop the NPRM from being issued at all. Pai's original version of the NPRM included a more definitive proposal to increase the size of the license areas, but Clyburn said at the time that she negotiated with FCC Republicans to change the NPRM so that it would merely seek comment on the idea and seek comment on other possibilities.

FCC Republican Michael O'Rielly said he supports "increasing the market sizes from census tracts, which will reduce auction complexity, administrative burdens, and interference concerns. But I recognize that there are many different views, so I look forward to hearing from all interested parties on this issue."

Clyburn said the characteristics of census tract-sized license areas make them "affordable for small

Clyburn said the characteristics of census tract-sized license areas make them "affordable for small school systems and rural hospitals, located in underserved areas that are desperate for cost-effective broadband services." Besides the small size, the FCC's 2015 decision set the license terms at three years instead of the usual ten years. Clyburn said the shorter license terms would help encourage small entities to bid, but Pai is proposing to raise the term to ten years.

Small providers have already started investing with the expectation that the FCC's 2015 decision wouldn't be changed, Clyburn also said in October:

> The overwhelming evidence demonstrates that those rules are working. Wireless Internet service providers (or "WISPs") that tend to serve rural areas, equipment manufacturers, tech companies, and heavy industries, have raced to invest millions of dollars to unlock the potential of mid-band spectrum in the Citizens Broadband Radio Service band. To-date, fifty-five entities—including chipmakers, mobile carriers, cable companies, equipment manufacturers and more—have joined the Citizens Broadband Radio Service or CBRS Alliance. Forty-seven companies participating in the Wireless Innovation Forum, have spent tens of thousands of hours developing technical standards to implement CBRS. At least a dozen firms have obtained experimental authorizations to trial equipment and technology in the band. They are developing private networks to support an open architecture operating system for the Industrial Internet as well as smart grid, rural broadband, small cell back haul, and other point-to-multipoint networks.

It's not clear when the FCC will issue a final decision, but large carriers are still pushing for an increase in the size of license areas."[C]ensus tract licensing will hinder the development of the 3.5GHz band and impede US companies as they compete in the global race to 5G," wireless industry lobby group CTIA wrote. CTIA represents T-Mobile, Verizon Wireless, AT&T, and Sprint.

NTCA, a lobby group for rural broadband providers, said it backs a potential compromise that would auction licenses in "a combination of counties and census tracts."

Rural ISPs should have "a reasonable opportunity to obtain spectrum and to promote more effective use of spectrum for actual service delivery in rural areas," the group told the FCC.

Promoted Comments

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Well. If you can't afford to purchase regulation, you can't afford to invest in your business.

:|

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UNITED STATES DEPARTMENT OF COMMERCE
The Assistant Secretary for Communications and Information
Washington, D.C. 20230

July 18, 2018

The Honorable Ajit Pai
Chairman
Federal Communications Commission
445 12th Street, Southwest
Washington, DC 20554

Re. Accelerating Wireline Broadband Deployment, WC Docket No. 17-84

Dear Chairman Pai:

The National Telecommunications and Information Administration (NTIA), as the President's principal adviser on telecommunications and information policy, applauds the Commission's continuing actions to accelerate the ongoing modernization of the Nation's communications infrastructure, by promoting the transition from legacy networks and services to next-generation networks and services (the so-called IP transition). NTIA has consistently supported network modernization because it will both significantly reduce carriers' operating and maintenance costs and enable carriers to expand and enhance the services they can offer subscribers.[1] NTIA remains concerned, however, that streamlined regulatory requirements may place federal departments and agencies that rely on services subject to discontinuance in the untenable position of losing access to critical national security and public safety communications functionality.

As an initial matter, NTIA continues to believe that, in most instances, the transition from legacy to next-generation networks and services will be seamless for residential and business customers.[2] Accordingly, lowering regulatory hurdles for grandfathering and discontinuance applications generally will allow the Nation to reap the benefits of a more capacious, reliable, and flexible communications infrastructure more quickly, without significant customer disruptions. For that reason, we support the Commission's decision to extend the streamlined processing rules it adopted last November for legacy voice and data services operating at speeds less than 1.544 Mbps to carrier applications to discontinue data services at speeds below 25/3 Mbps.[3] Further, NTIA welcomes the Commission's decision to retain the "adequate replacement

[1] *See* Ex Parte Comments of the National Telecommunications and Information Administration in WC Dkt. No. 17-84, at 2 (filed Oct. 27, 2017) (*NTIA Comments*), *available at* https://ecfsapi.fcc.gov/file/10277834225O1/NTIA%20Ex%20Parte%20Comments%20in%20WC%20Dkt.%20No.%2017-84.pdf; Letter from Assistant Secretary for Communications and Information to FCC Chairman Wheeler, at 1, Gen. Dkt. No. 13-5 (filed July 29, 2015) (*NTIA Letter*), *available at* https://ecfsapi.fcc.gov/file/60001119091.pdf.

[2] *See NTIA Comments* at 4-6.

[3] *See* Accelerating Wireline Broadband Deployment by Removing Barriers to Infrastructure Investment, *Second Report and Order*, WC Dkt. No. 17-84, FCC 18-74, ¶¶ 7-14 (rel. June 8, 2018) (*Second Report*), *available at* https://docs.fcc.gov/public/attachments/FCC-18-74A1.pdf; Accelerating Wireline Broadband

test" it adopted in 2016 as a precondition, in certain circumstances, to streamlined processing of carrier applications to discontinue legacy voice services.[4] Having retained the adequate replacement test, NTIA encourages the Commission to put in place a process to enable expanding as necessary the list of protected key applications and functionalities.[5] We also anticipate that the Commission will soon address NTIA's pending request to expand the list of "low-speed modem devices" identified in the *2016 Technology Transitions Order* to include similar devices commonly used by federal agencies.[6]

NTIA has described to the Commission the problems that the IP transition has created, and will present, for federal users in particular situations.[7] We appreciate the Commission's recognition last year of "the budget and procurement challenges that government customers face, as well as other challenges associated with transitioning strategic government applications that use legacy services to alternative next-generation services."[8] We also appreciate the Commission's view that, as a predominant buyer of communications services, the federal government generally is well-positioned to protect its interests through large-scale service contracts with carriers, such as the General Service Administration (GSA)-negotiated contracts underlying the Networx and its replacement, Enterprise Infrastructure Solutions (EIS), communications platforms.[9] However, as the Commission knows, many federal agencies have offices and installations in remote or less populated areas, or receive services outside of Networx or EIS. In such contexts, they must purchase services outside of GSA contracts, often from carriers that do not face the competitive pressures that the Commission sees in other parts of the country, or in the marketplace generally. Oftentimes, carriers in these areas lack the incentives that exist in more populated areas and, thus, negotiation alone may not produce the contractual provisions that adequately serve federal users' needs.[10]

In that regard, NTIA is encouraged by the Commission's statement that it expects carriers to continue "to collaborate with their [enterprise or government] customers, especially utilities and public safety and other government customers, to ensure that they are given sufficient time to accommodate the transition to [next-generation services] such that key functionalities are not

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and Further Notice of Proposed Rulemaking, 32 FCC Rcd 11128, 11160-68, ¶¶ 80-107 (2018) (*First Report*).

[4] *Second Report* ¶¶ 29, 33-34. As the Commission notes, one prong of that test requires that any proposed replacement service preserve "interoperability and compatibility" with a specified list of key applications and functionalities. *Second Report* n.91. *See also* Technology Transitions, *Declaratory Ruling, Second Report and Order, and Order on Reconsideration*, 31 FCC Rcd 8283, 8305, 8341-42, ¶¶ 65, 157-59 (2016) (*2016 Technology Transitions Order*).

[5] *See 2016 Technology Transitions Order, 31 FCC* Rcd at 8342-43, ¶¶ 160-66.

[6] *See* Petition for Reconsideration or Clarification of the National Telecommunications and Information Administration at 7-10, GN Dkt. No. 13-5 (filed Oct. 12, 2016) (*NTIA Petition*), available at https://ecfsapi.fcc.gov/file/10124774109311/NTIA%20Pet%20for%20Recon%20101216.pdf.

[7] *See, e.g., NTIA Comments* at 6-7, 10 and n.27; *NTIA Petition* at 6-7, 9; *NTIA Letter* at 2-3.

[8] *See First Report*, 32 FCC Rcd at 11168, ¶ 106.

[9] *Second Report* ¶ 38; *First Report*, 32 FCC Rcd at 11148-49, 11168, ¶¶ 47, 107.

[10] The term "federal user" includes not only federal agencies, but also private contractors that procure, assemble, aggregate, and manage networks for federal users and agencies. *See NTIA Comments* at 3 n.6.

lost during this period of change."[11] We understand the Commission's decision not to adopt specific protections for federal users rests on its confidence in carriers' "incentives and a long history of accommodating government customers to avoid costly and dangerous disruptions of service."[12] Further, in the case of service discontinuances involving multiple locations – a major concern for federal users – the Commission specifically relied on carriers "strong incentives to work with its customers to establish a transition schedule that is seamless, physically attainable," and consistent with any applicable contractual obligations.[13]

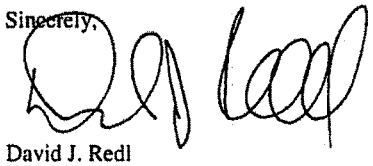
A broad range of critical national security and public safety functions of the Federal government rely on reliable telecommunications services, and it is in the national interest to ensure that those functions can be maintained as our country's communications providers make the welcome transition to modern technology. NTIA appreciates that if carriers' conduct impairs those agencies' critical national security and public safety functions, the Commission retains "flexibility to address these circumstances on a case-by-case basis."[14] As the Commission states, "customers are able to file comments in opposition to a discontinuance application and seek to have the Commission remove the application from streamlined processing."[15] We construe that language as a commitment to sanction conduct impinging on those critical functions when it occurs.[16] In particular, the Commission should hold in abeyance any copper retirement if a federal user credibly alleges that the carrier's proposed retirement date does not give the user "sufficient time to accommodate the transition to new network facilities such that key functionalities are not lost."[17]

I am confident that the Commission will continue to recognize and address the specific needs of federal government users during the IP transition and look forward to working together to ensure no disruption to their communications, particularly in the areas of national security and

[11] *Second Report* ¶ 38 (quoting *First Report*, 32 FCC Rcd at 11149, ¶ 48).
[12] *First Report*, 32 FCC Rcd at 11167-68, ¶ 106. *See also Second Report* ¶ 38; *NTIA Comments* at 8-9.
[13] *First Report*, 32 FCC Rcd at 11166, ¶ 97.
[14] *Id.* ¶ 98 (referring to "specific applications that raise public safety or other mission-critical safety concerns, where the discontinuance timeframe is too short to accommodate [a customer's] transition needs, or where a carrier is not working cooperatively to effectuate such a transition").
[15] *Second Report* ¶ 38.
[16] For example, if a federal user credibly claims that a carrier has not discussed a proposed service discontinuance with affected federal customers, and taken all reasonable steps to ensure the continuity of critical agency networks, systems, and services, the relevant discontinuance application should not qualify for expedited review until the Commission is satisfied that the carrier has taken such steps.
[17] *See First Report*, 32 FCC Rcd at 11149, ¶ 48.

public safety. Thank you for your consideration of these views. If you have any questions, please contact either me or John Morris of my staff at (202) 482-1880.

Sincerely,



David J. Redl

cc: Commissioner Michael O'Rielly
Commissioner Brendan Carr
Commissioner Jessica Rosenworcel

RON WYDEN
OREGON

RANKING MEMBER OF COMMITTEE ON FINANCE

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SELECT COMMITTEE ON INTELLIGENCE
JOINT COMMITTEE ON TAXATION

May 8, 2018

The Honorable Ajit Pai
Chairman
Federal Communications Commission
445 12th Street Southwest
Washington, DC 20554

Dear Chairman Pai:

I write to ask that the Federal Communications Commission (FCC) investigate abusive and potentially unlawful practices of wireless carriers, which have permitted at least one company to provide law enforcement with unrestricted access to the location data of the carriers' customers.

I recently learned that Securus Technologies, a major provider of correctional-facility telephone services, purchases real-time location information from major wireless carriers and provides that information, via a self-service web portal, to the government for nothing more than the legal equivalent of a pinky promise. This practice skirts wireless carrier's legal obligation to be the sole conduit by which the government conducts surveillance of Americans' phone records, and needlessly exposes millions of Americans to potential abuse and surveillance by the government.

To access this private data, correctional officers simply visit Securus' web portal, enter any U.S. wireless phone number, and then upload a document purporting to be an "official document giving permission" to obtain real-time location data. I have enclosed portions of a Securus presentation demonstrating that web portal as well as a Securus white paper documenting "success stories" where Securus customers used this turnkey service to conduct activities wholly unrelated to correctional-facility telephone services.

Top officials at Securus confirmed to my office that Securus takes no steps to verify that uploaded documents in fact provide judicial authorization for real-time location surveillance, or conduct any review of surveillance requests. Securus claimed, incorrectly, that correctional facilities, not Securus, must ensure that correctional officers don't misuse the web portal.

Federal law—enforced by the FCC—restricts how and when wireless carriers may share certain customer information, including location data. Wireless carriers have an obligation to take affirmative steps to verify law enforcement requests for customer information, and must further ensure they are the sole avenue for law enforcement to obtain that information. Federal law also permits the commercial disclosure of customer location data to third parties, but only with the consent of the customer. Securus does not take any of the steps required of carriers.

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U.S. COURTHOUSE
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ROOM 118
MEDFORD, OR 97501
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THE JAMISON BUILDING
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BEND, OR 97701
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707 13TH ST, SE
SUITE 285
SALEM, OR 97301
(503) 589-4555

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It is incredibly troubling that Securus provides location data to the government at all—let alone that it does so without a verified court order or other legal process. This clear abuse is only possible because wireless carriers sell their customers' private information to companies claiming to have consumer consent without sufficiently verifying those claims. I am also asking the major wireless carriers to investigate their own practices and the obvious potential for abuse. I have enclosed a copy of that letter.

I ask that the FCC promptly investigate Securus, the wireless carriers' failure to maintain exclusive control over law enforcement access to their customers' location data, and also conduct a broad investigation into what demonstration of customer consent, if any, each wireless carrier requires from other companies before the carriers provide them with customer location information and other data.

If you have any questions about this request, please contact Chris Soghoian in my office.

Sincerely,

Ron Wyden
United States Senator

GREG WALDEN, OREGON
CHAIRMAN

FRANK PALLONE, JR., NEW JERSEY
RANKING MEMBER

ONE HUNDRED FIFTEENTH CONGRESS

Congress of the United States

House of Representatives

COMMITTEE ON ENERGY AND COMMERCE

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WASHINGTON, DC 20515–6115
Majority (202) 225–2927
Minority (202) 225–3641

August 9, 2018

The Honorable Ajit Pai
Chairman
Federal Communications Commission
445 12th Street, S.W.
Washington, DC 20554

Dear Chairman Pai:

Thank you for appearing before the Subcommittee on Communications and Technology on Wednesday, July 25, 2018, to testify at the hearing entitled "Oversight of the Federal Communications Commission."

Pursuant to the Rules of the Committee on Energy and Commerce, the hearing record remains open for ten business days to permit Members to submit additional questions for the record, which are attached. To facilitate the printing of the hearing record, please respond to these questions with a transmittal letter by the close of business on Thursday, August 23, 2018. Your responses should be mailed to Evan Viau, Legislative Clerk, Committee on Energy and Commerce, 2125 Rayburn House Office Building, Washington, DC 20515 and e-mailed to Evan.Viau@mail.house.gov.

Thank you again for your time and effort preparing and delivering testimony before the Subcommittee.

Sincerely,

Marsha Blackburn
Chairman
Subcommittee on Communications and Technology

cc: The Honorable Michael F. Doyle, Ranking Member, Subcommittee on Communications and Technology

Attachment

Federal Communications Commission
Office of Legislative Affairs
Washington, D.C.20554

Office of the Director

August 31, 2018

The Honorable Marsha Blackburn
Chairman
Subcommittee on Communications and Technology
Committee on Energy and Commerce
U.S. House of Representatives
2125 Rayburn House Office Building
Washington, D.C. 20515

Dear Chairman Blackburn:

Enclosed please find responses to Questions for the Record submitted for Chairman Ajit Pai regarding his appearance before the Subcommittee on Communications and Technology on July 25, 2018, at the hearing entitled "Oversight of the Federal Communications Commission."

If you have further questions, please contact me at (202) 418-2242.

Sincerely,

Timothy B. Strachan
Director

Attachment—Additional Questions for the Record

The Honorable Greg Walden

1. Our colleague Congressman Tom Cole, who chairs the House Appropriations Subcommittee on Labor, HHS, and Education, sent you a letter recently asking for your assurance that transitioning C-Band frequencies for wireless services would not degrade or impair public radio's programming distribution and public safety function.

   As you know, public radio relies on C-Band frequencies to distribute 450,000 hours of programming annually, 80 percent of which is live, to 42 million Americans each week—including in rural and remote areas where citizens rely on their local public radio station because there are few or no alternative sources of news and emergency information. Will you please provide Congressman Cole and our Committee with your plan to protect public radio's satellite-based programming distribution and public safety activities while making more intensive use of the band?

   Response: I agree with you on the importance of protecting broadcast and cable earth stations as we increase terrestrial use of the 3.7-4.2 GHz band, commonly called the C-band. At this time, the Commission is collecting data from incumbent earth stations and public radio stations in order to have an accurate picture of how the spectrum is currently being used. Without this information, we will have no way to protect public broadcasters that currently use earth stations to access programming. Because we have not yet collected all the information we need, we have not yet decided on a specific plan to protect public radio's satellite-based programming distribution and public safety activities, but please be assured that protecting these functions is a priority for us as we make more intensive use of the band.

2. Since the oversight hearing, you announced a circulation order to extend the Mobility Fund Phase II challenge process by an additional 90 days. With $4.53 billion at stake to support 4G LTE service in unserved areas, how can you assure the Committee the extended challenge process will be sufficient to update the map with more reliable data to determine eligible areas?

   Response: As you know, the Commission's legacy support for mobile services has been poorly targeted. All too often, it has supported buildout in areas where private capital has already invested and provided duplicative support to more than one carrier in the same area, while leaving states like Oregon with less funding than they need to ensure universal service. The Mobility Fund Phase II auction will redirect funding to unserved areas—like Eastern Oregon—helping us fulfill our goal to bring digital opportunity to all Americans. I am pleased that the Commission voted recently to extend the challenge process for an additional 90 days. Based on the record, this additional 90 days should ensure that stakeholders have adequate time to challenge the maps submitted by mobile providers while ensuring that we're able to move forward with the auction in a timely manner.

The Honorable Marsha Blackburn

1. Chairman Pai: I understand the FCC has taken a number of actions to stop unwanted calls from reaching consumers and is looking into this issue through a variety of pending rulemakings. This is another example of the FCC and FTC working together, and I commend all of you for that. Can you give us an update on when we might see additional steps taken from the rulemakings that are currently pending before the FCC?

   Response: Unwanted robocalls are consumers' top complaint to the FCC, and we have accordingly made combating illegal robocalls our top consumer protection priority. We have aggressively enforced the TCPA as well as the Truth in Caller ID Act, leveling $120 million of fines and proposing more than $82 million in fines, respectively, against two robocallers who engaged in illegal spoofing on a massive scale. We have authorized carriers to stop certain robocalls at the source while we pursue the creation of a reassigned numbers database and a robust call-authentication framework. And we have been working with our colleagues at the Federal Trade Commission, hosting a policy forum in March and a tech expo in April.

   We will continue our work this fall to combat unwanted robocalls. We are currently studying the record in response to our open rulemakings regarding a reassigned numbers database and additional opportunities for carriers to block illegal robocalls. In addition, we are closing loopholes in our rules that allow robocallers to profit through regulatory arbitrage (e.g., with toll-free calls), and we are working with carriers to implement a call-authentication framework by next year so that consumers can once again trust Caller ID. Finally, we are studying the record in response to the March decision by the U.S. Court of Appeals for the District of Columbia in *ACA International v. FCC*, which struck down much of the agency's 2015 interpretation of the Telephone Consumer Protection Act. I look forward to working with you and my colleagues to continue our crackdown on what former Senator Fritz Hollings once rightfully deemed the "scourge of civilization."

The Honorable John Shimkus

1. I understand that the National Association of Regulatory Utility Commissioners recently passed a resolution raising concerns regarding the implementation of the National Verifier and the absence of Application Programming Interfaces (APIs) that allow for automated interaction between consumers, carriers and the National Verifier when consumers are attempting to enroll in Lifeline with carriers. NARUC is concerned that the absence of these APIs will make it unnecessarily difficult for eligible consumers to enroll. I understand you also have a petition before you asking the FCC to address this. I also understand that the National Lifeline Accountability Database already uses similar APIs. Are you are reconsidering reinstating APIs as part of the National Verifier and whether they should be part of the design, and if so, will you complete any decision-making before "hard launch" of the National Verifier?

   Response: As you know, the Commission created the National Verifier in response to widespread waste, fraud, and abuse in the Lifeline program, with the goal of eliminating the role of carriers in verifying the eligibility of consumers. A carrier API could give the very companies that have previously abused the Lifeline program direct access to the National Verifier. In light of the $137 million in abuse that the Government Accountability Office discovered in the Lifeline program last year, we must be careful in designing any carrier API to mitigate the ability of unscrupulous carriers to evade the screening role of the National Verifier.

   As such, we have not made a final decision on whether to include a carrier API in the National Verifier. We continue to study the National Verifier's functioning to determine whether one is necessary and whether one can be designed without undermining the National Verifier's work of reducing waste, fraud, and abuse in this important program. In the meantime, carriers are able to work with consumers in person using the National Verifier's service provider portal.

The Honorable Robert E. Latta

1. What steps have you taken to reduce regulatory burdens for small entities, and what do you have planned for the future?

   Response: Federal regulations have a disproportionate effect on small businesses. This is unfortunate in several respects: small businesses are often the linchpin of a more competitive marketplace or are critical to providing access in the first place, and they simply don't have the resources of their larger competitors to comply with complex regulatory schemes. Accordingly, the FCC has taken numerous actions to reduce regulatory burdens on small entities. For example, last year we eliminated the onerous reporting requirements imposed by the last Administration on small Internet service providers in the *Title II Order*, and then later eliminated the regulatory overhang of that same order. Also last year, we eliminated unnecessary reporting burdens on small providers participating in our universal service high-cost programs. In June of this year, we eliminated a rule that penalized small rural carriers with extra Universal Service fees whenever they offered broadband. The Commission also hosted a workshop to help small business entrepreneurs navigate corporate supplier diversity programs. And in August, we launched an incubator program in the radio industry where an established broadcaster will provide financial and operational support, including training and mentoring, to a new or small broadcaster.

   And we're not finished yet. For example, we have proposed to eliminate many of the legacy burdens for small, model-based carriers serving businesses in rural America—burdens that unnecessarily divert funding away from build-out of broadband toward paperwork. I look forward to working with you and my colleagues to continue this work.

2. I have over 20 telecommunications companies operating in my district. The majority are small businesses in rural areas that are recipients of USF. I'm concerned that the uncertainty of budget controls in the USF High-Cost program is stifling investment and preventing rural Americans from getting the broadband they deserve. I know the Commission has taken steps to address USF budget shortfalls in some of the programs, but the High-Cost program hasn't had a recent recalibrated budget, or an inflationary factor applied to it. Are you considering addressing the concerns with the High-Cost program in a manner similar to how the FCC has addressed the other USF programs?

   Response: I agree with you that the *2016 Rate-of-Return Reform Order* has not lived up to its promise—and some decisions of the prior Administration like the budget control mechanism require revisiting. That's why I led my colleagues earlier this year to increase funding for small carriers and to propose changes to that prior order to respond to its many shortcomings. Later this year, I aim to circulate an order that will boost funding for small companies deploying broadband to rural America, while considering other reforms to ensure that money is spent wisely, and funding is more predictable going forward.

The Honorable Brett Guthrie

1. When it comes to describing the Commission's work within global fora such as the ITU or others, what role do you believe the Commission should play as an influential voice on spectrum policy and connectivity? This could be in relation to other U.S. agencies and foreign policy makers or relative to domestic and foreign stakeholders.

   Response: The FCC should play a leading role on spectrum policy and connectivity both here at home and abroad—and it does. We are working within the U.S. to establish a policy environment that encourages the development and deployment of new technologies and high-speed networks for all consumers. And internationally, we are working to harmonize spectrum allocations for next generation terrestrial mobile and satellite services while focusing on connectivity—the core of ITU's mission—to help promote more innovation and greater international unity. To build support for our positions in the ITU, we engage extensively on a bilateral and regional basis—sharing regulatory best practices and encouraging innovative spectrum policies. I personally have participated in numerous multilateral and bilateral meetings and have aggressively promoted various American positions on communications policy with regional representatives like Europe's BEREC and individual countries as varied as the Bahamas and Bahrain.

The Honorable Gus M. Bilirakis

1. The Final National Verifier Plan reviewed by the Commission and released by the Universal Service Administration Company (USAC) in January 2017 included plans to design application programming interfaces (APIs) both between the National Verifier and state eligibility databases, and between the service providers and the National Verifier to facilitate modern machine-to-machine interaction necessary to ensure efficient and effective enrollment processes for eligible Lifeline subscribers.

   How does the Commission expect these two verification systems to operate with each-other in order to verify an eligible Lifeline applicant? For example, will the applicant be tasked with providing proof of state eligibility to the service provider upon approval (siloed interfaces) or will the two verification systems interact autonomously to prove who a particular applicant is and their eligibility?

   Response: With the National Verifier, carriers do not verify subscriber eligibility and do not retain eligibility documents. The National Verifier is designed to work in an integrated fashion with other databases and has two online methods for obtaining a subscriber eligibility determination: a carrier portal (used when the carrier representative is present with the consumer) and the consumer online portal (used when the consumer is applying without in-person carrier assistance). Consumers also have the option of mailing in a paper application along with their supporting eligibility documents. For consumers who are enrolled through the carrier portal, carriers have immediate access to their customer information and eligibility determination in the National Verifier system. For consumers who are enrolled in the consumer portal or via a paper application, the consumer must first select a specific carrier and give that carrier his information and National Verifier number in order for the carrier to access that consumer's information and eligibility determination in the National Verifier system. Carriers will still need to enter and maintain consumer records separately in their customer relationship management system.

2. As a follow up to your testimony during the hearing on the Telephone Consumer Protection Act (TCPA), does the FCC need any additional authority from Congress in order to adequately address issues related to TCPA and robocalls that could enhance your ability to fight bad actors?

   Response: We have found that unlawful robocalling and unlawful spoofing tend to go hand-in-hand. The Truth-in-Caller-ID Act, which governs spoofing violations, does not require the Commission to first issue a citation against non-carriers; we can go directly to a Notice of Apparent Liability. It also provides a two-year statute of limitations. We would welcome legislation that eliminates the citation requirement and provides for a two-year statute of limitations for TCPA actions as well, allowing us to pursue robocalling and spoofing violations in a more coordinated manner.

The Honorable Bill Johnson

1. Earlier this year, 130 members of the House, including many members of this Subcommittee, sent a letter thanking the FCC for providing additional resources in the Universal Service Fund (USF) High-Cost Program for areas served by smaller rural broadband providers.

   While we are very thankful that all of you at the FCC helped to address the USF budget shortfalls in the last fiscal year, a new budget cut took effect last month that will reduce USF support on average by 15.5%—or about $230 million—over the next 12 months. This budget control keeps growing every year, taking more and more USF support away from companies. Companies that elected model USF support are also not able to deliver on what they had hoped to due to funding shortfalls.

   It's my understanding that your agency is taking a fresh look at these budget concerns and trying to address sufficiency in the program.

   a. After having made significant positive changes to the budget of the Rural Health Care Program recently, the High-Cost Program is the only USF program without a recently recalibrated budget or an inflationary factor applied to it. Are you considering addressing the concerns with the High-Cost Program in a manner similar to how the FCC has addressed the other USF programs?

      Response: I agree with you that the *2016 Rate-of-Return Reform Order* has not lived up to its promise—and some decisions of the prior Administration like the budget control mechanism require revisiting. That's why I led my colleagues earlier this year to increase funding for small carriers and to propose changes to that prior order to respond to its many shortcomings. Later this year, I aim to circulate an order that will boost funding for small companies deploying broadband to rural America, while considering other reforms to ensure that money is spent wisely, and funding is more predictable going forward.

   b. Would any steps you take aim to address sufficiency concerns and provide more support both for those small carriers that adopted model support as well as those that are being hit by the 15% budget control right now?

      Response: Yes.

   c. Can you commit to a vote by the end of this year to address these concerns?

      Response: I commit to circulate an order to my colleagues addressing these concerns later this year.

The Honorable Bill Flores

1. The record in the 6 GHz Notice of Inquiry includes studies that show potential interference from unlicensed operations to mission critical communications systems, and there are concerns regarding mitigation strategies to reduce the potential for interference. If the FCC does expand the 6 GHz band to include unlicensed operations, how does the FCC plan to develop technical rules and implement mitigation capabilities to protect incumbent mission critical communications against interference?

   Response: The record developed by the *Mid-Band NOI* reflects how greater unlicensed use in the 6 GHz range could facilitate the introduction of 5G services and help close the digital divide. A fundamental principle of unlicensed spectrum policy is that operations may not cause harmful interference to licensed services. I anticipate that the Commission's 6 GHz rulemaking process will foster proposals that protect incumbent services while allowing more intensive use of the band. Our staff will review that record and ensure that we can adequately protect existing users before proceeding to a final rule.

The Honorable Susan W. Brooks

1. Bridging the digital divide in rural areas remains a challenge, particularly regarding wireless connectivity. Since deployments by Educational Broadband Service (EBS) licensees and leasing partnerships with small wireless operator have been successful in delivering wireless broadband services in hundreds of rural communities, do you see a feasible opportunity to extend this successful model to areas where EBS has not been licensed before considering auctions?

   Response: In May, the Commission unanimously voted to begin a proceeding that proposes to allow more efficient and effective use of the EBS band. The Notice of Proposed Rulemaking asks about giving existing EBS licensees, along with other educational entities and rural Tribal communities, the chance to obtain new local priority licenses before auctioning off the remaining white spaces. Our proposals also seek to give current users more flexibility, such as standardizing license areas and eliminating outdated restrictions on lease terms and how the spectrum is used. I look forward to reviewing the record and am hopeful that in the end we will be able to make more spectrum available for high-speed wireless broadband.

2. I introduced H.R. 5329, the Poison Control Center (PCC) Network Enhancement Act, which will help improve Americans' access to poison control center services during an emergency. I'm proud that this bill was packaged into H.R. 6, the SUPPORT for Patients and Communities Act, however there is one provision aimed at improving call routing accuracy for PCCs we pulled from the bill, so we could further explore how to best go about addressing the issue. The provision would have:

   - Requested enhanced communications capabilities such as texting be established
   - Requested the FCC work with HHS to ensure calls to the 1-800 number are properly routed
   - Directed HHS to implement call routing based on a caller's actual location to ensure timely responses

   Currently, calls to the poison control center's 1-800 number are routed based on the area code associated with the phone number of the caller. For example, if I (Susan Brooks) am in Washington, D.C. and call the poison control center's 1-800 number with my personal phone (Indiana area code 317), I would be connected to the center in Indiana, rather than a center closer to my actual location in Washington, D.C. This could present a problem in situations where a caller is in an area with a specific poisoning danger that might not be as well known to the poison control center staff in another location. PCCs standardize training across all regions, but it is still practical to assume that certain region's will be more familiar with certain situations. For example, if you visit California and are bitten by a rattle snake and call the poison control center's 1-800 number, you would be directed to the poison control center in Indiana, which is likely not as well equipped with knowledge and experience regarding the treatment of a rattlesnake bite as someone in a California location. In this instance, as with most poisoning situations, timing is critical. It is important that the caller be directed as quickly as possible to the poison control center closest to where they are currently located.

a. Are you aware of this issue with call routing accuracy with regard to PCCs?

Response: Yes, the Commission is aware of this issue with call routing from wireless phones, both in the context of Enhanced 911 calling and also for calls to the PCC toll free number and other emergency numbers. In addition, we are aware of commercial solutions available in the toll free services marketplace that can provide call routing based on the rough location of a wireless caller. Such capability is available via the Responsible Organization (RespOrg) that manages the toll free number for the toll free subscriber.

b. Working on this issue made me wonder what we can learn from other emergency lines, like the Suicide Hotline and Veterans Crisis Lines to improve 9-1-1 and vice versa. Can you elaborate on what some of these potential similarities and learning opportunities might look like, and what, if any, role the FCC could play?

Response: The Commission's success in establishing location-based call routing with Enhanced 911 has resulted in an ecosphere of location-based technologies and providers, and the extension of such capabilities beyond 911 calling into other wireless calling and related applications, such as commercial toll free location-based calling services referenced above. I believe the Commission's continuing efforts in this area may continue to foster benefit to wireless usage beyond 911 systems. For example, earlier this year, the Commission issued a Notice of Inquiry on location-based routing for 911 calls, seeking industry and public input on reducing delays in and improving such functionality.

3. How should we ensure that we do not use universal service funding to overbuild an existing broadband provider when that existing provider serves, or has plans to serve, a significant number of, but not all, locations in a census block?

Response: The Commission is continuing to refine its universal service programs to more precisely target support. For example, participants in the Connect America Fund must report the precise geolocation of the locations they build out using federal funding. This below-census-block granularity will enable the Commission to more closely track compliance with our rules and ensure that overbuilding even within a census block does not occur.

4. How should we ensure that universal service funding is not used by a recipient to enter an adjacent area that is already served?

Response: Recipients of Connect America Fund support are prohibited from using that support anywhere outside of their eligible areas. In addition, recipients must submit the precise geolocation of the locations served using such funding to USAC for review and potential auditing.

a. Would you consider an audit of current universal service spending to review this issue?

Response: USAC regularly reviews the submissions of carriers and conducts risk-based audits to ensure program compliance.

The Honorable Frank Pallone, Jr.

1. I'm concerned that the only time Democratic Members seem to get responses from you or the FCC to our oversight letters is either when we send public follow-up letters, or shortly before you're scheduled to testify before the Committee. Moreover, your responses often are incomplete and, further, the answers you do provide are so general and lacking in specificity that they do not truly satisfy the questions raised. This is particularly troubling given your commitment to Ranking Member Doyle and me at the beginning of this Congress to be responsive to both Democrats and Republicans.

   a. Going forward, will you commit to providing complete responses to both Republican and Democratic Members of this Committee within three weeks of receiving such inquiries?

      Response: I am happy to renew my commitment to respond to all congressional inquiries in a complete and timely manner. I have done so throughout my tenure. For example, when you wrote earlier this year asking about 26 letters written by Democratic members of the Committee, we had already responded to 21 of those letters—and I responded to the remaining five shortly thereafter. And as you know, each response requires an examination of different facts and circumstances that may require a substantial devotion of limited Commission resources.

      Under my leadership, the Commission has been more transparent than ever before. I have responded to 389 letters over the last twenty months. And for the first time, we have released the full texts of meeting items three weeks in advance, thus providing Congress and the American people the ability to see what the FCC is considering before the Commission votes. This level of transparency at the Commission is unprecedented, and I look forward to working with you to maintain this transparency in the months and years ahead.

   b. To the extent you need additional time on some aspect of an inquiry, will you commit to submitting a written response within three weeks of receiving such request explaining what information you cannot provide at that time, what steps are being taken to provide a complete response to the inquiry, and by when the complete response will be sent?

      Response: As I explain in the response to the question above, each letter I receive contains a unique set of facts and receives the singular attention that it deserves. Nonetheless I am happy to reiterate my commitment to respond to all congressional inquiries in a complete and timely manner.

The Honorable Yvette Clarke

1. Following FCC Auction 97 for AWS-3, which raised more than $44 billion in auction proceeds, some committee Democrats, including myself, sent your agency a letter in June 2015, asking you to curb instances of "gaming" of the Designated Entity (DE) program. In our letter, we'd also offered some recommendations to make smart reforms to the FCC's designated entity and other small business-related rules and policies. Our letter was prompted largely by public disclosures that DISH Network had heavily financed and could potentially exert unauthorized control over these DEs and licenses.

   I understand though, that in late August 2017, the DC Circuit remanded the FCC's decision to deny bidding credits to some of the winning DEs back to your agency. The DC Circuit agreed with the DE petitioners that in the past, the FCC had allowed small companies a chance to modify their contractual agreements with large investors to gain enough independence from those investors to satisfy the FCC.

   Judge Pillard, who wrote that case opinion stated, "the FCC's [rules and decisions] did not give [the Petitioners] clear notice" of which violations of its control rules were irreparable. (Op. at 45). Judge Pillard wrote further, "Where, as here, hundreds of millions of dollars are at stake, regulated parties need fair notice of the circumstances in which a finding of de facto control will and will not be subject to an opportunity to attempt to negotiate a cure." (Op. at 45) The Circuit Court concluded "that an opportunity for [the] petitioner to renegotiate their agreements with DISH provides the appropriate remedy." (Op. at 46).

   The appeal holds very important implications for the future inclusion of designated entities and small businesses who wish to participate in spectrum auctions. Invariably, these bidders will need to seek out capital and execute financing and operations agreements that pass Commission muster. Without more clear guidance from the Commission, consistent with the DC Circuit's remand, it is highly probable that designated entities and small businesses will continue to be shut out from the wireless marketplace.

   a. What is the status of the remand and when will the FCC act consistently with the DC Circuit opinion?

      Response: In January 2018, the Wireless Telecommunications Bureau issued the *Order on Remand* (DA 18-70), which put in place a process to afford Northstar and SNR Wireless an opportunity to cure consistent with the D.C. Circuit opinion. On July 12, 2018, the Commission affirmed that order with one minor modification (FCC 18-98). This process remains ongoing.

   b. Have the petitioners in that appeal attempted to renegotiate with DISH Network and submitted those renegotiated terms to the FCC?

      Response: Northstar and SNR Wireless have renegotiated their agreements with DISH and submitted the new agreements to the FCC on June 8, 2018.

   c. Provided that a satisfactory cure with respect to the petitioners is achievable, how will the Commission resolve the matters of the disputed Auction 97 licenses and the denied bidding credits?

Response: The *Order on Remand* established a process for petitioners and parties of record to provide input to the Commission on these issues. That process contemplates the possibility of additional filings by Northstar and SNR Wireless, currently due on September 6, 2018, with an opportunity by other parties of record to file responsive comments 30 days thereafter. Commission staff will evaluate the record established through this process and, once it is complete, make recommendations to the Commission about how to proceed.

2. It has come to my attention that the Commission recently notified at least two 600 MHZ auction winners of *de facto* control concerns and afforded them an opportunity to cure.

   a. Please identify all DE bidders participating in the AWS-3 and 600 MHz auctions that were afforded opportunities to cure *de facto* control issues.

      Response: The Broadband Division has identified two DE bidders raising control issues (although not necessarily issues of *de facto* control)—Bluewater Wireless II, L.P. and Omega Wireless, LLC—and asked each to provide written explanations as to how specific provisions in their agreements were consistent with their eligibility for a small business bidding credit. In response, both applicants chose to revise their agreements.

   b. Do all DEs applying for FCC licenses and bidding credits have similar opportunities to cure potential *de facto* control issues consistent with the DC Circuit's ruling?

      Response: DEs who applied for Commission licenses and bidding credits before the D.C. Circuit's ruling will receive similar opportunities to cure control issues. For upcoming Auctions 101 and 102, however, the Commission informed applicants that they "should not expect to receive any opportunities to revise their ownership structure after the filing of their short- and long-form applications, including making revisions to their agreements or other arrangements with interest holders, lenders, or others in order to address potential concerns relating to compliance with the designated entity bidding credit requirements." *See* FCC 18-109.

   c. Do these opportunities to cure involve back-and-forth discussions or meetings between the FCC and the DEs?

      Response: Neither the court decision nor the Commission's rules and policies require the Commission to hold "responsive, back-and-forth discussions" with DEs, especially given the prohibitions applicable to a restricted proceeding. Instead, the Commission, like the court, expects that an opportunity to cure may require negotiations between DEs and those who have invested in them—negotiations common among business entities that have entered into contractual arrangements. The Commission's role is simply to determine whether a DE has complied with the rules laid out for bidding credits, not to essentially negotiate against itself by allowing variances with an established decision by the agency (here, the denial of bidding credits to certain entities) that has already been upheld by the court as reasonable.

   d. Please identify which DEs have received or been denied licenses and/or bidding credits and detail what specific steps that the Commission took on its own or pursuant to

delegated authority to notify these DEs about these issues or to guide them on how to cure those issues.

Response: To date, no 600 MHz applicants have been denied any licenses or bidding credits for which they applied. Attached is a list of the applicants that have been granted 600 MHz licenses as of the date of this letter; applicants that received Small Business or Rural Service Provider bidding credits are identified on this list.

With respect to communicating with 600 MHz DE applicants about their eligibility for bidding credits, the Broadband Division sent two letters, which are attached, asking Bluewater Wireless II, L.P. and Omega Wireless, LLC to provide written explanations as to how specific provisions in their agreements were consistent with their eligibility for a small business bidding credit. In response, both applicants chose to revise their agreements.

e. Will the Commission be taking any further actions under your Chairmanship to increase designated entity and small business ownership and participation through spectrum auctions in the communications and IT sectors?

Response: Pursuant to Section 309(j) of the Communications Act, the Commission regularly considers in the context of designing each of its spectrum auctions how to promote the dissemination of licenses among a wide variety of applicants, including but not limited to, through use of bidding credits. We are providing eligible small business and rural service providers the opportunity to seek bidding credits in upcoming Auctions 101 and 102, which should promote small business participation.

The Honorable Debbie Dingell

1. Given the Congressional and public attention questioning the FCC's reported DDoS attack, what did you do to verify whether the DDoS attack occurred and what steps did you take to address the alleged attack? Please provide all correspondence and other documentation between you and your staff that reflect your engagement on the issue.

   Response: The Office of Inspector General Report details some of the steps we took to verify the determination that David Bray, the then-CIO, made. For example, the Commission's Chief of Staff asked the then-CIO if he was confident that the incident wasn't caused by a number of individuals "attempting to comment at the same time . . . but rather some external folks deliberately trying to tie-up the server." In response to this direct inquiry, the former CIO told him: "Yes, we're 99.9% confident this was external folks deliberately trying to tie-up the server to prevent others from commenting and/or create a spectacle." Moreover, in the days and weeks following the incident, my office had several conversations with the then-CIO and other Commission IT personnel to better understand what had happened, help answer questions regarding what had happened, and take steps to keep ECFS running.

   In terms of addressing the situation, following the incident the Commission took several steps to ensure that ECFS remained operational. Career FCC IT personnel have explained to my office that they focused on three key areas with respect to ECFS: content delivery, system scaling, and application optimization.

   For content delivery, FCC IT personnel improved caching both internally, within the ECFS system, and externally, leveraging our Content Delivery Network provider. Caching improves content delivery to the end user while reducing the load on ECFS.

   With respect to system scaling, FCC IT personnel enhanced ECFS both vertically (using "larger" instances with more memory and CPU capacity) and horizontally (adding additional instances to the various clusters) to deal with the increased volume of requests. The scaling of the various components of ECFS was initially done manually but was later automated to the extent possible.

   Finally, FCC IT personnel also optimized the ECFS application both in terms of data access and application functions. The data queries were optimized as the dataset increased and better indexing strategies were implemented to improve retrieval from the data store—especially for queries producing large return sets. The application functions were tested and optimized to improve performance to the end user.

2. When did you personally suspect that there was no May 7th DDoS attack?

   Response: I initially assumed that the attack was not the result of a DDoS attack, but received a contrary opinion from the then-CIO (an opinion reinforced by IT staff on July 24, 2017 during a meeting my office). I personally suspected the then-CIO's opinion was wrong on January 23, 2018, when I learned that the Office of the Inspector General did not believe the then-CIO's representations were accurate. That suspicion was, as you know, confirmed in the OIG's report.

3. During the most recent FCC oversight hearing on July 25, 2018, when asked about providing the Committee with reports, requests, memoranda, and service logs related to the DDoS attack, you referenced the OIG and said you "would expect him to issue more information on this in the very near future."

   a. Were you aware of the findings of the IG's report at that time?

      Response: Yes.

   b. Prior to the OIG's report being released, were you ever advised by either the FCC's General Counsel or the OIG to not correct the public record and your misrepresentations to Congress that there had not been a cyber-attack during the net neutrality comment period? If so, were those advisories in writing and will you commit to sharing those with the Committee?

      Response: The OIG orally requested that we not discuss the investigation with anyone until it was complete in order not to jeopardize it (including the referral of facts involving the then-CIO's conduct to the Department of Justice for potential criminal prosecution).

The Honorable Jerry McNerney

1. During the oversight hearing, I asked you about VPNFilter—Russian-linked malware that can be used to steal users' information, exploit devices, and block network traffic. I noted that dozens of router models have been identified as susceptible to VPNFilter, and yet many consumers know nothing about it. While some consumers might be aware of it, they have been left wondering if their router is affected and what steps they should take to protect themselves from potential threats. Since your responses to my questions regarding this matter were not clear, I wanted to give you another opportunity to answer them.

   a. What is the FCC doing to make sure ISPs inform customers about VPNFilter malware, how to update their routers, and whether their routers have been compromised? Please specify all actions the FCC has taken to date and any steps the FCC plans to take going forward.

      Response: When consumers file informal consumer complaints with the Commission about network and end user security concerns relating to a specific provider, we forward their concerns to the provider for investigation and response pursuant to our informal complaint process. We also refer consumers to the Federal Trade Commission, which has helpful information and resources regarding a variety of online security issues on its website. We are currently exploring additional avenues for consumer outreach and education.

   b. Is the FCC doing anything at all to help make consumers aware of how to protect themselves against their routers being infected by malware? Please specify all actions the FCC has taken to date since you became Chairman and any steps the FCC plans to take going forward.

      Response: Please see response to 1.a. above.

2. You recently announced that you will be making changes to the FCC's Electronic Comment Filing System (ECFS) in an effort to address fake comments. You have also noted that if your reprogramming request is approved by the House and Senate Appropriations Committees, the FCC will incorporate CAPTCHA or a similar mechanism to prevent bots from submitting comments.

   a. In addition to your plans to incorporate CAPTCHA or a similar mechanism, can you provide us with details about what else you plan to do to combat fake comments and the misuse of Americans' identities?

      Response: We intend to seek a broad range of input before making final decisions with respect to how ECFS will be redesigned, so I am not able to provide such details at this time.

   b. Are there any steps you can take now to prevent fake comments from being filed in matters currently pending before the Commission?

Response: The current system cannot validate the user identity, which is why we are focused on redesigning the ECFS system rather than modifying the existing system.

c. Following the reprogramming request's approval, how quickly can you get started?

Response: The Commission is moving forward with the procurement steps for this project and expects that the Discovery/Requirements phase of the ECFS Replacement project will start in the first quarter of FY 2019.

d. How long do you expect the process to take?

Response: Upon completion of the procurement steps and the Discovery/Requirements phase of the ECFS Replacement project, we will have a more accurate timeline for ECFS development. The estimated development time is six to nine months.

e. Will you commit to giving me and the quarterly briefings on the FCC's actions to address fake comments, prevent identity theft, and restore the public's trust in the ECFS?

Response: The Commission will commit to providing quarterly briefings on ECFS development to Congress.

3. RAY BAUM's Act of 2018, which was signed into law as part of the Consolidated Appropriations Act of 2018, included my bill, the Improving Broadband Access for Veterans Act. Pursuant to this law, the FCC is required to produce a report examining the current state of veterans' access to broadband and what can be done to increase access, with a focus on low-income veterans and veterans residing in rural areas. In preparing this report, the FCC is to provide the public with notice and an opportunity to comment. The report must be completed by March 23, 2019 and include findings and recommendations for Congress.

Veterans, who fight tirelessly to protect our country, face many challenges when they return home. Not having internet access makes what is already an incredibly difficult transition process to civilian life even harder. It is critical that we move quickly to close the digital divide for veterans.

a. Has the Commission started the process for producing this report?

Response: Yes. Commission staff are in the process of preparing the Public Notice for this report.

In the meantime, the FCC is working to promote broadband-enabled access and services to veterans. For example, I have delegated to Commissioner Carr the responsibility of spearheading a pilot program for telehealth connectivity, with a focus on increasing access for low-income families and veterans. In addition, I have personally visited three facilities run by the U.S. Department of Veterans Affairs (VA)—in Lecanto, Florida; Boise, Idaho; and Salt Lake City, Utah—to better understand how broadband can improve veterans' health through services like online mental health consultations. I have also spoken repeatedly to VA leadership about collaborating to broaden the availability of telemedicine services to those who have served in our armed forces.

b. On what date do you expect that the Commission will begin to seek public comment for this report?

Response: We plan to release the Public Notice in the fall.

c. Will you commit that by November 1, 2018, you will provide my office with a briefing on the status of the report?

Response: Yes. The Commission's Office of Legislative Affairs will coordinate with your staff to schedule a briefing on the status of the report.

FEDERAL COMMUNICATIONS COMMISSION
Wireless Telecommunications Bureau
Broadband Division
445 12th Street, S.W., Suite 3-C123
Washington, D.C. 20554

May 21, 2018

Thomas Gutierrez
Lukas, LaFuria, Gutierrez & Sachs, LLP
8300 Greensboro Drive, Suite 1200
Tysons, VA 22102

Re: Bluewater Wireless II, L.P.
Application for 600 MHz Licenses/Auction 1002
File No. 0007754927

Dear Mr. Gutierrez:

The Broadband Division (Division) of the Wireless Telecommunications Bureau (WTB) is processing the application of Bluewater Wireless II, L.P. (hereinafter "Applicant") for sixty-six 600 MHz Band licenses pursuant to its winning bids in Auction 1002[1] under FCC File No. 0007754927 (Application).[2] In its Application, Applicant seeks a 25% Small Business Designated Entity (SB DE) bidding credit in the amount of $150,000,000.[3]

To establish its eligibility for the SB DE bidding credit, Applicant asserts that Charles C. Townsend, the sole owner and president of the Applicant's General Partner (GP), Bluewater Wireless Management Company, has both *de jure* and *de facto* control of the Applicant.[4] With reference to the reviewed Bluewater Wireless, II, L.P. Agreement of Limited Partnership, dated December 1, 2015 (Agreement), filed with the Application, please provide by June 20, 2018 a written explanation as to how the specific provisions of that Agreement identified in Appendix A, both individually and in the aggregate, are consistent with this assertion. If your explanation leads Applicant to revise the Agreement, please include a redline of any changes when you file your explanation. All responses to this letter should be filed as part of the Application in ULS. In addition, please also send a courtesy copy of your filing addressed to Madelaine Maior at madelaine.maior@fcc.gov.

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[1] *Incentive Auction Closing and Channel Reassignment Public Notice: The Broadcast Television Incentive Auction Closes; Reverse Auction and Forward Auction Results Announced; Final Television Band Channel Assignments Announced; Post-Auction Deadlines Announced*, Public Notice, 32 FCC Rcd 2786 (2017) (*Auction 1002 Closing Public Notice*).

[2] Bluewater Wireless II, L.P. Long-Form Application, FCC Form 601, ULS File No. 0007754927 (filed Apr. 25, 2017, last amended July 25, 2017) (Application); Bluewater Wireless II, L.P., FCC Ownership Disclosure Information for the Wireless Telecommunications Services, FCC Form 602, File No. 0007859165 (filed July 19, 2017).

[3] *Auction 1002 Closing Public Notice*, 32 FCC Rcd at 2875, Appx. B.

[4] *See* Application, Exhibit C – Small Business Bidding Credit.

Sincerely,

Blaise A. Scinto /jbb

Blaise A. Scinto
Chief, Broadband Division
Wireless Telecommunications Bureau

Attachment: Appendix A

APPENDIX A

1. The Agreement authorizes the GP to "manage the Partnership business . . . [and] perform all contracts and undertakings deem[ed] necessary or advisable or incidental to . . . the Partnership," but only insofar as "all such acts and undertakings are contemplated by the Reviewed Budget" as submitted to the Advisory Board.[1]

2. The LPs and the Advisory Board must approve the following actions taken by the GP on behalf of the Partnership even if contemplated in a Reviewed Budget. For example:

   (a) The GP's ability "to borrow money . . . in furtherance of any and all purposes of the Partnership,"[2] must be both contemplated in the Reviewed Budget[3] *and* approved by the Advisory Board.[4]

   (b) The Applicant may acquire and/or dispose of certain property only if such transactions are contemplated in the Reviewed Budget[5] *and* the Advisory Board and the partners approve the transaction.[6]

   (c) The GP may hire staff on behalf of the Partnership only if staff salaries and benefits are contemplated within the Reviewed Budget,[7] *and* the Advisory Board approves of "the annual compensation and benefits for senior management of the Partnership."[8]

   (d) The GP-prepared budget is subject to Advisory Board approval if "aggregate expenditures proposed in the Reviewed Budget exceed by more than 20% the aggregate expenditures included in the immediately preceding Reviewed Budget."[9] Given the limited scope of the

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[1] Bluewater Wireless II, L.P. Long-Form Application, FCC Form 601, ULS File No. 0007754927 (filed Apr. 25, 2017, last amended July 25, 2017), REDACTED Exhibit D –Agreement of Limited Partnership (Agreement) §§ 3.01(a), (e). *See also* Agreement § 3.05(a)(i) ("Reviewed Budget"). It is unclear how the Reviewed Budget relates to the initial budget, and how the initial budget is prepared, reviewed, and approved. Please address these questions in your response.

[2] Agreement § 3.01(e)(ii).

[3] Agreement § 3.01(e).

[4] Agreement § 3.04(c)(i)(d).

[5] Agreement § 3.01(e)(i). We note that sections of the Agreement use the terms "asset" and "property" interchangeably, and neither term is defined in the Agreement.

[6] Agreement §§ 3.04(c)(i)(f)(Advisory Board must approve "material asset transfers and acquisitions"), 3.06(c) (Advisory Board approval required to "sell…a material portion, all or substantially all of the Partnership's assets), 4.01(a)(i) (requiring the "Consent of the Partners" for "[t]he sale, transfer, lease or other conveyance of all or substantially all of the Partnership's property"). We note the term "material" is used to describe both a type of asset and a portion of the Partnership's assets but is not defined in the Agreement. Further, the Agreement is unclear about whether the Advisory Board or the Partners must first approve a transaction disposing of all or substantially all of the Partnership's assets. Please address these questions in your response.

[7] Agreement § 3.05(a)(i).

[8] Agreement § 3.04(c)(i)(e). Notably, the Agreement provides that, after the Applicant no longer is subject to the Commission's Designated Entity rules, the Advisory Board must approve the annual budget and "any material amendments thereto." Agreement §§ 3.04(c)(i)(c), 3.05(b)(i).

[9] Agreement § 3.05(a)(ii).

initial budget,[10] and the likelihood that the business will progress beyond this initial stage, one or more subsequent budgets are likely to exceed the 20% limit that triggers the approval of the budget by the Advisory Board. Even though the Agreement provides that the 20% limit is "applicable only when the Partnership remains in the same phase of development of its business . . . as reasonably determined by the [GP],"[11] the Agreement does not define "phase of development" for purposes of determining when the GP must obtain Advisory Board approval of a budget.

3. The Advisory Board has the unilateral authority to remove and replace the GP or force the sale or other disposition of the Partnership's assets if the Advisory Board determines that "[GP president, Charles Townsend] fails to devote . . . such time as may be reasonably necessary for the proper performance of his duties and the General Partner's duties under this agreement."[12]

[10] The Agreement states that the Partners agree that the initial budget consists only of a monthly [redacted] fee for the GP (capped at thirteen months) and an agreement to cover the GP's expenses subject to a cap of [redacted]. Agreement § 4.02(b).

[11] Agreement § 3.05(a)(ii).

[12] Agreement § 3.04(c)(ii). *See also* Agreement § 3.01(f). The Agreement does not appear to define what is "reasonably necessary" or to place any limits on the Advisory Board's determination of whether this standard is met. Please address these questions in your response.

FEDERAL COMMUNICATIONS COMMISSION
Wireless Telecommunications Bureau
Broadband Division
445 12th Street, S.W., Suite 3-C123
Washington, D.C. 20554

June 4, 2018

Tom W. Davidson
Akin, Gump, Strauss, Hauer & Field, LLP
1333 New Hampshire Avenue, N.W.
Washington, DC 20036

Re: Omega Wireless, LLC
Application for 600 MHz Licenses/Auction 1002
File No. 0007754732

Dear Mr. Davidson:

The Broadband Division (Division) of the Wireless Telecommunications Bureau (WTB) is processing the application of Omega Wireless, LLC (hereinafter "Applicant") for one-hundred and nineteen 600 MHz Band licenses pursuant to its winning bids in Auction 1002[1] under FCC File No. 0007754732 (Application).[2] In its Application, Applicant seeks a 25% Small Business Designated Entity (SB DE) bidding credit in the amount of $32,234,183.[3]

To establish its eligibility for the SB DE bidding credit, Applicant asserts that the Controlling Members of the LLC[4] and members of the LLC's Board of Managers[5] have both *de jure* and *de facto* control of the Applicant. With reference to the reviewed Omega Wireless, LLC Amended and Restated Limited Liability Company Agreement, dated April 6, 2016 (Agreement) filed with the Application, please provide by July 9, 2018 a written explanation as to how the specific provisions of that Agreement identified in Appendix A, both individually and in the aggregate, are consistent with this assertion. If your explanation leads the Applicant to revise the Agreement, please include a redline of any changes when you file your explanation. All responses to this letter should be filed as part of the Application. In addition, please also send a courtesy copy of your filing addressed to Madelaine Maior at madelaine.maior@fcc.gov.

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[1] *Incentive Auction Closing and Channel Reassignment Public Notice: The Broadcast Television Incentive Auction Closes; Reverse Auction and Forward Auction Results Announced; Final Television Band Channel Assignments Announced; Post-Auction Deadlines Announced*, Public Notice, 32 FCC Rcd 2786 (2017) (*Auction 1002 Closing Public Notice*).

[2] Omega Wireless, LLC Long-Form Application, FCC Form 601, ULS File No. 0007754732 (filed Apr. 27, 2017, last amended Jan. 17, 2018) (Application); Omega Wireless, LLC, FCC Ownership Disclosure Information for the Wireless Telecommunications Services, FCC Form 602, File No. 0008064598 (filed Jan. 17, 2018).

[3] *Auction 1002 Closing Public Notice*, 32 FCC Rcd at 2875, Appx. B.

[4] Kenneth D. Anderson, Christopher J. Jensen, Edward Moise, and W. Scott Soden are identified by Applicant as Controlling Members of the LLC. *See* Application, Exhibit C – Small Business Bidding Credit

[5] Kenneth D. Anderson, Christopher J. Jensen, Edward Moise, W. Scott Soden, Barry B. Lewis, and Craig W. Viehweg are identified by Applicant as members of the LLC's Board of Managers. *See* Application, Exhibit C – Small Business Bidding Credit.

Sincerely,

Blaise A. Scinto

Blaise A. Scinto
Chief, Broadband Division
Wireless Telecommunications Bureau

Attachment: Appendix A

APPENDIX A

1. The April 6, 2016 Omega Wireless, LLC Amended and Restated Limited Liability Company Agreement (Agreement) confers management responsibilities on the Board of Managers.[1] However, several Company activities require authorization by a "supermajority"[2] of all Managers, thereby necessitating, at a minimum, one of the two stated Non-Controlling Managers voting in favor of the proposed actions.[3] The activities subject to supermajority approval include:
    - the annual budget for expenditures;[4]
    - any "material deviation from the approved budget, the effect of which would have a substantial impact on the financial condition of the Company;"[5] and
    - incurring "any indebtedness or authorize, cause or allow any Subsidiary to incur any indebtedness in an amount that, when combined with all other indebtedness of the Company and the Subsidiaries, exceeds twenty five percent (25%) of the annual budgeted capital expenditures."[6]
2. The Agreement requires the consent of the Majority Institutional Investors[7] before the Company, the Board of Managers or other agents of the Company may engage in certain activities and/or transactions,[8] including:
    - any amendment of the Company's charter documents, including the Agreement, without limitation (other than as reasonably required by the FCC);[9] and
    - the sale, transfer or assignment of not only "all" but also "any portion" of the Company's assets or property[10]

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[1] Omega Wireless, LLC Long-Form Application, FCC Form 601, ULS File No. 0007754732, REDACTED Exhibit D – Amended and Restated Limited Liability Company Agreement § 6.1(a) (filed Apr. 27, 2017, revised Sept. 1, 2017) (Agreement) ("the powers of the Company . . . and business and affairs of the Company shall be managed under the direction, a Board of Managers . . . and . . . the Board may make all decisions and take all actions for the Company not otherwise provided for in this Agreement.").

[2] "Supermajority Vote" means the affirmative vote or written consent of four of the five Board votes, under most circumstances. Agreement § 1.1 ("Supermajority Vote").

[3] Agreement § 6.4(b). There are five members of the LLC's Board of Managers, two of whom are Non-Controlling Managers. *See* Agreement §§ 6.1(c) (naming Kenneth D. Anderson, W. Scott Soden, Christopher J. Jensen, Craig Viehweg, and Barry Lewis as the initial Managers of the Company); 6.1(g) (defining "Non-Controlling Manager", identifying Craig Viehweg and Barry Lewis as Non-Controlling Managers, and establishing the right of the Majority Institutional Investors to nominate Non-Controlling Managers).

[4] Agreement § 6.4(b)(ii).

[5] Agreement § 6.4(b)(iii).

[6] Agreement § 6.4(b)(iv).

[7] "Majority Institutional Investor" means "the Institutional Investors [comprised of M/C, Peppertree and Shamrock] whose Commitments as of the date of this Agreement amount to a majority of the Commitments made by all of the Institutional Investors as of the date of this Agreement" Agreement § 1.1.

[8] Agreement § 6.4(a).

[9] Agreement § 6.4(a)(iii).

[10] Agreement § 6.4(a)(vii).

Applicant	Bidding Credit
Agri-Valley Communications, Inc.	RSP 15%
Alaska Wireless Network, LLC	
AT&T Spectrum Holdings LLC	
Bluewater Wireless II, L.P.	SB 25%
Carolina West Wireless, LLC	RSP 15%
CC Wireless Investment, LLC	
Cellular South Licenses, LLC	
Chariton Valley Telephone Corporation	RSP 15%
CT Cube, L.P.	RSP 15%
Cumberland Cellular Partnership	RSP 15%
Docomo Pacific, Inc.	
East Kentucky Network, LLC	RSP 15%
Farmers Telephone Cooperative, Inc.	RSP 15%
Gold Spectrum, LLC	SB 15%
Hulce, James C	SB 25%
Inland Cellular LLC	RSP 15%
Iowa RSA 2 Limited Partnership	RSP 15%
Kentucky RSA 3 Cellular General Partnership	RSP 15%
Kentucky RSA 4 Cellular General Partnership	RSP 15%
LICT Wireless Broadband Company, LLC	
Mach FM Corp.	SB 25%
McCotter, James E	SB 25%
NE Colorado Cellular, Inc.	RSP 15%
NEIT Services, LLC	RSP 15%
Nex-Tech Wireless, LLC	RSP 15%
Northeast Nebraska Telephone Company	RSP 15%
Northern Valley Communications, LLC	SB 25%
Nova Wireless LLC	
Nsight Spectrum, LLC	
Omega Wireless, LLC	SB 25%
Pacific Comnex, Inc.	SB 25%
Panhandle Telecommunication Systems, Inc.	RSP 15%
ParkerB.com Wireless L.L.C.	
PBP LICENSE GROUP, LLC	RSP 15%
Pine Belt Cellular, Inc.	RSP 15%
Pine Cellular Phones, Inc.	RSP 15%
Pioneer Telephone Cooperative, Inc.	RSP 15%

Plateau Telecommunications, Incorporated	RSP 15%
Polar Communications Mutual Aid Corporation	RSP 15%
Rural Telephone Service Co., Inc.	RSP 15%
Sagebrush Cellular, Inc.	RSP 15%
SAL Spectrum, LLC	
SI Wireless, LLC	RSP 15%
Smith Bagley, Inc.	RSP 15%
Spectrum Financial Partners, LLC	SB 25%
Spotlight Media Corporation	SB 25%
T-Mobile License LLC	
Tradewinds Wireless Holdings, LLC	SB 25%
Triangle Communication System, Inc.	RSP 15%
TStar 600, LLC	SB 25%
UNITED STATES CELLULAR CORPORATION	
TOTAL	

Key:
SB 15% = granted a 15% small business bidding credit (revenue does not exceed $55 million)
SB 25% = granted a 25% small business bidding credit (revenue does not exceed $20 million)
RSP 15% = granted a 15% rural service provider bidding credit (subscribers fewer than 250,000)

GREG WALDEN, OREGON
CHAIRMAN

FRANK PALLONE, JR., NEW JERSEY
RANKING MEMBER

ONE HUNDRED FIFTEENTH CONGRESS

Congress of the United States

House of Representatives

COMMITTEE ON ENERGY AND COMMERCE

2125 RAYBURN HOUSE OFFICE BUILDING
WASHINGTON, DC 20515–6115
Majority (202) 225–2927
Minority (202) 225–3641

August 9, 2018

The Honorable Michael O'Rielly
Commissioner
Federal Communications Commission
445 12th Street, S.W.
Washington, DC 20554

Dear Commissioner O'Rielly:

Thank you for appearing before the Subcommittee on Communications and Technology on Wednesday, July 25, 2018, to testify at the hearing entitled "Oversight of the Federal Communications Commission."

Pursuant to the Rules of the Committee on Energy and Commerce, the hearing record remains open for ten business days to permit Members to submit additional questions for the record, which are attached. To facilitate the printing of the hearing record, please respond to these questions with a transmittal letter by the close of business on Thursday, August 23, 2018. Your responses should be mailed to Evan Viau, Legislative Clerk, Committee on Energy and Commerce, 2125 Rayburn House Office Building, Washington, DC 20515 and e-mailed to Evan.Viau@mail.house.gov.

Thank you again for your time and effort preparing and delivering testimony before the Subcommittee.

Sincerely,

Marsha Blackburn
Chairman
Subcommittee on Communications and Technology

cc: The Honorable Michael F. Doyle, Ranking Member, Subcommittee on Communications and Technology

Attachment

FEDERAL COMMUNICATIONS COMMISSION
WASHINGTON DC

Mike O'Rielly
Commissioner

August 21, 2018

Via U.S. Mail and Email

Mr. Evan Viau
Legislative Clerk
Committee on Energy and Commerce
2125 Rayburn House Office Building
Washington, DC 20515

Re: Additional Questions for the Record to Commissioner Michael O'Rielly
July 25, 2018 Hearing before the House Energy and Commerce
Subcommittee on Communications and Technology
"Oversight of the Federal Communications Commission"

Dear Mr. Viau:

Please find enclosed my responses to the additional questions for the record in connection with my testimony at the July 25, 2018 hearing entitled "Oversight of the Federal Communications Commission."

Thank you and please do not hesitate to contact me if you should have any questions.

Sincerely,

Michael O'Rielly

Enclosure
cc w/enc: Evan.Viau@mail.house.gov

Additional Questions for the Record to Commissioner Michael O'Rielly

The Honorable Brett Guthrie

1. When it comes to describing the Commission's work within global fora such as the ITU or others, what role do you believe the Commission should play as an influential voice on spectrum policy and connectivity? This could be in relation to other U.S. agencies and foreign policy makers or relative to domestic and foreign stakeholders.

Globally, the Commission has a vital role to play on spectrum policy and connectivity. I was fortunate to have attended the last ITU Plenipotentiary Conference in Busan, WRC-15 in Geneva and more recently the CITEL PCC.II meeting in Orlando, along with other international events. These conferences and ministerial meetings have driven home the importance of our nation and subsequently our region having a united front and strategy when it comes to spectrum policy generally and, specifically, as we approach international conferences, such as the next ITU Plenipotentiary Conference and WRC-19. My firsthand observations from these conferences solidified, in my mind, how difficult it can be to arrive at consensus decisions, especially when it comes to spectrum and the protectionist approach advocated by some nations. I also fully appreciate the need to start communications with other countries as early as possible so that we are effective in executing on our main priorities.

As far as the U.S. perspective, our priorities are generally aligned with creating a regulatory environment that provides our telecommunications industries the opportunity to innovate, obtain investment, and ensure continued growth for years to come. In part, that means reallocating underutilized spectrum bands globally for new wireless services. We also seek to promote the interests of our citizens, especially those who are unserved and in need of modern and robust connectivity in order to participate in the new digital economy. I recently penned an op-ed on needed changes to the structure and operations of the ITU. In the end, the United States must pursue the best course of action to meet its own spectrum needs. While I am hopeful that the ITU will be part of that process, there is much work ahead before that is a surety.

The Honorable Pete Olson

1. As you are well aware, many telecom companies are looking to rollout 5G as a fixed wireless broadband service, which will compete directly with DSL, Cable, Satellite and Fiber. Can you please elaborate on what the addition of "Wireless Fiber" to the broadband marketplace means for the increasingly competitive marketplace?

As you note, many people refer to 5G as "Wireless Fiber" because it has the potential to offer consumers enormous increases in capacity, much faster speeds, and a significant reduction in latency to meet the demands of a broad range of applications, some of which are not even thought of today. To put this in perspective, the FCC's latest Mobile Competition Report highlights industry developments from 4G LTE: data usage has soared to 13.7 trillion MB, a 42 percent increase from the prior year and a whopping 238 percent increase from just two years ago. On an individual basis, monthly consumer data use is up 39 percent since 2015 and over 50 percent of the American public has gone completely

wireless. But, I see this as just the beginning. Every day more and more consumers are flocking to wireless broadband and the mobile experience it provides despite the differences in speed. In other words, consumers, especially in the less affluent and younger populations, are willing to trade speed for flexibility. This is not too dissimilar to how consumers were willing in the early 2000s to trade wireline voice call quality for inferior wireless voice service that offered mobility. With wireless fiber, those speed differences will be even harder to distinguish, and it will be nearly impossible for the Commission to ignore the exciting benefits and new competitive marketplace options made possible in a 5G universe.

The Honorable Susan W. Brooks

1. We need a balanced approach to spectrum policy, one that takes into account both big and small providers, urban and rural. I am particularly concerned about On-Ramp Indiana, Inc. (along with their customers such as Beck's Hybrids and their farm server customers), a constituent of mine that has been deploying rural broadband using CBRS spectrum in my district. They need to have a fair shot to compete in this upcoming auction, and have asked for just a couple of small license areas. Would you commit to working to find a balanced approach so that rural broadband providers like On-Ramp Indiana, Inc. can compete in the upcoming auction?

For over a year, I have been working with a vast array of stakeholders interested in CBRS spectrum to ensure that it is attractive to as many users and use cases as possible. Debate over the geographic license size has been the most contentious change contemplated from the past rules. Based on countless conversations and compromises, I have formulated recommendations on a way to modify our existing rules for PAL licenses and hope that this will be ready to be considered at an Open Meeting soon. I can commit to you that I believe the approach I have recommended to the Chairman is balanced and addresses all legitimate concerns raised throughout our process. Once the proposal is made public, I would be happy to brief you on it and answer any questions you may have on the potential impact to your state. No one is likely going to be entirely pleased with this outcome, but I believe it achieves a sound and just result.

GREG WALDEN, OREGON
CHAIRMAN

FRANK PALLONE, JR., NEW JERSEY
RANKING MEMBER

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August 9, 2018

The Honorable Brendan Carr
Commissioner
Federal Communications Commission
445 12th Street, S.W.
Washington, DC 20554

Dear Commissioner Carr:

Thank you for appearing before the Subcommittee on Communications and Technology on Wednesday, July 25, 2018, to testify at the hearing entitled "Oversight of the Federal Communications Commission."

Pursuant to the Rules of the Committee on Energy and Commerce, the hearing record remains open for ten business days to permit Members to submit additional questions for the record, which are attached. To facilitate the printing of the hearing record, please respond to these questions with a transmittal letter by the close of business on Thursday, August 23, 2018. Your responses should be mailed to Evan Viau, Legislative Clerk, Committee on Energy and Commerce, 2125 Rayburn House Office Building, Washington, DC 20515 and e-mailed to Evan.Viau@mail.house.gov.

Thank you again for your time and effort preparing and delivering testimony before the Subcommittee.

Sincerely,

Marsha Blackburn
Chairman
Subcommittee on Communications and Technology

cc: The Honorable Michael F. Doyle, Ranking Member, Subcommittee on Communications and Technology

Attachment

FCC Commissioner Brendan Carr – Questions for the Record

Rep. Brett Guthrie

Through the ITU and other global fora, the Federal Communications Commission advances the United States' interests in telecommunications. One way the FCC does and should continue to do so is through our work to ensure spectrum harmonization globally. This effort benefits American consumers by creating economies of scale as well as larger markets for equipment and next-gen services, thus driving down the costs of devices and increasing the speed with which new technologies can make it to American consumers. The FCC's work on this front also enables American businesses to compete across global geographies without the friction that would otherwise accompany vastly different, regional regimes. America is the leading innovator in satellite technology, and continuing our leadership role at the ITU furthers the industry's ability to serve customers, develop new technologies, and create jobs. The FCC also works to promote a pro-competitive environment for U.S. industry abroad. Another important activity undertaken by the FCC is representation, on behalf of the State Department, of U.S. commercial licensees during international coordination with other Administrations.

GREG WALDEN, OREGON
CHAIRMAN

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August 9, 2018

The Honorable Jessica Rosenworcel
Commissioner
Federal Communications Commission
445 12th Street, S.W.
Washington, DC 20554

Dear Commissioner Rosenworcel:

Thank you for appearing before the Subcommittee on Communications and Technology on Wednesday, July 25, 2018, to testify at the hearing entitled "Oversight of the Federal Communications Commission."

Pursuant to the Rules of the Committee on Energy and Commerce, the hearing record remains open for ten business days to permit Members to submit additional questions for the record, which are attached. To facilitate the printing of the hearing record, please respond to these questions with a transmittal letter by the close of business on Thursday, August 23, 2018. Your responses should be mailed to Evan Viau, Legislative Clerk, Committee on Energy and Commerce, 2125 Rayburn House Office Building, Washington, DC 20515 and e-mailed to Evan.Viau@mail.house.gov.

Thank you again for your time and effort preparing and delivering testimony before the Subcommittee.

Sincerely,

Marsha Blackburn
Chairman
Subcommittee on Communications and Technology

cc: The Honorable Michael F. Doyle, Ranking Member, Subcommittee on Communications and Technology

Attachment

Responses of Commissioner Jessica Rosenworcel, Subcommittee on Communications and Technology, July 25, 2018 Hearing Entitled "Oversight of the Federal Communications Commission"

The Honorable Brett Guthrie

1. **When it comes to describing the Commission's work within global for a such as the ITU or others, what role do you believe the Commission should play as an influential voice on spectrum policy and connectivity? This could be in relation to other US agencies and foreign policy makers or relative to domestic and foreign stakeholders.**

Historically, the United States government—led by the Department of State and supported by the policy and technical expertise of the Department of Commerce and the Federal Communications Commission—has played an important role shaping international frameworks for spectrum and connectivity policies. We have led the world with our support of innovation and competition while highlighting that these policies are compatible with a commitment to human rights and consumer protection.

I believe that continued US advocacy on the global stage is important. To this end, I believe the FCC should continue to play a role in spectrum and connectivity policies at the International Telecommunication Union and other comparable international fora. Note that while the Department of Commerce—through the National Telecommunications and Information Administration—is the primary coordinator for federal spectrum, spectrum matters involving commercial use, as well as use by local and state authorities, is uniquely subject to the oversight of the FCC.

Accordingly, I believe the FCC should coordinate with other federal authorities and interagency committees on international telecommunications matters. At a practical level, this means participating in US delegations and leading US participation in international conferences, assisting with preparatory efforts, advising on the status of FCC actions, helping with the negotiation and implementation of telecommunications trade agreements, and conducting economic, statistical, legal, and technical studies to support the development of positions and policies, among other things.

In addition, I believe the FCC should engage with industry interests and other non-governmental stakeholders. This can be accomplished in a variety of different ways. The agency can establish external advisory committees pursuant to the Federal Advisory Committee Act. It also can seek input through solicitations published in the Federal Register. It also can develop more informal vehicles for public participation, provided they offer all stakeholders an equal opportunity to give input and share their perspectives. Consistent with this approach, on June 9, 2016, the FCC rechartered its World Radiocommunication Conference Advisory Committee to provide advice, technical support, and recommend proposals for the ITU's upcoming 2019 World Radiocommunication Conference. This committee—which is composed of public and private sector members—is focused on the set of spectrum issues identified in the WRC-19 agenda with the goal of identifying US priorities and objectives. I fully expect that the work of this committee will help the FCC formulate meaningful recommendations.

In sum, I believe the upcoming ITU Plenipotentiary and World Radiocommunication Conferences are important opportunities for the US—supported by the FCC—to forcefully

advocate for ITU efforts to bridge the digital divide, allocate global spectrum resources, and support telecommunications development around the world. I believe it is also possible for the US to accomplish these goals while ensuring that ITU policymaking stays within the scope of its mandate.

The Honorable Yvette Clarke

1. **The FCC's efforts to expand broadband access in rural areas are appropriate, but the Communications Act also mandates that the Commission help low-income communities get access to broadband. A recent Pew Research Center survey on internet use found that more than 19 percent of Americans who do not use the internet cite the expense for internet service or a computer as the reason.**

   Given the clear instructions Congress gave to the Commission in the law, and the facts on the ground, it's vexing to me that the FCC would push struggling families to the back of the line when it comes to broadband access. Specifically, Mr. Chairman, your proposal to strip phone or internet service from 8.3 million Americans is draconian.

   a. **Can you explain the problems faced by low-income Americans struggling to afford internet access and why cutting 70% of providers, capping the program, or cutting out fully subsidized service would be devastating to Americans using the Lifeline program to get back on their feet?**

I do not support the proposal by the Federal Communications Commission that would cut 70% of existing users from the Lifeline program.

The Lifeline program got its start in 1985, when President Reagan was in the White House and nearly all communications involved a cord and a jack in the wall. When it began, it supported the cost of basic telephony in low-income households. The idea was simple—without the ability to call others, it would be difficult to secure jobs, seek out healthcare, pursue education, or seek assistance in a disaster. Over time, the FCC updated this program to reflect the current state of technology. To this end, more than a decade ago it added wireless service. Later, the FCC sought to add broadband, recognizing that internet access is the dial tone of the digital age.

Unfortunately, the agency's most recent proposal does not continue this course. Instead of modernizing the program, it proposes to slash it from front to back. This will harm millions who presently rely on the program. That includes nearly 2.2 million elderly who depend on Lifeline for their healthcare and security as they age on limited incomes. It includes 1.3 million veterans who rely on Lifeline to reacclimate to civilian life. It includes 500,000 people on Puerto Rico who are still recovering from last year's devastating hurricane season. It also includes those who seek assistance from domestic violence programs and homeless youth—and many other similar groups that rely on low-cost communications services for safety.

It does not have to be this way. It is possible to address concerns about the Lifeline program through more thoughtful reform. All carriers participating in the program should be subject to regular audits. In addition, the FCC should consider increased penalties for those carriers that fail to follow program rules—including debarment prohibiting future participation. It is also important to note that key reforms are already underway, including the introduction of a national verifier system in six states. This should be expanded nationwide as soon as feasible.

I believe that it is worth the effort to modernize and improve the Lifeline program. But I am concerned that the proposal before the agency is not only cruel, it is at odds with the FCC's statutory duty to support service to "all regions of the Nation, including low-income consumers."

b. I share your concern about the Homework gap. How does the FCC's assault on Lifeline affect the homework gap, and how can better help our students compete?

Today, seven in ten teachers assign homework that requires broadband access. But data from the FCC show that as many as one in three households do not subscribe to internet service. Where those numbers overlap is the Homework Gap. According to the Senate Joint Economic Committee, the Homework Gap is real. By their estimate, it affects 12 million children across the country.

The Homework Gap harms students in rural areas and urban areas—wherever they lack access to the reliable internet service that is now necessary for so much nightly schoolwork. That means students are sitting in fast food restaurants and writing their papers with fries, just to get a free Wi-Fi signal. It means there are parents who have to make elaborate plans to head to the homes of friends and relatives just to ensure their children have a place to get online for homework. It means too many students sitting in the school parking lot well after the final bell has rung because it is the only place they can get a reliable connection.

We can applaud the grit of those who find a way to cobble together a connection for schoolwork. But we should also do better—and the Lifeline program could help. If it was properly reformed and refocused on broadband, it could assist millions of students in low-income households get the internet access they need for basic homework.

In 2016, the FCC sought to make this happen when it updated the Lifeline program. Pursuant to that effort, wireless services eligible under the program would feature devices with Wi-Fi chips for internet access and permit tethering for use by other devices, such as a computer. Unfortunately—over my objection—the FCC rolled back these changes in 2017. This is regrettable. I believe the FCC needs to reconsider this course. Were we to do so, it would help bridge the Homework Gap. It also would help ensure that in the digital age no student will lack the skills necessary for full participation in modern civic, social, and economic life.

