

ACCOUNTABILITY AND OVERSIGHT OF THE  
FEDERAL COMMUNICATIONS COMMISSION

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HEARING  
BEFORE THE  
SUBCOMMITTEE ON COMMUNICATIONS AND  
TECHNOLOGY  
OF THE  
COMMITTEE ON ENERGY AND  
COMMERCE  
HOUSE OF REPRESENTATIVES  
ONE HUNDRED SIXTEENTH CONGRESS

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## **ACCOUNTABILITY AND OVERSIGHT OF THE FEDERAL COMMUNICATIONS COMMISSION**

**WEDNESDAY, MAY 15, 2019**

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

The subcommittee met, pursuant to call, at 10:01 a.m., in the John D. Dingell Room 2123, Rayburn House Office Building, Hon. Mike Doyle (chairman of the subcommittee) presiding.

Members present: Representatives Doyle, McNerney, Clarke, Loeb sack, Veasey, McEachin, Soto, O'Halleran, Eshoo, DeGette, Butterfield, Matsui, Welch, Luján, Schrader, Cárdenas, Dingell, Pallone (ex officio), Latta (subcommittee ranking member), Scalise, Olson, Kinzinger, Bilirakis, Johnson, Walberg, Gianforte, and Walden (ex officio).

Also present: Representative Griffith.

Staff present: AJ Brown, Counsel; Jeffrey C. Carroll, Staff Director; Jennifer Epperson, FCC Detailee; Evan Gilbert, Press Assistant; Tiffany Guarascio, Deputy Staff Director; Alex Hoehn-Saric, Chief Counsel, Communications and Consumer Protection; Zach Kahan, Outreach and Member Service Coordinator; Jerry Leverich, Senior Counsel; Dan Miller, Policy Analyst; Phil Murphy, Policy Coordinator; Kaitlyn Peel, Digital Director; Tim Robinson, Chief Counsel; Andrew Souvall, Director of Communications, Outreach, and Member Services; Robin Colwell, Minority Chief Counsel, Communications and Technology; Jordan Davis, Minority Senior Advisor; Kristine Fargotstein, Minority Detailee, Communications and Technology; Margaret Tucker Fogarty, Minority Staff Assistant; Peter Kielty, Minority General Counsel; and Tim Kurth, Minority Deputy Chief Counsel, Communications and Technology.

Mr. DOYLE. Good morning, everyone. The Subcommittee on Communications and Technology will now come to order. The Chair will now recognize himself for 5 minutes.

### **OPENING STATEMENT OF HON. MIKE DOYLE, A REPRESENTATIVE IN CONGRESS FROM THE COMMONWEALTH OF PENNSYLVANIA**

I would like to welcome everyone to this subcommittee's first oversight hearing of the Federal Communications Commission. I'd also like to thank FCC Chairman Pai and the other Commissioners for appearing before us today.

I am also very happy to welcome Commissioner Starks, both to this hearing and to the Commission. It's good to have the Commission back up to full strength. Welcome, Commissioner Starks.

It has been 9 months since this subcommittee's last oversight hearing, and while a lot has happened in that time, a lot of issues that were a concern then remain unresolved today.

At our last oversight hearing, I expressed concerns about revelations that mobile carriers were selling location data. I expressed concerns about the Mobility Fund II proceeding, competition policy, and U.S. spectrum policy.

At that time, I expressed serious concerns to Chairman Pai about reports that mobile wireless carriers were sharing individuals' real-time location data with third parties.

Chairman Pai, you told us that you were investigating this issue. Today, we still don't have assurances that these practices have stopped. And since we first heard about this problem, new even more troubling revelations have emerged, namely, that this data was being sold to bounty hunters and God knows who else.

Americans don't know who had access to this data, who sold the data, or whether anyone is going to be held accountable because we have heard nothing about it yet from the FCC.

At this juncture, neither Congress nor the American people understand the scope of what happened and no one has been held accountable for this reckless and illegal practice.

The situation as it stands is unacceptable, as has been the lack of communication to this committee and the American people about this situation. We need answers.

Nine months ago, I also expressed concerns about the Mobility Fund II proceeding. In a way, I am happy that the Commission has acknowledged that the process and the data in this proceeding were deeply flawed.

However, rural communities around the country remain unserved and these funds remain unobligated. All we have heard from the Commission is that you are investigating this issue, too. It is my understanding that the Commission has not requested new coverage data from carriers to correct its flawed maps.

I don't know why you've waited so long to act to fix this problem, and today we sit here without a resolution in sight.

In the same vein, I expressed concerns about old and faulty data being used to justify Commission decisions regarding competition policy in the Business Data Service market.

Today, the Commission is considering using data we all agree to be faulty and misleading as well as data collected years ago that is long past stale in a forbearance proceeding by USTelecom.

The Commission needs to clean up and update its data before it makes decisions that could seriously hamper the deployment of new fiber, limit consumer choice, and negatively affect Government agencies that still rely on legacy infrastructure for national security and public safety notices.

And as we look to the future of 5G and the need for more mid-band, much thought is being given to the C-band. I have seen this band valued as high as \$70 billion, and I think making a part of this band available for 5G service is important for meeting the Nation's mid-band spectrum needs.

But given that much of the country has no Gs, shouldn't we try to use the value of this band to fund the deployment of broadband to unserved areas as well as to help with adoption and affordability?

Simply put, it seems irresponsible and unconscionable to give money to four foreign satellite companies when the broadband infrastructure needs of our Nation are so great.

And finally, on the topic of robocalls, this problem is out of control. Americans this year will receive 12 billion more robocalls than they received last year. And since the Trump administration took office Americans have gone from receiving 2 billion calls a month to 5 billion calls a month.

It has become a game for Members of Congress to get robocalled while they are complaining about robocalls, which happened to Mr. Soto at our last hearing on robocalls.

We are past the point of band aids. We need real solutions to address the problem and we need real protections for the American people.

I want to thank you all for being here today, and I look forward to the testimony of our witnesses.

[The prepared statement of Mr. Doyle follows:]

#### PREPARED STATEMENT OF HON. MIKE DOYLE

Good morning, I'd like to welcome everyone to this subcommittee's first oversight hearing on the Federal Communications Commission. I'd also like to thank FCC Chairman Pai and the other Commissioners for appearing before us today.

I'm also very happy to welcome Commissioner Starks, both to this hearing and to the Commission. It's good to have the Commission back up to full strength.

It's been 9 months since this subcommittee's last oversight hearing, and while a lot has happened in that time, a lot of the issues that were a concern then remain unresolved today. At our last oversight hearing, I expressed concerns about revelations that mobile carriers were selling location data, the Mobility Fund 2 proceeding, competition policy, and US spectrum policy.

At that time, I expressed concerns to the Commission about reports that mobile wireless carriers were sharing individuals' real time location data with 3rd parties. Chairman Pai, you told us that you were "investigating" this issue. Today, we still don't have assurances that these practices have stopped. And since we first heard about this problem, new even more troubling revelations have emerged. Namely, that this data was sold to bounty hunters and God knows who else. Americans don't know who had access to this data, who sold the data, or whether anyone is going to be held accountable, because we have heard nothing about it yet from the FCC. At this juncture neither Congress nor the American people understand the scope of what happened, and no one has been held accountable for this reckless and illegal practice. The situation as it stands is unacceptable, as has been the lack of communication to this committee and the American people about this situation. We need answers.

Nine months ago, I also expressed concerns about the Mobility Fund 2 proceeding. In a way I'm happy the Commission has acknowledged that the process and the data in this proceeding were deeply flawed. However, rural communities around the country remain unserved and these funds remain unobligated. All we have heard from the Commission is that you are "investigating" this issue too. It is my understanding that the Commission has not requested new coverage data from carriers to correct its flawed maps. I don't know why you've waited so long to act to fix this problem, and today we sit here without a resolution in sight.

In the same vein, I expressed concerns about old and faulty data being used to justify Commission decisions regarding competition policy in the Business Data Service market. Today, the Commission is considering using data we all agree to be faulty and misleading, as well as data collected years ago that is long past stale, in a forbearance proceeding by US Telecom. The Commission needs to clean up and update its data before it makes decisions that could seriously hamper the deployment of new fiber, limit consumer choice, and negatively affect Government agencies

that still rely on legacy infrastructure for national security and public safety services.

As we look to the future of 5G and the need for more mid-band, much thought is being given to the C-band. I have seen this band valued as high as \$70 billion. I think making a part of this band available for 5G service is important for meeting the Nation's mid-band spectrum needs. But given that much of the country has No Gs, shouldn't we try to use the value of this band to fund the deployment of broadband to unserved areas as well as to help with adoption and affordability? Simply put, it seems irresponsible and unconscionable to give that money to four foreign satellite companies when the broadband infrastructure needs of our Nation are so great.

Finally, on the topic of robocalls, this problem is out of control. Americans this year will receive 12 billion more robocalls than they received last year. And since the Trump administration took office Americans have gone from receiving 2 billion calls a month to 5 billion. It's become a game for Members of Congress to get robocalled while they are complaining about robocalls, which happened to Mr. Soto at our last hearing on robocalls! We are past the point of band-aids. We need real solutions to address this problem, and real protections for the American people.

Thank you again for being here and I look forward to the testimony of our witnesses.

Mr. DOYLE. And now the Chair will recognize Mr. Latta, ranking member of the subcommittee, for 5 minutes for his opening statement.

**OPENING STATEMENT OF HON. ROBERT E. LATTA, A  
REPRESENTATIVE IN CONGRESS FROM THE STATE OF OHIO**

Mr. LATTA. I thank my friend, the chair of the subcommittee. Thanks very much for having this hearing this morning, and also welcome to the Commissioners, who are here to discuss a variety of issues including infrastructure, spectrum, rural broadband, and robocalls.

I think it's safe to say there is more agreement on the issues I just mentioned than disagreement. We can all agree on the importance of bringing the benefits of broadband to all Americans, especially rural Americans.

But despite the work from this committee and the FCC, we still have Members on both sides of the aisle whose constituents lack broadband.

Earlier this year, I was fortunate to have two of the FCC Commissioners join me in my district to see firsthand the connectivity my constituents enjoy and the additional connectivity they so desperately need.

Commissioner Carr joined me for a visit, and the one stop turned to a five-stop day when we visited a local hospital and when we talked about telehealth.

We went out to a local WISP, and the Commissioner was up on top of the elevator. We will mention he was up on top. The rest of them were taking great pictures of him up there. But he also visited one of our sheriffs and talked about 9 091 091.

He was out to talk about what was happening with one of our local TV stations, the public WBGU and questions about repack, and then joined us at a farm where we were talking about agriculture and what we need to do with broadband there, and we appreciated that.

And also we had Commissioner Carr join us 2 days later in the district in Defiance, Ohio, where he met with internet service providers across my district to discuss broadband access and the avail-

ability in northwest and west central Ohio, and I want to thank both Commissioners for joining us that day and that week.

Being about to go out into the community and experience broadband connectivity or lack thereof is an incredibly useful tool to know where we need to target the precious Federal funding to support additional broadband development.

To help further inform the FCC's ability to tell where broadband is and, more importantly, where it isn't, I introduced legislation last week with my good friend, the gentleman from Vermont, that would require the FCC to establish a challenge process to verify fixed and mobile broadband service coverage data.

Local officials in my district have conducted their own broadband studies to evaluate their residence broadband needs and proved that there were holes in the FCC maps.

After hearing about these local actions, I started working on my Broadband Mapping After Public Scrutiny Act, or Broadband MAPS Act, to enhance the data the FCC already collects by involving additional entities, such as local and State governments, to verify FCC's data.

I look forward to hearing more about the Commission's mapping efforts and ways the agency is working to get a better picture of broadband connectivity in this country so that we can target truly unserved areas.

I also look forward to hearing about the FCC's plans to continue making more spectrum available at 5G. As I have learned, 5G requires a variety of spectrum inputs—low-band, mid-band, high-band, as well as unlicensed.

This is because each part of the band has different characteristics and all types are needed to build a robust 5G network capable of serving this country—including rural America.

The FCC cleared a huge swath of mid-band spectrum in the incentive auction and carriers are now deploying innovative broadband offerings on that spectrum.

The Commission has also successfully auctioned off spectrum in the high band and is actively working to make more spectrum available in the low band and unlicensed spaces.

Another issue with broad bipartisan support is the need to stop the scourge of illegal robocalls. They are not wanted. They are tricking people into scams, and it's costing Americans billions of dollars.

It is one of the biggest issues I hear when I am out in the district and it is affecting everyone. At our hearings on this topic last month, it became clear my district is not unique with these concerns.

We must—and will—do everything in our power to stop the annoying and illegal robocalls while protecting the technology for the lifesaving, pro-consumer services people use and need.

I am encouraged by the work of industry to protect consumers from unwanted robocalls by developing a set of procedures to authenticate caller ID information associated with telephone calls to combat unlawful calls and caller ID spoofing.

I also appreciate the FCC's work in holding industry accountable for delivering that system to the public as early as the end of this

year. I am optimistic that this will curb some of the illegal unwanted robocalls.

But, as technology continues to evolve, so do the tactics the bad actors use to illegally spoof numbers to make fraudulent calls.

For this reason I introduced with my friend, the chairman of our subcommittee, the Support Tools to Obliterate Pesky Robocalls Act, or STOP Robocalls Act. Our bill would give the FCC additional tools in its robocall toolbox to go after the bad actors.

Specifically, the STOP Robocalls Act would help the FCC identify these scammers and empower consumers with robocall blocking technology.

I look forward to hearing from our witnesses today and I thank the chairman again for calling this hearing.

I yield back.

[The prepared statement of Mr. Latta follows:]

#### PREPARED STATEMENT OF HON. ROBERT E. LATTA

Good morning. I am happy to welcome the Commission here today to discuss its progress on a variety of issues, including infrastructure, spectrum, rural broadband, and robocalls.

I think it's safe to say that there is more agreement on the issues I just mentioned than disagreement. We can all agree on the importance of bringing the benefits of broadband to all Americans, especially rural Americans. But, despite the work from this committee and the FCC, we still have Members on both sides of the aisle whose constituents lack broadband.

Earlier this year, I was fortunate to have two FCC Commissioners join me in my district to see firsthand the connectivity my constituents enjoy and the additional connectivity they so desperately need. Commissioner Carr joined me for a visit at a hospital in Toledo, Ohio where we saw how health care professionals are embracing telemedicine for stroke patients. We also visited a local WISP who showed us how they provide broadband to the Wood County Sherriff's call dispatch center and a local farmer - where, of course, the Commissioner couldn't resist the opportunity to see an antenna up close and personal on the top of a grain elevator! My feet stayed on the ground. My trip with Commissioner Carr continued with a stop at WBGU in Bowling Green and ended on a farm in Napoleon, Ohio where we saw how they're utilizing precision agriculture technologies to help make their farm more efficient. Two days later, Commissioner O'Rielly joined me in Defiance, Ohio where we met with internet service providers across my district to discuss broadband access and availability in Northwest and West Central Ohio.

Being able to go out into the community and experience broadband connectivity, or lack thereof, is an incredibly useful tool to know where we need to target precious Federal funding to support additional broadband growth.

To help further inform the FCC's ability to tell where broadband is, and more importantly, where it still isn't, I introduced a bill last week with my good friend from Vermont, Mr. Welch, that would require the FCC to establish a challenge process to verify fixed and mobile broadband service coverage data. Local officials in my district have conducted their own broadband studies to evaluate their residents' broadband needs and prove that there are holes in the FCC maps. After hearing about these local actions, I started working on the "Broadband Mapping After Public Scrutiny Act" or "Broadband MAPS Act" to enhance the data the FCC already collects by involving additional entities, such as local and State governments, to verify FCC data. I look forward to hearing more about the Commission's mapping efforts and ways the agency is working to get a better picture of broadband connectivity in this country so that we can target the truly unserved areas.

I also look forward to hearing about the FCC's plans to continue making more spectrum available for 5G. As I have learned, 5G requires a variety of spectrum inputs - low-band, mid-band, and high-band, as well as unlicensed. This is because each part of the band has different characteristics, and all types are needed to build a robust 5G network capable of serving this country - including rural America. The FCC cleared a huge swath of mid-band spectrum in the incentive auction and carriers are now deploying innovative broadband offerings on that spectrum. The Commission has also successfully auctioned off spectrum in the high-band and is actively working to make more spectrum available in the low-band and unlicensed spaces.



Another issue with broad bipartisan support is the need to stop the scourge of illegal robocalls. They're not wanted. They're tricking people into scams. And it's costing Americans billions of dollars. It's one of the biggest issues I hear about from families in Ohio. At our hearing on this topic last month, it became clear that my district is not unique in these concerns. We must -- and we will -- do everything in our power to stop the annoying and illegal robocalls, while protecting the technology for the life-saving, pro-consumer services people need.

I am encouraged by the work of industry to protect consumers from unwanted robocalls by developing a set of procedures to authenticate caller ID information associated with telephone calls to combat unlawful caller ID spoofing. I also appreciate the FCC's work in holding industry accountable for delivering that system to the public as early as the end of this year. I am optimistic that this will curb some of the illegal, unwanted robocalls. But, as technology continues to evolve, so do the tactics that bad actors use to illegally spoof numbers and make fraudulent calls.

For this reason, I introduced the Support Tools to Obliterate Pesky Robocalls Act or STOP Robocalls Act. My bill would give the FCC additional tools in its robocall toolbox to go after bad actors. Specifically, the STOP Robocalls Act would help the FCC identify these scammers and empower consumers with robocall blocking technology.

I look forward to hearing our witnesses' views on how we can all work together to further our existing efforts on infrastructure, spectrum, rural broadband, and robocalls. With that, Mr. Chairman, I yield back.

Mr. DOYLE. The gentleman yields back.

The Chair now recognizes Mr. Pallone, chairman of the full committee, for 5 minutes for an opening statement.

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

Mr. PALLONE. Thank you, Chairman Doyle.

The American people look to the FCC to ensure that they can reliably make phone calls, send text messages, watch TV, and access the internet at reasonable rates.

They rely on these technologies to check in with loved ones, call for help, operate their businesses, get info during disasters, and engage with people across the globe.

To properly fulfill this duty, it has always been my belief that the FCC must put consumers first. But over the last 2 years, this FCC has too often turned its back on the public, putting the big corporate interests first.

This FCC has heartlessly and needlessly proposed drastic cuts to the Lifeline program. This critical subsidy program for telephone and internet access is oftentimes the only way that low-income Americans can keep in touch with friends or family, explore job options, or make medical appointments.

And then it slashed media ownership rules to allow the biggest media companies to grow even larger, controlling more and more of the news and entertainment that reach Americans and making it more difficult for underrepresented populations such as minorities and women to own or manage media companies.

The FCC has repeatedly deferred to companies on voluntary measures to correct major consumer problems like robocalls or widespread communication failures after disasters like Hurricanes Maria and Michael.

And this FCC has taken more than a year to investigate the widespread disclosure of real-time location data by wireless carriers without taking any public action to require the carriers to stop sharing this data.

So putting aside bad policy, the FCC has also been derelict in its duty. In the first 2 years of the Trump Presidency we have seen this agency abdicate many of its important roles.

For example, the Commission has, for the most part, made itself irrelevant when it comes to protecting Americans' access to the dominant communications technology of our time, and that is the internet.

Even more shockingly, when the Trump administration took over, the new FCC deliberately walked back its role in cybersecurity, leaving Americans vulnerable.

I am hopeful things will change, but I fear even if they do, we are starting from behind because of the decisions this Commission has already made.

And finally, while it touts transparency and the importance of facts, this Commission, much like the Trump administration, has misled the public and hid some of its actions from public view.

For example, the Commission recently claimed victory over the digital divide, only for us to later learn that the Commission was relying on seriously flawed data.

According to reports, the Chairman voted to release the congressionally mandated broadband report knowing that the data in the draft was inaccurate.

Despite what the President thinks, the truth, in fact, matters. Nevertheless, the Chairman recently touted a new \$20 billion infrastructure program, only for us to learn afterwards that it was being funded with repurposed money from the Universal Service Fund.

And at the very same time, the FCC hid its proposal to cap that very same Universal Service Fund, limiting the support that goes to struggling Americans, to veterans, to schools, to libraries, to rural healthcare facilities, and Americans living in rural and hard-to-reach areas.

Americans don't need repurposed funds and they don't need gimmicks. People all over this country are looking for a real infrastructure plan that invests in our future and strengthens our economy, and that is why we are introducing a comprehensive infrastructure package today, the LIFT America Act, that includes \$40 billion of broadband infrastructure funding for unserved and underserved areas, \$12 billion for Next Generation 9 091 091, and \$5 billion for financing new infrastructure projects.

The American people deserve better than what this agency has given them. They deserve an FCC that acts in their best interests and not on behalf of the entities it is supposed to be overseeing.

Oversight is critical to getting the FCC back on the right track, and I appreciate the members of the Commission coming before us today.

I have faith in the FCC as an institution, and I do have faith in the exemplary career public servants that work there.

[The prepared statement of Mr. Pallone follows:]

#### PREPARED STATEMENT OF HON. FRANK PALLONE, JR.

The American people look to the Federal Communications Commission (FCC) to ensure they can reliably make phone calls, send text messages, watch television, and access the internet at reasonable rates. They rely on these technologies to check

in with loved ones, call for help, operate their businesses, get information during disasters, and engage with people across the globe. To properly fulfill this duty, it has always been my belief that the FCC must put consumers first.

But, over the last 2 years, this FCC has too often turned its back on the public - putting the big corporate interests first.

This FCC has heartlessly and needlessly proposed drastic cuts to the Lifeline program. This critical subsidy program for telephone and internet access is oftentimes the only way that low-income Americans can keep in touch with friends or family, explore job options, or make medical appointments.

It slashed media ownership rules to allow the biggest media companies to grow even larger—controlling more and more of the news and entertainment that reach Americans and making it more difficult for underrepresented populations such as minorities and women to own or manage media companies.

It has repeatedly deferred to companies on voluntary measures to correct major consumer problems, like robocalls or widespread communications failures after disasters like Hurricanes Maria and Michael.

The FCC has taken more than a year to investigate the widespread disclosure of real-time location data by wireless carriers without taking any public action to require the carriers to stop sharing this data.

Putting aside bad policy, the FCC has also been derelict in its duty. In the first 2 years of the Trump Presidency we've seen this agency abdicate many of its important roles.

For example, the Commission has, for the most part, made itself irrelevant when it comes to protecting Americans' access to the dominant communications technology of our time—the internet.

Even more shockingly, when the Trump administration took over, the new FCC deliberately walked back its role in cybersecurity, leaving Americans vulnerable. I'm hopeful things will change, but I fear even if they do, we're starting from behind, because of the decisions this Commission has already made.

Finally, while it touts transparency and the importance of facts, this Commission, much like the Trump administration, has misled the public and hid some of its actions from public view.

For example, the Commission recently claimed victory over the digital divide, only for us to later learn the Commission was relying on seriously flawed data. According to reports, the Chairman voted to release the congressionally mandated broadband report knowing that the data in the draft was inaccurate. Despite what the President thinks, the truth matters.

Nevertheless, the Chairman recently touted a new \$20 billion infrastructure program, only for us to learn afterwards that it was being funded with repurposed money from the Universal Service Fund.

And at the very same time, the FCC hid its proposal to cap that very same Universal Service Fund, limiting the support that goes to struggling Americans, veterans, schools, libraries, rural healthcare facilities, and Americans living in rural and hard to reach areas.

Americans don't need repurposed funds, and they don't need gimmicks. People all over this country are looking for a real infrastructure plan that invests in our future and strengthens our economy. That's why we are introducing a comprehensive infrastructure package today, the LIFT America Act, that includes \$40 billion of broadband infrastructure funding for unserved and underserved areas, \$12 billion for next generation 9 091 091, and \$5 billion for financing new infrastructure projects.

The American public deserves better than what this agency has given them. They deserve an FCC that acts in their best interest and not on behalf of the entities it is supposed to be overseeing.

Oversight is critical to getting the FCC back on the right track, and I appreciate the members of the Commission coming before us today. I have faith in the FCC as an institution and I have faith in the exemplary career public servants that work there.

Mr. PALLONE. I have a minute left, Mr. Chairman. I would like to yield back a minute to Ms. Matsui.

Ms. MATSUI. Thank you, Chairman Pallone.

As cochair of the Spectrum Caucus, I remain focused on ensuring our spectrum resources are allocated effectively, equitably, and rapidly.

The C-band has been one of the most complex and high-stakes proceedings in front of the Commission and Congress. That is why I plan to release legislation called the Win 5G Act to propose a comprise consensus-based approach to rapidly reallocate the spectrum in a manner that addresses many of the concerns raised on the Commission's record.

I thank the wireless, cable, and rural stakeholders preparing to support this effort. Fundamentally, a quick, equitable, and consensus-based transition process is the only way to avoid this proceeding being slowed down or tied up in court.

And I want to be clear that this chamber is not willing to accept an undesirable result. I look forward to working with all of you and all the interested parties to ensure the spectrum necessary for the United States to win the race to 5G is allocated rapidly.

Thank you, and I yield back.

Mr. DOYLE. Gentleman yields back.

The Chair now recognizes the ranking member of the full committee, Mr. Walden, for 5 minutes for an opening statement.

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

Mr. WALDEN. Good morning, Mr. Chairman. Thanks for having this hearing. I want to welcome all the Commissioners and, Chairman Pai, we are glad to have you all back.

Commissioner Starks, welcome aboard. We are glad to have you here. Buckle in. It is going to be a lot of fun. So we are glad to have you here.

And I know there is a lot of work being done and, Chairman Pai, I appreciate your leadership and that of the other Commissioners. I think we all have agreement we need to build out more broadband to more places in America, period, hard stop.

We should be all for that. Last Congress we worked together in a bipartisan way to get that done and there is more work to be done.

We passed the RAY BAUM'S Act to reauthorize the FCC for the first time in, I don't know, 20, 30 years. We gave you some new authority and we gave you new authority to go after robocallers, which I believe you are in the process of doing. Not as fast as some would like, including probably everybody in the room and you, but you are headed there and I think that is really important.

And we are wrestling with legislation here. We haven't moved anything yet but, clearly, we have ideas on this committee about what else we need to do stop these unwanted not only nuisance but perhaps very risky robocallers that interfere, as we have heard from testimony, cancer centers in America spoofing that they are actually making calls from there. We all need to be together on this and pulling the same direction to put a stop to bad behavior.

And I know in some of the meetings I have had with some of the carriers they are willing to lean in full force. But they also said, look, when we do that we are probably going to catch a call that isn't really a robocall, and as much as we are sitting up here pounding to do more, we also have to understand probably what you are looking at in terms of a safe harbor provision is really important because we will have those same carriers up here, pound-

ing on them for catching what they thought was a robocall and it wasn't.

And so I think we have got to be smart about how we do this. We got to be aggressive about how we do this. We all know the numbers. We all know the problem. A lot of it is offshore.

But, clearly, there is more that can be done and there is more to connect the rural areas. I have done 20 town halls this year, more than any Member in the House, and one of them was out in Spray, Oregon, population 150, and they kind of do a little booster thing to keep the signal going while you're in town, which is one block.

But the educators there said, but when we get away from that kids don't have connection when they go home, and I know that's been a huge issue for Commissioner Rosenworcel and all of us, I think. How do we do this?

And I know there are funds that have been released. Satellite carriers say, "We can go into these remote areas." This county, by the way, has one person for every 9 miles of power line.

So this is remote. You have been out there. Others have been out there. And so we have got to look at alternative platforms that work to get in there.

As we honor today police officers' memorial day and the 106 officers who lost their lives, we have to remember we have got FirstNet building out. We have got the issue that some of you have raised—the diversion of 9 091 091 fees.

We have got the whole T-band issue as well, and Commissioner O'Rielly, I think you point out in your testimony the diversion rate in one State is 90 percent. This ought to be mail fraud, frankly, because some communities and States are telling their consumers on their phone bill you are paying for 9 091 091 when in fact they take the money and spend it elsewhere.

And so I am glad you all are making a point of this because we need to take care of our 9 091 091 system and take care—and consumers ought to have a right to know that they are getting defrauded by their own governments, in some cases, where they say on your phone bill, I am taking money for 9 091 091 and, oh by the way, I am going to spend it somewhere else, and I am going to come to Washington and say, I need more money.

That is not helping our law enforcement, and the politicians ought to be held accountable. So in the FirstNet legislation of 2012 in the Middle Class Tax Relief Act, which I helped to author, we did a lot to set up a system to serve our first responders.

Part of the FirstNet deal included an agreement by public safety to receive prime spectrum for broadband in exchange for T-band spectrum. That was part of the agreement. I was there. I helped negotiate it.

We all agreed that T-band would phased out over time once mission critical features are available. However, with a 2021 start date for the process impending, concerns have been raised about planning for the move.

So today, I am floating a proposal that I welcome your thoughts on as we reconcile these issues. My draft would delay the start of the T-band process for another 3 years to 2024.

To be eligible for this delay, States and localities would simply need to comply with a very commonsense policy the bipartisan bills have already called for, which is to put a stop to 9 091 091 diversion.

So you want to get a delay on T-band, got it. Stop diverting your 9 091 091 money and defrauding your own customers. So that is a draft we are putting out.

There is a lot more we can talk about here. Look forward to it. We are glad you are here and, Mr. Chairman, I yield back.

[The prepared statement of Mr. Walden follows:]

#### PREPARED STATEMENT OF HON. GREG WALDEN

Good morning, I welcome all our returning Commissioners, and of course our newest, Mr. Starks. I'm not sure what we should learn from the fact that the medical community in Kansas keeps producing telecom lawyers.

I'm pleased that subcommittee Chairman Doyle has convened this hearing and look forward to the important discussion on infrastructure.

And on this front, I very much appreciate the work of Chairman Pai and the Commission to accelerate broadband deployment, through public investment, spectrum policy, and just as importantly, the clearing of regulatory red tape.

Last session, Republicans and Democrats on E&C shared a successful commitment to reaching unserved communities with broadband dollars.

So, I'm not sure why the majority leadership chose to launch an all-Democrat rural broadband task force this week when we have worked together so productively in the past and shown conclusively that this is not, or at least should not be, a partisan issue.

I hope this is not a bad sign for prospects of working together on broadband infrastructure this year. Because this is important.

I recently held a town hall in Spray, Oregon, a rural community of about 150 people in my district. A social studies teacher explained during my town hall that, while the internet at the school is OK, he worried about the access his students have when they get home as education and homework become increasingly reliant upon the internet. Speeds and options are limited since they are several miles from the nearest commercial fiber line.

Folks in places like Spray don't have the luxury of even 10 megabits to support basic streaming video, or online education and business opportunities. With scarce Federal dollars, this is where our focus should be. So, I want to hear how the inter-agency consultation we legislated last year is coming along as we consider infusing much more than the six hundred million we did during the last Congress. Eliminating the digital divide will require a substantial investment, but focus is important, so we do not repeat the failures of the Obama stimulus plan.

On that note, let me also highlight the role that our friends on the electricity side do for our rural communities. We need them more and more as partners in these broadband deployments, whether they are sharing facilities or deploying broadband themselves, so in the process of doing the good work of clearing out the regulatory red tape for 5G, the Commission should make sure to maintain flexibility to address safety and technical concerns that may come up.

It is also imperative that we put a stop to 9 091 091 fee diversion so that States stop from using fees paid by consumers to support essential public safety services as slush funds. Judging from the FCC report in December, progress has been mixed, despite bipartisan attention to this issue. As Commissioner O'Rielly pointed out in his testimony, the diversion rate was as high as 90% in one State. This situation is very alarming as investment in Next Generation 9 091 091 (NG911) is also part of the infrastructure discussion. The estimated cost to taxpayers starts at \$10-11 billion and could go several billion higher according to the administration's cost study.

As an author of the legislation that created FirstNet in 2012 via the Middle-Class Tax Relief Act, I am familiar with the commitments and the tradeoffs we have made. What we do need to focus on, and the FCC can help us with today, is how best to ensure that any successful infrastructure effort this year will not be undermined by the shameful practice of fee diversion.

Part of the FirstNet deal included an agreement by public safety to receive prime spectrum for broadband in exchange for T-band spectrum, which all agreed could be phased out over time once mission critical features are available. However, with

the 2021 start date for the process impending, concerns have been raised about planning for the move.

So today I'm floating a new proposal that I welcome thoughts on as we reconcile the issues here. My draft would delay the start of the T-band process for another 3 years, to 2024. To be eligible for this delay, States and localities would simply need to comply with a very common-sense policy that bipartisan bills have already called for, which is to put an end to 9 091 091 fee diversion.

I look forward to hearing testimony from the Commissioners on these and many other important topics, and with that I yield.

Mr. DOYLE. The gentleman yields back.

The Chair would like to remind Members that, pursuant to committee rules, all Members' written opening statements shall be made part of the record.

I would now like to introduce our witnesses for today's hearing. Our FCC Chairman, Ajit Pai—welcome—Commissioners Michael O'Rielly, Brendan Carr, Jessica Rosenworcel, and Geoffrey Starks.

Commissioners, welcome. We want to thank all of you for joining us today, and we look forward to your testimony.

At this time, the Chair will now recognize each witness for 5 minutes to provide their opening statement. Before we begin, I would like to explain the lighting system in front of you.

You will see a series of lights which will initially be green at the start of your statement. It will turn yellow when you have 1 minute remaining.

Please begin to wrap up your testimony when the light turns red—your time is expired.

And with that, Chairman Pai, we are anxious to hear your 5 minutes.

Is your microphone on? We actually wanted yours to work so—  
[Laughter.]

Mr. PAI. We will investigate it.

Mr. DOYLE. They are investigating it.

Mr. PAI. Sorry for that.

Mr. DOYLE. Technology—

# **STATEMENTS OF AJIT PAI, CHAIRMAN, AND MICHAEL O'RIELLY, BRENDAN CARR, JESSICA ROSENWORCEL, AND GEOFFREY STARKS, COMMISSIONERS, FEDERAL COMMUNICATIONS COMMISSION**

## **STATEMENT OF AJIT PAI**

Mr. PAI. Pardon the esthetic challenges.

But, Chairman Doyle, Ranking Member Latta, members of the subcommittee, thank you for holding this hearing today. I appreciate this opportunity to update you on the FCC's work to advance the public interest.

At the beginning of my chairmanship, I said that the Commission's top priority would be closing the digital divide. We have been busy working to do just that.

Last year, for example, we finished the Connect America Fund Phase II reverse auction, which allocated about \$1.5 billion to connect over 713,000 homes and small businesses nationwide with high-speed broadband.

Yesterday, we gave final approval to the first batch of final applications and money will begin flowing to these auction winners by the end of the month.

Moreover, last December, we implemented reforms to the FCC's Alternative Connect America Cost Model, or ACAM, that will fund broadband deployment to an additional 106,000 rural homes and small businesses.

Earlier this month, we made new ACAM offers to small rural carriers that could result in over 1.1 million rural homes and businesses gaining access to broadband service.

Later this year, we will begin rulemaking to establish a \$20.4 billion rural digital opportunity fund with the goal of spurring deployment of high-speed broadband networks to up to 4 million rural homes and businesses.

The Commission is also committed to maintaining and advancing American leadership in 5G, the next generation of wireless connectivity, through our 5G FAST plan.

This is a comprehensive strategy that takes a three-pronged approach of pushing more spectrum into the commercial marketplace, making it easier to deploy wireless infrastructure, and modernizing our regulations to promote fiber deployment.

Over the past year, we made substantial progress on all three fronts and I would be happy to discuss that with you in greater detail later today. We have also prioritized national security.

Just last week, the FCC denied the application of China Mobile USA, a wireless carrier ultimately and controlled by the Chinese government, to enter the U.S. market.

Granting that application would have posed an unacceptable risk to our national security. We also recently took part in an international conference in Prague where over 30 nations came together to propose common principles for 5G security.

These proposals gained wide support in part because of the close collaboration among U.S. Government agencies including the FCC and direct engagement on the international stage.

The final issue that I would like to discuss this morning is illegal robocalls. Combating these unwanted robocalls is the Commission's top consumer protection priority.

That is why we have taken many steps to fight what the late Senator Hollings rightly called the scourge of civilization. We have authorized carriers to block robocalls from certain spoofed numbers.

We have authorized the creation of a reassigned numbers database. We have taken aggressive enforcement action against those who unleash robocalls on consumers and we have demanded that phone carriers establish a robust caller dedication framework by the end of this year.

I know that this is a top concern for this subcommittee as well. In the last Congress, as Congressman Walden mentioned, you included in RAY BAUM'S Act a provision to extend the FCC's truth in caller ID rules to reach calls originating from outside of the United States.

And last month, you held a hearing to consider many pieces of legislation to attack this problem. I applaud these efforts.



The onslaught of robocalls presents us with a complex challenge. There is no single bullet that will get the job done. Instead, Congress, the FCC, the FTC, and other Government agencies all must do what we can, working together, to stem the tide of unwanted robocalls.

In that spirit, I am pleased to announce this morning that the FCC will vote on our June 6th monthly meeting on significant new steps to reduce the number of unwanted robocalls.

Specifically, I will ask my fellow Commissioners to make it easier for carriers to block these robocalls by default. Right now, many carriers let you know when a call is likely to be spam. But they don't block them automatically.

I want to make clear that carriers can implement call blocking by default so long as consumers are given the option of opting out.

I am also proposing that we allow carriers to block on a networkwide basis those calls that cannot be authenticated under the SHAKEN/STIR framework once it is implemented.

I believe that these measures would have a major impact in our fight against robocalls. American consumers deserve that protection and peace of mind and I hope my colleagues will join me in supporting these efforts.

Chairman Doyle, Ranking Member Latta, and members of the subcommittee, thank you once again for giving me the opportunity to testify. I look forward to answering your questions and to continuing to work with you on the matters within our jurisdiction.

Thank you, Mr. Chairman.

[The prepared statement of Mr. Pai follows:]

STATEMENT OF  
CHAIRMAN AJIT PAI  
FEDERAL COMMUNICATIONS COMMISSION

HEARING ON “ACCOUNTABILITY AND 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

MAY 15, 2019

Chairman Doyle, Ranking Member Latta, 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.

I’d like to lead off by saying how proud I am of the dedicated staff of the Commission. They come to work every day eager to carry out their mission to close the digital divide, promote innovation, protect consumers and public safety, and improve the FCC’s processes and programs. It has been a privilege to work alongside them at the FCC’s headquarters and in the field. They exemplify what it means to be a public servant.

For almost two-and-a-half years, we have worked together to achieve the priorities I set at the beginning of my chairmanship—most notably, the top priority of closing the digital divide. The Commission has taken a variety of steps to better enable the private sector to deploy broadband infrastructure. For example, last year, we made it easier and cheaper for competitive providers to attach fiber to utility poles through a groundbreaking reform called “one-touch make ready.”

Of course, there are some areas where the business case for broadband deployment just won’t exist—no matter how much red tape we cut. These are typically rural areas with sparser populations and lower incomes. The FCC manages programs to connect these rural communities through the Universal Service Fund. Here, we’ve been aggressively taking action to maximize the USF’s impact—to stretch scarce dollars as far as we can.

Last year, we finished the Connect America Fund Phase II reverse auction. Through this novel approach, we’re now awarding about \$1.5 billion to connect over 713,000 homes and businesses nationwide. Before the auction, we identified parts of our country that were unserved by broadband. This was so that we could target funding to leverage—not displace—private capital expenditures. We didn’t want to fund overbuilding. We also made sure the auction was open to providers of all types, including rural telecom, cable, fixed wireless, and satellite companies, as well as electric utilities. This ensured that there would be plenty of competition.

The outcome of the auction was a tremendous success. We distributed funding much more efficiently thanks in part to intermodal, competitive bidding, saving \$3.5 billion from the \$5 billion price we initially thought would be required to connect these unserved areas. We also ensured that 99.7% of the winning bids would provide consumers with service of at least 25/3 Mbps. And we set a level playing field that enabled a variety of entities, from small fixed wireless companies to electric utilities, to win.

Moreover, last December, we implemented reforms to the FCC’s Alternative Connect America Cost Model (A-CAM). As a result, a total of 186 small, rural carriers participating in the A-CAM program have now accepted \$657 million in additional support over the next decade to provide 106,000

more rural homes and small businesses with 25/3 Mbps broadband service. This represents a 31.8% increase in the number of locations that will have high-quality service available through the FCC's A-CAM program. And the increase is much larger in many states, such as 123% in New Mexico, 114% in Arizona, and 105.4% in Montana.

In December, for the first time we also began requiring that small, rural carriers that continue to rely on the Commission's legacy, cost-based support mechanism provide 25/3 Mbps broadband service to specific numbers of rural homes and small businesses in their service areas. Under the prior Administration's rules, these carriers were only required to provide 10/1 Mbps service to 115,441 locations; under our new rules, these same carriers will have to provide 25/3 Mbps broadband to at least 600,535 locations. At the same time, we also initiated a second round of A-CAM offers of fixed, model-based support for a term of ten years to these carriers, in exchange for building out 25/3 Mbps broadband to all fully-funded locations in their service areas. If all legacy-reliant carriers accept the new A-CAM offers, they will be required to provide 25/3 Mbps service to at least 1,126,082 locations. This would include over 58,000 locations in Texas and Iowa, over 42,000 locations in Indiana, and 36,000 locations in Missouri.

Last year, we took other steps through the Fund to help close the digital divide. For example, we increased the annual cap on rural healthcare program spending by nearly 43% to \$571 million per year and implemented ongoing annual inflation adjustments—the first increase in the program's funding level since it was established in the 1990s. These additional funds will help to provide critical connectivity to rural healthcare institutions.

Going forward, we plan to continue our emphasis on closing the digital divide. Later this year, for instance, we will begin a rulemaking to establish a \$20.4 billion Rural Digital Opportunity Fund. Applying lessons learned from the Connect America Fund Phase II reverse auction, this program will spur the deployment of high-speed broadband networks across more of rural America over the next decade, bringing greater economic opportunities to America's heartland. Service providers that win funding in the reverse auction will deploy needed infrastructure to provide up to gigabit-speed broadband in the parts of the country most in need of connectivity. I'm excited about this program—it will be the FCC's single biggest step yet to close the digital divide and will connect up to 4,000,000 rural homes and small businesses to high-speed broadband networks.

Of course, it is vital that we spend USF funds wisely and eliminate waste, fraud, and abuse in these programs. That's why recently, we developed a reorganization plan to create a Fraud Division within the Enforcement Bureau. I am pleased that this proposal was unanimously endorsed by the Commission and cleared by the Office of Management and Budget. This reform will embed a permanent effort to combat USF fraud within the structure of the Enforcement Bureau.

Another critical Commission priority is to maintain and advance our nation's leadership in 5G, the next generation of wireless connectivity. 5G networks will be 100 times faster than today's networks, perhaps more. They will have lag times that are one-tenth of what they are today. And they'll have much more capacity, being able to connect as many as one million devices per square kilometer.

Our work on 5G will open the door to new services and applications that will grow our economy and improve our standard of living. Smart transportation networks will link connected cars—reducing traffic, preventing accidents, and limiting pollution. Ubiquitous wireless sensors will enable healthcare professionals to remotely monitor your health and transmit data to your doctor before problems become emergencies. Connected devices will empower farms to apply precision agriculture. And there will be more innovations that we can't even conceive of today.

These breakthroughs will boost our economy. One study pegs 5G's potential at three million new jobs, \$275 billion in private investment, and \$500 billion in new economic growth.

To realize this potential, we've developed and are executing the 5G FAST plan—a comprehensive strategy that will “Facilitate America’s Superiority in 5G Technology.” It has three key components: (1) pushing more spectrum into the marketplace; (2) promoting the deployment of wireless infrastructure; and (3) modernizing outdated regulations. In my testimony today, I’d like to concentrate on the first prong, spectrum.

The applications and services of tomorrow will require much more bandwidth. They cannot be developed and deployed without spectrum. This critical resource represents the lifeblood of the communications industry—and with it, the future of our economy. That’s why the FCC must continue its work to aggressively make more spectrum available for commercial use.

Last year, I stated that the FCC would hold two high-band spectrum auctions during this fiscal year: one for the 28 GHz band and another for the 24 GHz band. And I noted that conducting these auctions successfully and promptly would be important to U.S. leadership in 5G.

I am pleased to report that we have done what I said we would do. Our 28 GHz auction began last November and concluded this January. All in all, bidders won 2,965 licenses, and the auction raised \$702,572,410 in gross bids for the U.S. Treasury. Our 24 GHz auction began in March. The clock phase of this auction ended in April, and the assignment phase will end later this month. After the end of the clock phase, gross bids had more than doubled the amount raised in the 28 GHz auction, to just short of \$2 billion.

While these auctions are significant accomplishments, the FCC cannot and will not rest on our laurels. Instead, we will continue to free up spectrum for commercial use. Starting on December 10, we will hold an auction of the upper 37 GHz, 39 GHz, and 47 GHz bands. This auction will be the largest in American history, releasing 3,400 megahertz of spectrum into the commercial marketplace. All in all, these auctions will free up for the commercial marketplace over 5 gigahertz of spectrum for flexible use. For context, that’s more spectrum than is currently used for mobile broadband by all mobile broadband providers in the United States *combined*.

Next year, we also intend to auction mid-band spectrum in the 3.5 GHz band. We will continue our work to make additional mid-band spectrum bands available for flexible use, including in the 2.5 GHz, 3.1-3.55 GHz, and 3.7-4.2 GHz bands. This will be important given the desirable combination of coverage and capacity that these bands offer for wireless services.

As part of our balanced spectrum strategy, we have also been working to make more spectrum available for unlicensed use. Earlier this year, for example, we allocated over 21 gigahertz of spectrum in the *Spectrum Horizons* bands for unlicensed operations. And we are continuing our effort to open up a large amount of unlicensed spectrum in the 6 GHz band (while safeguarding incumbents with innovative technologies and sharing techniques). This will make sure we get the most use of this limited, essential resource and deliver consumer value.

The next priority I’ll discuss is our important mission to protect public safety. Here, the Commission has been extremely active, both proactively and in response to emergencies that have arisen, such as Hurricanes Harvey, Irma, Maria, and Michael.

Last year, for example, we took important steps to improve Wireless Emergency Alerts, which play a critical role in notifying Americans when emergencies strike. We adopted an order that requires the delivery of more precise, geographically targeted alerts so that the alerts reach only those communities impacted by an emergency. The order also adopted rules to enable the public to better review emergency information by requiring that alert messages remain available on wireless devices for at least 24 hours after receipt, or until consumers choose to delete it.

Last year, we also took important steps to improve the reliability and effectiveness of the Emergency Alert System, or EAS. For example, we adopted an order that authorizes “live code” testing

of EAS—that is, the testing of the same alert codes and processes that would be used in actual emergencies—but also requires clear messaging and outreach to make sure the public knows they are receiving a test message, not an actual emergency alert. To further enhance public awareness, the order permits public safety authorities to issue Public Service Announcements (PSAs) about EAS that can even include the tones that precede an actual EAS alert, provided that the PSA includes a clear disclaimer that the tones are not signaling a real alert. And to reduce the risk and impact of false alerts, the order requires new safeguards in the configuration of EAS equipment and also requires broadcasters, cable systems, and other EAS participants to notify the Commission’s 24/7 operations center when they discover they have transmitted a false alert.

We have also taken steps to ensure that Americans in need can reach someone who can help and that emergency responders can more quickly locate Americans in need. With respect to the first, we proposed rules to implement Kari’s Law. Kari’s Law requires multi-line telephone systems—which commonly serve hotels, office buildings, and campuses—to enable users to dial 911 directly. And it also contains a notification requirement so that when a 911 call is made in these settings, a front desk or security office will be alerted to facilitate building entry by first responders. With respect to the second, in March, we proposed rules to help first responders more precisely locate wireless 911 callers in multi-story buildings. Specifically, we proposed a vertical, or “z-axis” metric to our location accuracy rules that would enable 911 call centers and emergency responders to figure out on what floor wireless 911 callers are located. In the coming year, the Commission intends to take further steps to improve 911 calling. Among other things, I believe that we will be able to take final action to add a vertical, or “z-axis” metric to our location accuracy rules and finalize rules implementing Kari’s Law.

Our work in this area also extends to national security. When it comes to the security of our communications networks, we cannot afford to make risky choices and just hope for the best. We have to have a clear view of the threats we face and take action to respond to those threats. That ethos extends to our review of foreign companies that seek to do business in the United States. Just last week, at our May open meeting, the Commission advanced the national security of the United States by denying the application of China Mobile USA, a wireless carrier ultimately owned by the Chinese government, to provide international telecommunications services in the United States.

The process that yielded decision reflects the well-considered, fully-integrated approach of the FCC and Administration to national security implications of communications networks. The FCC solicited the views of the relevant federal agencies on whether China Mobile’s application raised national security, law enforcement, or related concerns. After a lengthy review of the application and in consultation with the U.S. intelligence community, in 2018, the Executive Branch agencies recommended that the FCC deny China Mobile USA’s application due to substantial national security and law enforcement concerns that could not be resolved through an agreement with the company (called “voluntary mitigation”). Notably, this was the first time the Executive Branch had ever recommended that the FCC deny an application due to national security concerns. Based on this recommendation and the full public record in this proceeding, I determined that approving this application would not serve the public interest and the Commission voted to deny China Mobile USA’s application. I’m pleased my colleagues agreed with me.

Our cross-agency efforts extend to the international stage. Just two weeks ago, I was honored to be part of the United States delegation that traveled to Prague for an important conference on how best to secure our 5G networks. I’m grateful to the leaders of the Czech Republic’s government for convening this meeting, which featured government officials from more than 30 countries, as well as industry leaders. I’m even more gratified that this gathering was able to develop a set of consensus best practices for 5G security. Dubbed the Prague Proposals, these guiding principles fall into four categories: policy,

technology, economy, and security.<sup>1</sup> And the fact that proposals gained such wide support was due in part to the close collaboration among U.S. government agencies, including the FCC, and direct engagement on the international stage.

Going forward, we will continue to apply our statutory authority to protect the security of our communications networks. That includes finalizing our proposal to ban the use of money from the Universal Service Fund from being used by recipients to procure equipment or services from companies that pose a national security threat to our communications networks or the communications supply chain.

The last priority I'll mention—but certainly not the least important—involves attacking unwanted and illegal robocalls. During my tenure as FCC Chairman, I've had the opportunity to set the agenda for 27 monthly meetings. At almost half of those meetings, we've voted on measures to fight unlawful robocalls and caller ID spoofing. We've taken action to cut off robocalls and spoofing at the source, including authorizing carriers to stop certain spoofed robocalls. We've authorized the creation of a reassigned numbers database. We've taken aggressive enforcement action against those who unleash robocalls on consumers. We've demanded that phone carriers establish a robust call-authentication framework.

Pursuant to Congressional direction in RAY BAUM's Act, at the Commission's February Open Meeting, we adopted a Notice of Proposed Rulemaking that proposes to modify the FCC's Truth in Caller ID rules. The changes proposed would extend the rules' reach to include communications originating outside the United States and expand the rules' scope to include text messages and other voice services. This item is but one part of the Commission's multi-pronged effort to combat unwanted and illegal caller ID spoofing.

Also, I called on carriers to implement a robust call authentication system to combat illegal caller ID spoofing. Call authentication is the best way to ensure that consumers can answer their phones with confidence. It will help consumers know when a phone call is fraudulent before they pick up, thus eroding the ability of scam artists to use false caller ID information to trick vulnerable Americans into answering their phones when they shouldn't. With a robust framework in place, consumers and law enforcement alike will be able to more readily identify the source of illegally spoofed robocalls and reduce their impact.

I expect large telephone operators will take all the steps needed to ensure that system is on track to become operational in 2019. If they do not act promptly, the Commission stands ready to take regulatory action to ensure widespread deployment to meet this important technological milestone.

In addition, the Commission continues to aggressively enforce the Telephone Consumer Protection Act as well as the Truth in Caller ID Act. We have sent a clear message that those who engage in illegal robocall schemes will pay a price. The FCC coordinates with the Federal Trade Commission on investigations into violations of our Do Not Call rules, and we work together on consumer education programs. The Commission also works with federal and state agencies to share information and resources that can be used to investigate unwanted calls, such as the Department of the Treasury, Department of Justice, and Department of Homeland Security. Finally, we alert consumers about robocall scams, a recent example being a "one-ring" advisory issued this month warning consumers about scam calls using three-digit country codes for Mauritania or Sierra Leone and hanging up after a single ring.<sup>2</sup>

<sup>1</sup> The Prague Proposals issued following the Prague 5G Security Conference are available at <https://www.vlada.cz/en/media-centrum/aktualne/prague-5g-security-conference-announced-series-of-recommendations-the-prague-proposals-173422/>.

<sup>2</sup> The "One-Ring" Phone Scam" advisory is available at <https://www.fcc.gov/consumers/guides/one-ring-phone-scam>.

\* \* \*

I would like to conclude by once again thanking our dedicated staff. Day in and day out, they work hard to advance the public interest. Whether they are working to combat robocalls, expand broadband deployment, promote wireless innovation, protect public safety, or address consumer complaints, they serve the American people with skill and dedication, and I am honored to have them as colleagues.

Thank you for this opportunity to testify. I will be pleased to answer any questions that you may have.

Mr. DOYLE. Thank you, Mr. Chairman.  
Commissioner O’Rielly, you are now recognized for 5 minutes for your opening statement.

**STATEMENT OF MICHAEL O’RIELLY**

Mr. O’RIELLY. Thank you, Chairman Doyle, Ranking Member Latta, and the members of the subcommittee. It is a real pleasure to appear before this subcommittee once again as it conducts further oversight of the FCC.

With your indulgence, I would like to raise four areas of communication policy for the subcommittee’s attention.

First, there is near universal realization that far more needs to be done to free up additional mid-band spectrum, given its propagation characteristics and opportunities for global spectrum harmonization.

But freeing these bands is extremely hard. Concerning what the Chairman has put forth in the motion, the Commission must redouble its efforts to reallocate additional mid-band frequencies for Next Generation license services.

Part of this must be reallocating a portion of the 3.7 to 4.2 gigahertz band, or the C-band. One of my foremost concerns is to ensure that the mechanism selected allows the quickest possible process and I remain hopeful that the satellite incumbents will be willing to part with closer to 300 megahertz of spectrum.

Separately, there needs to be a greater effort to identify more Federal agency holdings in the mid-bands for commercial use including reallocating the 3.45 to 3.55 gigahertz band and conducting feasibility studies to determine the exact—the extent of the commercial offerings that can be done in 3.1 to 3.45 gigahertz.

Moreover, the Commission must take action on freeing more unlicensed spectrum, particularly in the 5.9 and 6 gigahertz bands.

Second, while broadband availability has improved over the years, many unserved areas remain and we must continue our efforts to expand access in an efficient and timely manner.

That is why I have spent so much time over the years promoting better incentives and greater efficiency within our Universal Service Fund programs.

At the same time, I worry that the well-intentioned desire of Congress or selected agencies to expand broadband infrastructure will lead to unexpected wasteful or duplicative spending and adverse consequences for consumers.

While I would humbly suggest that the committee consider the FCC’s Universal Service Fund as a primary means to distribute new funding, it is my foremost concern that any funding go to unserved areas rather than areas where broadband service already exists.

Coordination among agencies and departments is helpful but only through clear legislative directive and necessary oversight can Congress ensure that funding does not go to duplicate existing programs and only goes to those Americans without broadband today.

Third, the Commission has rightfully focused time and attention on addressing the surge of illegal robocalls in this country. In considering this issue, it is important to maintain a careful and nuanced approach.



Many honest legitimate businesses use automatic dialling technologies to communicate needed information to their consumers and doing so is perfectly within the scope and intent of TCPA.

Any approach to illegal robocalls should not expose law-abiding and legitimate organizations to indeterminate and potentially crippling legal risk.

In terms of illegal calls, I applaud those innovative companies and carriers that have offered or are in the process of offering free call authentication and call-blocking services to their customers.

To protect and encourage these initiatives, I strongly support the adoption of a safe harbor to protect carriers from liability in their call-blocking efforts as well as a reassigned number database safe harbor.

At the same time, carriers must adopt expeditious processes for correcting false positives. The last issue that I will touch upon today is 9 091 091 fee diversion.

Every month, millions of consumers pay their phone bills only to see a good portion of the money flow into a State or territory's general treasury and, as a result, only a portion or small percentage goes towards emergency services.

On top of being downright deceptive, this is a serious public safety matter that directly affects emergency call centers and personnel.

Following the FCC's December report, the States and territories guilty of diverting these critical funds in 2017 were New York, New Jersey, Rhode Island, Montana, Nevada, West Virginia, and the U.S. Virgin Islands.

I respectfully request the subcommittee's assistance as the name-and-shame process generated by our annual report has only been so helpful.

The State leaders of certain recalcitrant States, specifically, New York, New Jersey, and Rhode Island, don't seem to care about the shaming part.

I believe new legislation is needed in addition to that already introduced on the topic and that will take a more forceful approach to end diversion once and for all.

Thank you to the chairman and the ranking member and leaders for inviting me to testify. I welcome any questions you may have.

Thank you.

[The prepared statment 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  
“Accountability and Oversight of the Federal Communications Commission”  
May 15, 2019**

Good morning. It is a pleasure to appear before this Subcommittee once again as it conducts further oversight of the Federal Communications Commission. I appreciate the opportunity to be here and welcome any questions you may have.

One word that we will hear a lot today and in the coming months around D.C. is infrastructure, and, in the context of the FCC, there’s plenty to cover. The communications industry continues to change as technologies advance and as networks grow, and under Chairman Pai’s leadership the Commission has made a strong effort to modernize our regulations to keep up with innovation. Make no mistake, this is hard work. And, it’s made no easier by those with an interest in protecting the status quo. However, we have made progress despite the headwinds, and I am excited to see further growth and strengthening of our nation’s communications infrastructure.

The four areas of communications infrastructure that I will touch on today are: 1) the need to quickly deploy more mid-band spectrum; 2) the need to protect taxpayer money from being used to overbuild existing infrastructure; 3) the need to address robocalls; and finally, 4) the need to end theft of 9-1-1 fees by states for programs not related to 9-1-1 emergency communications infrastructure.

*Wireless Infrastructure: Freeing Additional Spectrum*

The Commission continues to make great strides to ensure U.S. leadership in 5G by allocating the necessary millimeter wave frequencies, but, over the past three years, I have focused most of my energy on crucial mid-band spectrum. There is now near universal realization that far more needs to be

done to free up additional mid-bands given its propagation characteristics and opportunities for global spectral harmonization.

Finding additional mid-band spectrum is extremely hard. There is no fallow spectrum, incumbent users are everywhere, and a multitude of interested parties exist with different visions, interests, and needs. I faced these very issues when, with the Chairman's blessing, I led the process to review and revise our 3.5 GHz rules. Today, 3.5 GHz is nearly ready to go to auction and will support many functions, including 5G deployment. Unfortunately, software reconfiguration, the testing process, and other reasons seem to delay our auctions, meaning the priority access licenses are probably not going to be auctioned until the second quarter of 2020, at best. And, while 3.5 GHz is a good start, this supply cannot meet overall demand, especially since providers are seeking 100 megahertz channels. Continuing what the Chairman has put in motion, the Commission must redouble its efforts to allocate additional mid-band frequencies for next-generation licensed services.

Highest on our priority list must be the 3.7 to 4.2 GHz band, or the C-band. The Commission continues a deliberative process to consider the market-based approach, along with other options presented in the record. One of my foremost concerns is to ensure that the mechanism selected allows for the quickest reallocation of the band. I believe that the majority of relevant stakeholders are working through how best to accommodate the current incumbents and provide a sufficiently transparent process. Further, I remain hopeful that the satellite incumbents recognize the great need for such frequencies and are willing to part with closer to 300 megahertz, assuming the requisite technology can accommodate this amount.

In addition to 3.5 GHz and C-band, there needs to be a greater effort to identify more federal agency holdings in the mid bands for reallocation. I suggest that the 3.45 to 3.55 GHz band can be made available for commercial use, and additional feasibility studies should be initiated to determine the extent of commercial offerings that can be introduced in 3.1 to 3.45 GHz. This spectrum can be

combined with spectrum at 3.5 and 3.7 to 4.2 GHz to create the channel sizes required for true 5G services. Further, we should also start looking to the 7.125 to 8.5 GHz band to ensure that there is sufficient spectrum for the many providers that want to offer 5G services.

At the same time, the Commission must also consider mid-band spectrum for unlicensed use, such as the 4.9, 5.9, and 6 GHz bands. The community serving this incredibly valuable function needs larger spectrum swaths to meet the speed, capacity, and latency expectations demanded of next-generation Wi-Fi and other unlicensed uses.

*Broadband Infrastructure: Deployment & Overbuilding*

One of the many things my fellow colleagues and I agree on is the critical importance of broadband infrastructure to the American people. It is hard to imagine any part of our current society that hasn't been integrated with Internet connectivity: from education and information, to employment and health care, broadband serves as a key component to modern American life and has improved our standard of living in so many ways. This is true no matter the underlying characteristics of the technology used to provide digital access—wired or wireless. In fact, both serve interchangeable functions for increasing numbers of Americans and will likely continue to do so going forward.

Similarly, there is consensus among FCC Commissioners that all Americans—including those living in areas with challenging topography and sparse populations—should have the opportunity to access broadband Internet, if they wish to do so. While broadband availability has improved over the years, many unserved areas remain, and we must continue our efforts to expand access in an efficient and timely manner. That is why I have spent so much time over the years promoting better incentives and greater efficiency within our Universal Service Fund programs, and why I have repeatedly called for the implementation of the Remote Areas Fund (RAF) auction—in order to serve those Americans in the hardest to reach communities, which tend to be more rural and of lower economic status. I know that

Chairman Pai is committed to this goal as well, and I was very pleased to hear him announce that the Commission is moving forward on addressing the RAF—in some form—in the near future.

At the same time, I worry that the desire to expand broadband infrastructure will lead to wasteful and duplicative spending and adverse consequences for consumers. Recently, Congress allocated new funding for broadband programs at the Department of Agriculture, and there appears to be interest in funding broadband buildout via the Department of Commerce as well. While I would reiterate my humble request from previous testimony that Congress consider the FCC's Universal Service Fund (USF) as a primary means to distribute new funding, it is my foremost concern that any new funding go to unserved areas, rather than areas where broadband service already exists. Coordination among the various agencies and departments would be helpful, and there are new legislative efforts to help facilitate this. However, coordination can mean different things to different government agencies and their employees. Only through clear legislative direction and necessary oversight can Congress ensure that funding does not duplicate existing programs and goes only to those Americans without broadband today.

Failure to prevent overbuilding can undermine providers' existing and future investments and result in extremely problematic outcomes. In particular, providers serving hard to reach areas can face serious financial difficulties if a new government-subsidized provider "competes" to serve existing customers—or worse—takes only the most highly profitable customers. I have seen this situation firsthand within the Commission's own USF program. It recently came to my attention that new E-Rate-subsidized fiber networks were overbuilding local USF-funded Texas broadband providers and stealing their core anchor customers. By manipulating the contracting process to favor the bids of particular providers or self-provisioned service, some local school districts have been actively undermining local USF-supported providers' existing investments, and as a result, making it even more difficult to serve surrounding communities where some households may lack any Internet access at all.

*Consumer Telephone Infrastructure: Stopping Illegal Robocalls & Protecting Legal Calls*

The Commission has rightfully focused time and attention on addressing the surge of illegal robocalls in this country. These calls, many from overseas, are at best irritating; at worst, they serve to scam susceptible consumers out of their hard-earned money. Implementation of new technology should substantially reduce this menace, as will cooperation with foreign governments, but it is clear that eliminating such calls altogether is likely impossible.

In considering this issue, it is important to maintain a careful and nuanced approach. Not all robocalls are illegal or scams, and we must be precise in describing the actual problem at issue. Members of this Subcommittee deserve credit on this front, as efforts to engage in careful rhetoric were evident at your last robocall hearing. Many honest, legitimate businesses use automatic dialing technologies to communicate needed information to their customers and doing so is perfectly within the scope and intent of the TCPA. These legal and legitimate calls and texts share no part in the true robocall problem facing the nation's communications networks.

More fundamentally, any approach to illegal robocalls should not expose law-abiding and legitimate organizations to indeterminate and potentially crippling legal risk. Unfortunately, an aggressive few TCPA lawyers have taken advantage of the previous FCC's expansive and unclear rules to obtain unfair judgments and extract enormous, disproportionate settlements from businesses in virtually all industries.<sup>1</sup> This trend continues despite the U.S. Court of Appeals for the D.C. Circuit's rightful decision in *ACA Int'l v. FCC* to set aside the previous FCC's rules on the definition of an automatic telephone dialing system (ATDS) and one-call safe harbor in the reassigned numbers context. Rather than deferring to FCC expertise and staying TCPA cases pending the Commission's decision, various courts have issued a medley of confusing and conflicting rulings on the definition of ATDS in the

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<sup>1</sup> U.S. Chamber Institute for Legal Reform, *TCPA Litigation Sprawl: A Study of the Sources and Targets of Recent TCPA Lawsuits* (August 2017), [https://www.instituteforlegalreform.com/uploads/sites/1/TCPA\\_Paper\\_Final.pdf](https://www.instituteforlegalreform.com/uploads/sites/1/TCPA_Paper_Final.pdf).

aftermath of *ACA Int'l*.<sup>2</sup> I would welcome any efforts to codify a more reasoned and clearer approach to these issues.

Returning to the problem of *illegal* calls, I applaud those innovative companies and carriers that have offered or are in the process of offering free call authentication and call blocking services to their customers. To protect and encourage these initiatives, I strongly support the adoption of a safe harbor to protect carriers from Communications Act liability in their call blocking efforts, as well as the one the FCC authorized for a reassigned numbers database. At the same time, carriers must adopt expeditious processes for correcting false-positives and ensuring that legal and legitimate calls are not incorrectly labeled or blocked.

*Emergency Communications Infrastructure: Ending 9-1-1 Fee Diversion by States & Territories*

The last issue that I will touch upon today is one that I've been very vocal about for the past several years, and that is 9-1-1 fee diversion. This is a very significant problem in terms of importance, though not as widespread as it once was, thankfully. Every month, millions of consumers pay their phone bills and if they look closely enough, they'll see a line item that generally refers to 9-1-1 emergency services, though the exact wording varies by jurisdiction. In accordance with the line item, consumers appropriately expect that those funds will go toward maintaining and upgrading 9-1-1 emergency calling systems. In some states and territories, however, this money flows into the general treasury and, as a result, only some portion of the collected fees ends up going toward emergency services. On top of being downright deceptive, this is a serious public safety matter that directly affects emergency call centers and personnel, not to mention all the people who live in or visit these states who expect that when they call 9-1-1 the system is up to date. Following the FCC's December report,<sup>3</sup> the

<sup>2</sup> Eric Troutman, *Waiting Game: Taking Stock of the TCPA One-Year Removed from ACA Int'l*, National Law review (March 26, 2019), <https://www.natlawreview.com/article/waiting-game-taking-stock-tcpa-one-year-removed-aca-int-l>.

<sup>3</sup> Tenth Annual Report to Congress on State Collection and Distribution of 911 and Enhanced 911 Fees and Charges for the Period of January 1, 2017 to December 31, 2017 (Dec. 17, 2018), <https://www.fcc.gov/files/lothanual911feereporttocongresspdf>.

states and territories guilty of diverting these critical funds for 2017 were: New York, New Jersey, Rhode Island, Montana, Nevada, West Virginia, and the U.S. Virgin Islands.

Several Members of this Committee have been outspoken on this issue as well, in particular Representatives Eshoo and Shimkus as leaders of the Congressional NextGen 9-1-1 Caucus, and I thank them for their efforts. For the new members of the Committee or Members who are less familiar with this issue, the Commission has been issuing an annual report for the last decade, pursuant to federal law, that measures the amount of money that gets diverted, if any, by each state on a total funding and a percentage basis. The report also provides an assessment of whether the diverted funds were used for purposes related in some capacity to public safety or completely unrelated. You may find it shocking that the diversion rate was as high as 90 percent in one state (New York).

Beyond creating a problem of public confidence in the fee system itself, fee diversion also shortchanges the budgets of emergency call centers and has prevented much needed upgrades. I've been to public safety answering points (PSAP) and I've met with the dedicated emergency communications professionals in many of the states subject to diversion. I can assure you that they are continually frustrated by their state politicians who do not have the will to do the right thing. However, I would be remiss if I didn't also address the positive side of our report. There are many states and territories that have made a concerted effort to get off the list, especially in some cases where the problem was an accounting technicality, and in others where public officials simply did the right thing and rectified their state budget practices. West Virginia has committed to do just this. To those states and their leaders, I tip my cap, and I know that in the long run the people in their states will be better off and their emergency communications systems will be stronger and more reliable.

It is also important to remind those states and territories that continue this despicable practice: they remain ineligible for new federal funding to modernize their call centers as the shift to Next Generation 9-1-1 occurs. NG911 will be costly, but its effectiveness and the resulting improvements to



the system will be vital to saving lives. In the Middle Class Tax Relief and Job Creation Act of 2012, this Subcommittee helped created a new grant program for 9-1-1, E9-1-1, and NG911, and the law specifically excluded states and territories that divert fees from receiving these grants.

In closing on this topic, I respectfully request the Subcommittee's assistance. The "name and shame" process generated by our annual report has only been so helpful. The state leaders of certain recalcitrant states—New York, New Jersey, and Rhode Island—don't seem to care about the shaming part. Moreover, other states and territories seem to spring up after seeing a lack of substantial penalties and decide to divert for a few years to address a budget shortfall or provide new spending for a pet project. I believe new legislation is needed, in addition to that already introduced on the topic, and that it will take a more forceful approach to end diversion once and for all. I would be pleased to work with any Members who are interested in this issue.

\* \* \*

Thank you to the Chairmen and Republican Leaders for inviting me to testify today. I welcome the questions of any members of the Committee related to the topics I have covered or any others that are important to you and your constituents.

Mr. DOYLE. I thank the gentleman.

Commissioner Carr, you are now recognized for 5 minutes for your opening statement.

#### **STATEMENT OF BRENDAN CARR**

Mr. CARR. Chairman Doyle, Ranking Member Latta, distinguished members of the subcommittee, thank you for the invitation to testify.

When I first appeared before the subcommittee in 2017, the U.S. faced significant challenges in our effort to lead the world in 5G.

Our outdated rules meant that it took too long and it cost too much to build internet infrastructure in this country. We risked ceding U.S. leadership in 5G and a half a trillion dollars it could add to our economy to our global competitors.

Indeed, China was putting up new cell sites, the building blocks for 5G, at 12 times our pace. So we needed to take bold action and that is exactly what we've been doing at the FCC.

For one, we updated the Federal rules that apply to the construction of small cells. These are the backpack-size antennas needed for Next Generation connectivity.

We did so by excluding them from the costly and time-consuming reviews designed for the construction of large 200-foot towers.

For another, we addressed the State and local review process for small cells. We did so by building on the common sense reforms already enacted by elected officials in their own communities, reforms that provided clarity on fees and ensure timely decisions.

These and other FCC reforms are already delivering results. Internet speeds in the U.S. are up nearly 40 percent. Americans saw more fiber broadband built to their homes last year than ever before.

The number of small cells put up in this country increased from 13,000 in 2017 to more than 60,000 in 2018. Investment in broadband networks is back on the rise and the U.S. now has the world's largest 5G deployment with 92 builds expected by year's end, and China has announced plans for zero.

There is much more to do. We are heading in the right direction. The FCC's policies are working, and I have had the chance to see firsthand how our decisions are helping to create jobs and benefit American workers in communities around the country in places like South Carolina where a company I visited last month built a new 100,000 square foot manufacturing plant because of the increase in demand for small cells in the U.S.

In fact, our success in accelerating infrastructure construction has created a new opportunity. Industry now estimates that it could fill 20,000 job openings for tower techs. That would nearly double their existing workforce and bring thousands of families into the middle class.

So last month, I announced a jobs initiative modelled on a program developed by Aiken Technical College in South Carolina. It looks to community colleges as a pipeline for 5G jobs.

In 12 weeks, someone with virtually no training can learn the technical and physical skills needed to land a good-paying job in the tower industry. I am working to expand this program to community colleges around the country.

While we know that broadband can create jobs, it can also help save lives. I saw this in Ohio with Ranking Member Latta at ProMedica Hospital. The head of neurology, Dr. Mouhammad Jumaa, told us that every second matters in treating stroke patients, and Dr. Jumaa showed us how we can now use a video app right on his smart phone to quickly see and treat stroke victims from almost anywhere. It's saving precious minutes and changing outcomes.

I think the FCC should support this new trend in telehealth. With remote patient monitoring and mobile health apps that can be accessed right on your phone, high-quality care can now be delivered to patients wherever they are.

That is why I have led the FCC's effort to stand up a new connected care pilot program. It would provide up to \$100 million so low-income patients can benefit from this new trend. It would make a real difference in driving down costs and delivering quality care. My goal is to move that proceeding forward in the coming months. I look forward to working with all stakeholders to stand it up.

In closing, I want to thank you again, Chairman Doyle, Ranking Member Latta, members of the subcommittee, for the chance to testify. I look forward to your questions.

[The prepared statment 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**  
**“ACCOUNTABILITY AND OVERSIGHT**  
**OF THE FEDERAL COMMUNICATIONS COMMISSION”**

**May 15, 2019**

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

I want to begin with an update on the steps we are taking at the FCC to accelerate the buildout of 5G and other broadband infrastructure in communities across the country.

When I first testified before the Subcommittee in 2017, the U.S. faced significant challenges on this front. Outdated rules were holding back broadband deployment. It took too long and it cost too much to build Internet infrastructure in this country. We were at risk of ceding U.S. leadership in 5G—and the half a trillion dollars it could add to our economy—to our global competitors. Indeed, China was putting up new cell sites—the building blocks for 5G—at twelve times our pace.

We needed to take bold action. And that is exactly what we have done at the FCC. I want to highlight two decisions in particular that have made a difference.

First, in March of 2018, we examined some of federal rules that apply to the construction of small cells. These are the backpack-sized antennas that provide next-gen connectivity. They can be attached to light poles or other structures in a matter of hours. But the federal review process could take years and cost over a hundred thousand dollars. This is because our rules treated a single, unobtrusive small cell the same as a new, 200-foot tall tower. Applying all that red tape to every one of the thousands of new small cells needed for 5G threatened to hold the U.S. back. So we excluded small cells from those large tower reviews.

Second, in September, the FCC addressed the state and local review process that applies to small cells. We did so by building on the commonsense reforms already enacted by elected officials in their own communities. This meant updating the shot clocks that have long applied to the local review process, thus ensuring timely decision-making. And it meant providing clarity on the types of fees that can effectively prohibit service in violation of federal law. As specified in the decision, wireless providers—not cities—will pay the costs imposed by the buildout of small cell infrastructure.

These and other FCC reforms are delivering results. Internet speeds are up nearly 40 percent. Americans saw more fiber broadband built to their homes and businesses last year than ever before. The number of small cells put up in this country increased from around 13,000 in 2017 to more than 60,000 in 2018. The digital divide—the percentage of Americans lacking access to high-speed Internet—narrowed by almost 20 percent last year alone. Investment in broadband networks is now increasing—reversing the

significant declines we saw in 2015 and 2016. And a new forecast shows the U.S. will have twice the percentage of 5G connections as Asia.

In fact, the U.S. now has the largest 5G deployment in the world. Fourteen cities went live last year, and we expect 92 5G builds by year's end. China has announced plans for zero. While there is much more work to do to secure U.S. leadership and ensure every American has a fair shot at next-generation connectivity, we are now heading in the right direction. The FCC's new policies are working.

But more than the numbers, I've had the chance to see firsthand how the FCC's decisions are helping to create jobs and benefit American workers in communities around the country.

I saw this last month in South Carolina. That's where a company built a 100,000 square foot manufacturing plant less than a year ago to meet the increase in demand for small cells. At the facility, Jake and his crew told me that they got jobs at the plant less than six months ago. They had been employed in general steel and construction work before. They now have 5G jobs. And the company says they are expanding their workforce by nearly 10 percent every month to keep up with demand.

I saw this in Elkmont, Alabama. That's where a small-town manufacturing plant is already seeing a big boost from 5G. The facility makes the harnesses and other gear that America's tower climbers use to install new small cells. The plant has doubled production over the last year and a half with new small cell builds underway.

I've also seen firsthand the hard work that America's tower crews are doing every day to bring more broadband to more Americans. In fact, the successes we are seeing in accelerating infrastructure deployment has created a new opportunity. Industry estimates that it needs to fill another 20,000 job openings for tower climbers and telecom techs to complete this country's 5G build. That would nearly double the size of this group of skilled workers, bringing thousands of families into the middle class.

Last month, I announced a jobs initiative to help address this opportunity. It looks to community colleges and technical schools as a pipeline for these 5G jobs. And it is modeled on a program developed by Aiken Technical College in Graniteville, South Carolina. In 12 weeks, the program can take someone with virtually no training, teach them the mix of classroom and physical skills necessary to build and install new cell sites, and enable them to land a good-paying job in the tower industry. Dr. Gemma Frock, who developed the program, says that 100 percent of her students have received job offers upon graduating from the program.

We need to expand this model program to community colleges across the country to ensure we have the skilled workforce in place to build next-gen networks. I am working toward that goal with a number of stakeholders. These efforts will help address our country's need for 5G workers and close the skills gap.

While we know that broadband deployment can create jobs, it can also save lives. I saw this recently in Toledo with Ranking Member Latta, when we visited the ProMedica Toledo Hospital. There, Dr. Jumaa showed us how his team is using telemedicine to improve care in rural communities like Defiance, Ohio. For stroke patients, every second matters. And Dr. Jumaa demonstrated how he's now able to see and treat patients quickly from almost anywhere through a video app on his smartphone. By

shaving minutes off of treatment times, Dr. Jumaa and his team are using connectivity to change outcomes for stroke patients.

For years, the FCC has played 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.

At the FCC, we are taking steps to align public policy in support of this movement in telehealth. Last August, we initiated a proceeding to provide up to \$100 million for connected care pilots that benefit 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 might lack access to quality health care today. I anticipate moving to the next stage of the proceeding in the coming months, and I look forward to working with my colleagues at the FCC, federal and state partners, members of the Subcommittee, and all stakeholders as we stand up the Connected Care Pilot Program.

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In closing, I want to thank you again Chairman Doyle, Ranking Member Latta, and Members of the Subcommittee for holding this hearing and for the opportunity to testify. I look forward to continuing to work with this Subcommittee on reforms that will accelerate the buildout of broadband networks and the opportunity it enables. I welcome the chance to answer your questions.

Mr. DOYLE. Thank you, Commissioner.

The Chair now recognizes Commissioner Rosenworcel for 5 minutes for her opening statement.

#### STATEMENT OF JESSICA ROSENWORCEL

Ms. ROSENWORCEL. Good morning.

Chairman Doyle, Ranking Member Latta, members of the subcommittee, thank you for having me here today. I am going to start with a story.

So picture northeast Arkansas. This is a region known as the Upper Delta. It's got a proud history. It's where Johnny Cash spent his childhood years and where Ernest Hemingway penned "A Farewell to Arms" in a barn.

Its fields are known the world around for the rice they produce. But this region is also on the leading edge of an ugly trend—increasing maternal mortality.

You see, the United States is the only industrialized country with a growing rate of maternal mortality and the data show that it hits women of color and women in rural areas particularly hard.

So the week before last, I was in Little Rock and I spent time with a team from the University of Arkansas who decided that in the Upper Delta it was time to do something about pregnancy-related deaths.

They described a patient in the region. She was diagnosed with preeclampsia, and that's a hypertensive disorder that is a leading cause of maternal mortality.

To manage this disorder, monitoring is key. But this patient lived in a rural area. In fact, she had to drive several hours just to give birth in a specialty hospital. There was no way she was going to make this same drive on a daily basis during the weeks following delivery.

So this team at the medical center, they got creative. They sent her home with a blood pressure cuff, a special digital scale, and a pulse oximeter to measure the levels of oxygen in her blood.

They told her connect all of these devices to a wireless gateway and transmit daily readings back to her healthcare providers.

This was great, except for one small detail. The patient had no wireless service at home. As she described it, she lived in a dead zone. So every day after performing these rituals she climbed into her truck, drove up to the top of a hill a mile away where she was actually able to pick up a wireless signal and then she sent this data along.

I cannot stop thinking about this story. It demonstrates so clearly the wonder of modern communications but it also reminds us that there are too many people in too many places in this country struggling to connect.

And during the past 2 years I believe the FCC has done too little to address these problems. That is because too often this agency has acted at the behest of the largest corporate forces that surround us, short-changing the American public.

For starters, we do not know with certainty where broadband and wireless service is throughout the country. Our broadband maps are a mess. One Cabinet official recently called them fake news.

The FCC distributes billions of dollars each year to help build broadband. But it is wasteful and irresponsible for the agency to do so without having an accurate picture of where service is and is not in every community in this country.

On top of that, we have done too little to fix robocalls. Here are the numbers you need to know. At the start of this administration, consumers got 2 billion robocalls a month. That number is now above 5 billion. That is insane.

For too long, the FCC has been holding summits and holding workshops and not holding bad actors accountable. I am pleased to see that the Chairman has now distributed a new set of policies for us to take a look at, but I sincerely hope it is not too little too late.

Perhaps, however, the agency is best known for its misguided effort to roll back net neutrality. As a result of this decision, your broadband provider now has the right to block websites and censor online content.

That doesn't sound good to me and it doesn't sound good to the American public, either, 86 percent of whom support net neutrality. Should we have a court remand, I sincerely hope we take a cue from your Save the Internet Act and decide to change course.

Finally, public safety is paramount. But this agency has been totally silent when it comes to press reports that reveal that for a few hundred dollars shady middlemen can tell you your location within a few hundred meters, based on your wireless data.

I don't recall consenting to this surveillance when I signed up for wireless service and I bet neither did you. We need to be up front with the American people about just what's happening.

But while we have been silent, I decided to do something. I wrote all the major wireless carriers and asked them to explain just when they stopped selling our data in this fashion.

I also asked them to share with us what they are doing with the data that's already been sold or shared. I expect those letters to be responded to today and I would be happy to share them with this committee.

In closing, I believe communications policy can create opportunity and help solve problems including maternal mortality. But the way to do this is for the FCC to change course and put the public first.

Thank you. I look forward to answering any questions that you may have.

[The prepared statment of Ms. Rosenworcel follows:]



**STATEMENT OF  
JESSICA ROSENWORCEL  
COMMISSIONER  
FEDERAL COMMUNICATIONS COMMISSION  
BEFORE THE  
SUBCOMMITTEE ON COMMUNICATIONS & TECHNOLOGY  
COMMITTEE ON ENERGY & COMMERCE  
UNITED STATES HOUSE OF REPRESENTATIVES  
“ACCOUNTABILITY AND OVERSIGHT  
OF THE  
FEDERAL COMMUNICATIONS COMMISSION”  
MAY 15, 2019**

Good morning, Chairman Pallone, Ranking Member Walden, Chairman Doyle, Ranking Member Latta, and Members of the 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 21<sup>st</sup> century success. Clearing the way for this connected future should be at the heart of everything we do at the Federal Communications Commission. I believe we can do this when we focus on the most basic values in our laws: consumer protection, universal service, competition, and public safety.

It saddens me that during the past two years, we have not led with these values. Instead, too often this agency has acted at the behest of the corporate forces that surround it, shortchanging the American people. You see it clearly in our failure to fix robocalls, in our inability to bring broadband to underserved communities, in the mess we made with our roll back of net neutrality, and in our failure to offer anything but silence in response to revelations that our privacy has been violated with the sale of wireless location data on our phones.

I am disappointed that the FCC has failed to show the leadership I believe is necessary to take on these big challenges. Because on top of these, so many others lie ahead: our national leadership in 5G wireless, the extraordinary cybersecurity challenges facing our networks, and the need for a bolder national broadband goal of 100 megabits—with gigabit speeds in sight—everywhere.

We have problems to solve, resources that are constrained, and communities that are having difficulty navigating the digital age. I am optimistic that the right communications policies can help. They can help students caught in the homework gap, stuck without the internet service they need to do their nightly schoolwork. They can help expand the use of telemedicine to tackle our hardest healthcare challenges like the increasing rate of maternal mortality in this country. They can help make us safer, with improved 911 service in all of our communities. They can help make our democracy

stronger, if we can commit to media policies that ensure news organizations can report without fear or favor.

I believe it is not too late to change course. It is not too late to refocus our attention on our most basic values—consumer protection, universal service, competition, and public safety. To that end, I have some ideas about where we can start to regain what has been lost.

#### *Consumer Protection*

Consumer protection is always in the public interest. It requires the FCC to be nimble, especially as the communications industry changes at a breakneck pace. But our efforts to stem the growing tide of robocalls have been anything but.

At the start of this Administration, American consumers received roughly 2 billion robocalls a month. That number now exceeds 5 billion a month. That is about two thousand robocalls every second every day. So if you think the problem has gotten worse, you're right. Consumers are complaining that we're doing too little to stop this problem and they're right, too.

While I have supported the FCC's efforts to take on a handful of bad actors with enforcement fines, the *Wall Street Journal* reports that the agency has collected no more than a grand total of \$6,790. That's insane. It's clear the agency's current approach is not working. It's like trying to empty the ocean with a teaspoon.

We don't have time for that. So let me propose three things. First, it's time for the agency to change its rules and require call authentication technology, known as SHAKEN/STIR, that will help return trust to our communications networks. Second, I've written the major carriers calling for them to make free tools to avoid robocalls available to every consumer. It's time for my colleagues to join me in this quest. Third, it's time for the agency to create a new division in its Enforcement Bureau to focus strictly on robocalls. Robocalls are the largest single source of consumer complaints at this agency. It's time for the FCC to organize its work to reflect that and I thank those on this Committee who have sought to help this effort.

#### *Universal Service*

Universal service is a cherished value in communications law. As I noted at the outset, no matter who you are or where you live in this country, you need access to modern communications to have a fair shot at 21<sup>st</sup> century success.

But the fact of the matter is that too many Americans lack access to broadband. According to the FCC's last-published report, 24 million Americans lack access to high-speed internet service, the bulk of them in rural areas. That's troubling. But even more troubling is that this statistic is no longer credible. Our methodology—assuming a single broadband customer in a census block means service is available throughout—is

inadequate. How inadequate? Consider that another study found that 162 million people across the United States do not use internet service at broadband speeds. That turns our digital divide into a yawning chasm.

We have to figure out what is going on. It is becoming clear that the FCC does not have an accurate picture of just where service is and is not all across the country. This is unacceptable. It is time to fix this mess with accurate and honest broadband and wireless maps. This is essential because we will never be able to manage problems that we do not measure.

I am not the only one who feels this way. In a congressional hearing earlier this year, a cabinet official called the FCC's maps "fake news." While this is a loaded term, I think it's obvious we need to do better. Our wired maps have serious inaccuracies. Our wireless maps are so suspect they are now the subject of an ongoing investigation.

Getting this right matters. If we don't have proper maps, we will not be able to target policy solutions effectively. The FCC distributes billions of dollars each year to help accelerate the build out of broadband, so we can connect with all our communities. It's wasteful and irresponsible for the agency to do so without having a truly accurate picture of where those resources should go.

### *Competition*

Competition is fundamental. It yields lower prices and higher quality services. But there is a troubling trend in the state of competition. Right now, too few American consumers have a choice for high-speed broadband service. I know this personally, because I'm one of them. But I also know this professionally, because the FCC's data show that half the households in this country have no choice of broadband provider.

This is one of the reasons why the FCC adopted net neutrality rules in 2015. With net neutrality in place, your broadband provider does not have the right to block websites, throttle online services, or censor online content. That sounds good to me—and to American consumers everywhere. In fact, a study from the University of Maryland found that 86 percent of the public support net neutrality. And yet, the FCC—over my objection—stripped net neutrality from our rules. Now, because of the lack of competition, consumers have nowhere to turn if their broadband provider slows down their service or censors websites. I believe the FCC's net neutrality decision put the agency on the wrong side of the law, the wrong side of history, and the wrong side of the American public.

Sadly, in its haste to roll back net neutrality, the agency used a process that should make no one proud. The FCC refused to hold public hearings. It put out a press release alleging our net neutrality filing system was the subject of a distributed denial of service attack. This claim was later proved to be bogus. The record itself was rife with fraud—more than nine million people had their identities stolen and used to file views about net neutrality that were not their own. This is a crime under state and federal laws.

However, the FCC refused to assist state authorities looking to understand how this happened and turned away valid requests from journalists seeking information about this mess. The agency was forced to pay one journalist tens of thousands of dollars to settle a court case and is actively fighting others in court. All of which begs the question, what is the FCC hiding?

Earlier this year, I was the only FCC Commissioner to sit through the oral argument at court reviewing the FCC decision to eradicate net neutrality. What was obvious to me is that some part of our decision—if not all of it—will be returned to us. When that happens, I hope that this agency will have the courage to run a fair and open process. I hope that it will reflect the strong desire of the American public to have open internet policies once again be the law of the land.

### *Public Safety*

Finally, public safety is paramount. In the very first sentence of the Communications Act, Congress instructed the FCC to make available, “to all the people of the United States . . . a rapid, efficient, Nation-wide, and world-wide radio and communication service” in order to promote the “safety of life and property.”

At about this time last year, press reports first revealed that wireless carriers were selling our private data about when and where we are using our phones to third-party location aggregators. Then, earlier this year, it was revealed that this data was still for sale—and ending up in the hands of bounty hunters. It turns out that for a few hundred dollars, shady middlemen could use this data to show where you were at any moment within a few hundred meters.

This is outrageous. I don’t recall consenting to have my wireless location data sold this way—and yet it has been happening. I don’t see how this is permissible under the law—and yet it has been happening.

This is an issue of personal and national security. It is an issue of privacy. It is a matter that is crying out for clarity from the FCC. But to date, the agency has been silent.

That’s unacceptable. I believe the FCC needs to do more to provide the public with basic information about what is happening with their real-time location information. So I wrote every major wireless carrier and asked them to confirm that they have stopped this kind of sale of our wireless location data. Moreover, I asked for them to explain just what has happened to any data that has already been made available to location aggregators or anyone else. I expect to receive those responses today and will gladly share them with the Members of this Committee.

In closing, thank you again for holding this hearing. Thank you for providing me with the opportunity to offer my views. I look forward to answering any questions you may have and I look forward to working with you and your staff in the days ahead.

Mr. DOYLE. Thank you, Commissioner.

The Chair now recognizes Commissioner Starks for 5 minutes for his opening statement.

#### STATEMENT OF GEOFFREY STARKS

Mr. STARKS. Good morning, Chairman Doyle, Ranking Member Latta, and members of this subcommittee. It is a privilege to appear before you here for the first time today.

The future is already here. It's just not evenly distributed. Wise words and ones that excellently frame the state of our digital divide.

I was sworn in as a Commissioner about a hundred days ago and I am very excited about the development and deployment of 5G and fiber networks that will offer lightning-fast speeds and more.

These networks will further open the floodgates of innovation and turn today's cutting-edge technology into tomorrow's everyday tools.

But that future has not yet come to over 24 million Americans without access to affordable high-speed broadband, and while I am committed to winning the race to 5G, I am equally committed to the far too many communities that have no G.

There cannot be two Americas, one where those with much get even more and another for those who are left behind. Whenever I step outside of Washington, people tell me how broadband impacts their lives and a couple of months ago I met with folks in Blue Springs, Missouri, including Chris Chin, who is the director of agriculture for the State.

She told me how Missouri ranks 41st in terms of internet access and how farmers in their State, including her own family feed mill and hog farm, struggle to upload their livestock and crop data to the cloud to help them manage their farms.

But she spoke even more passionately about how difficult it is to convince the next generation to stay in a community that lacks high-speed internet, and I know a lot of rural communities share that fear.

The problem with broadband access isn't limited only to rural America, though, and an internet inequality exists even in well-connected urban areas where, unfortunately, your access to quality broadband too often depends on your economic status.

And that is why the Lifeline program is so critical. It offers a no-frills phone and internet service so that folks can stay connected, and but rather than recognize and fully address the affordability problem that I think is critical, this Commission has proposed drastic changes to the Lifeline program that would undermine this program.

The fundamental question is does this FCC know who has broadband and how doesn't. Unfortunately, this Commission has fallen down on this issue, I believe, beginning with our data.

Just 2 weeks ago, the Commission admitted that its draft broadband deployment report relied in part on data from a new provider that had inflated its coverage by nearly 62 million persons, and the error was caught not by the FCC but by a diligent public interest group.

We need to take a hard look at ourselves when the FCC's data management practices miss a brand new entrant that claims to cover a whopping 20 percent of Americans.

The stakes get higher. We manage billions of dollars that provide targeted funding but we don't know the right places to send that money.

Mobility Fund Phase II, one of our most important initiatives to expand rural mobile broadband coverage, was suspended indefinitely in December to investigate yet another set of data problems.

We can't have good money chasing bad data. These communities can't keep waiting and they shouldn't have to. Once we get folks online, though, our job doesn't stop there.

Over the last year, news reports have exposed schemes that exploited wireless carriers' customer data systems that allowed bad actors to pay to track anyone in real-time with only their victim's phone number and a couple hundred dollars.

We've heard stories about women being tracked by former partners that appear to be exploiting this vulnerability, and as a former Federal prosecutor, I've personally petitioned the court for restraining orders to protect survivors of domestic abuse and I am shocked to think that an abuser could legally track a survivor's phone to a safe house or a shelter.

After writing about this issue in the New York Times, I've heard from many members of the public who share my sense of outrage and I understand that at least one class action is in the offering.

But more than 1 year into the FCC's investigation, we still have not heard a resolution. Security problems aren't limited to our phones. The entire telecommunications network is equally at stake.

Our networks have serious vulnerabilities that bad actors can impersonate other folks, obtain access to sensitive communications, and even cause our networks to crash.

The situation could not be more urgent. With 5G our networks will connect to our utilities, healthcare, financial, and transportation system.

We need to take our statutory responsibilities seriously and ensure that all of our communications systems have the best possible protections.

Finally, I would very much like to thank this subcommittee for its hard work and passing legislation regarding net neutrality. Millions of Americans have spoken with the same voice that they want the internet to remain open and unfettered, and the Save the Internet Act has given action to that voice.

I will continue to also be a champion for this issue. There is a lot of work to do. I look forward to working with my colleagues to address these challenges and many more. Thank you for having me here today and I look forward to your questions.

[The prepared statment of Mr. Starks follows:]

**STATEMENT OF GEOFFREY STARKS  
COMMISSIONER, FEDERAL COMMUNICATIONS COMMISSION**

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

**“ACCOUNTABILITY AND OVERSIGHT OF  
THE FEDERAL COMMUNICATIONS COMMISSION”**

**WASHINGTON, DC**

**MAY 15, 2019**

Good morning, Chairman Doyle, Ranking Member Latta, Chairman Pallone, Ranking Member Walden, and Members of the Subcommittee. It is a privilege to appear before you for the first time today.

“The future is already here, it’s just not evenly distributed.” Wise words that I recently read, and ones that could not better frame the state of our digital divide. I was sworn in as a Commissioner about 100 days ago, and I am excited to see and participate in the development of the fifth generation of wireless technology, or 5G, and the deployment of fiber networks that offer gigabit speeds and more. Those networks will offer lightning-fast speeds that will further open the floodgates of innovation and could turn today’s cutting-edge tech into tomorrow’s everyday tools, including autonomous vehicles, virtual and augmented reality, advanced telehealth, precision agriculture, and artificial intelligence.

But at the same time, the future has not come to over 24 million Americans who do not have access to affordable, high-speed broadband. While I am committed to “winning the race to 5G,” I am equally committed to the far too many communities with “no-G.” There cannot be two Americas – one where those with much get even more, and another for those who are left

behind. It is absolutely imperative that we make sure that quality, affordable broadband is available to all Americans.

Whenever I step outside of Washington, passionate citizens, business owners and officials tell me how broadband issues impact them. I'll briefly share two stories. I sat down for a town hall with a panel of folks in Blue Springs, Missouri, including Chris Chinn, the Director of Agriculture for the state. She told me about how the state of Missouri ranks 41<sup>st</sup> in terms of internet access, and how that severely limits the ability of farmers in the state—including her family feed mill and hog farm—to upload their livestock or crop data to maximize the efficiency of their operations. But she spoke even more pointedly about the pangs she feels as a fifth-generation farmer, and how difficult it is to convince the next generation to stay in the community without high-speed internet. And I know that a lot of rural communities share that same worry.

I also had the privilege of visiting with Corie Nieto, the director of telehealth services at the Nevada Health Center Clinic in Amargosa Valley, Nevada – population about 1,500. They take all patients—whether you have insurance or not—in one of the most geographically isolated parts of the state. While there, Ms. Nieto demonstrated how telehealth technology connects doctors from distant urban centers with rural patients in the community. But the connection deteriorated significantly at times over the course of the demonstration, and Ms. Nieto also noted that when they make a video connection for a patient, which they do many times a day, the rest of the clinic's internet services become unusable. We must do better.

But the problem of broadband access isn't strictly limited to rural America. An "internet inequality" exists even in relatively well-connected urban areas where the quality and cost of service too often depends on which part of town you live in. The unfortunate reality is that your



access to quality broadband too often depends on your economic status. That's why the Lifeline program is so critical. By providing low-income Americans the opportunity to access a no-frills phone and internet service, we allow them to stay connected with their loved ones, their doctors, and their employers. But rather than recognize the affordability problem and do more to address it, this Commission has proposed drastic changes that would undermine the only program we have that confronts this barrier.

The fundamental question is this: does the FCC know who has broadband and who doesn't? Unfortunately, this Commission has fallen down on this issue, and the problem begins with the data. Just two weeks ago, this Commission admitted that its draft Broadband Deployment Report relied in part on data self-reported by a new provider that inflated its broadband coverage data by nearly 62 million persons. And the error was caught not by the FCC, but a diligent public interest group. We need to take a hard look at ourselves when the FCC doesn't have data management practices sound enough to detect a new entrant that comes out of nowhere, and incorrectly states that it covers a whopping 20 percent of the entire US population.

The stakes only get higher – we manage billions of dollars of support in our Universal Service Fund but we don't even know the right places to send the money. Mobility Fund Phase II is one of our most important initiatives to expand mobile broadband coverage – over \$4.5 billion in planned support over 10 years to deploy 4G to primarily rural areas. But the Commission suspended the program indefinitely in December to investigate yet another set of data problems. In this case, the issues were so bad that the data and mapping problems eliminated any confidence in the process to determine where the subsidies would go. Six months later, we have made no discernable progress in the investigation into the causes of this data issue

and the MF II proceeding remains mothballed. Meanwhile, the people who still have no service, and communities that submitted accurate broadband coverage information at tremendous effort and expense must wait. We can't have good money chasing bad data. We must correct course and we must do so now – these communities cannot keep waiting, and they shouldn't have to.

Even as we do this important work to close the digital divide, our work does not end there. Once we get folks online, they must remain safe and secure. Revelations over the last few years have alarmed every American concerned about issues of privacy and data security. These concerns will only grow as we interact with an increasing number of connected devices. For example, over the last year, news reports have exposed schemes that exploited wireless carriers' customer data systems and practices that allowed bad actors to "pay-to-track" anyone in real time with only their phone number and a few hundred dollars. I wrote a piece about this in the New York Times, bringing attention to this critical issue of mass public safety and calling for a speedy disposition to keep us safe and hold any wrongdoers accountable.

Let me tell you what I believe is at stake. As a former federal prosecutor, I have personally petitioned the court for restraining orders to protect survivors of domestic abuse. And I am shocked to think that an abuser could illegally track a survivor's phone to a safehouse or a shelter. In this case, which is yet another investigation that seems to be languishing, the Commission has been looking into the sale of geolocation information in pay-to-track schemes for over a year and we still don't have any resolution. After publication of my New York Times piece, I have heard from many members of the public who share my sense of outrage.

Security problems aren't limited to our phones – the entire telecommunications network is at stake. Experts indicate that our networks have serious vulnerabilities that allow bad actors to impersonate other people, obtain access to sensitive communications, and even cause

networks to crash. The Commission is the expert agency when it comes to telecommunications. The situation could not be more urgent – 5G networks will connect our utilities, our financial system, our transportation system, our health care system, and much more. A security breach could be catastrophic. As the leadership of this Committee recently affirmed, and as I recently demanded, we need to take our statutory responsibility seriously and get to work to ensure that all our communications have the best possible protections.

Security is not the only challenge posed by our next-generation networks. Those networks will enable technological changes that will create tremendous opportunities for innovation and investment, but could also cost millions of Americans their jobs, particularly the automation of repetitive and routinized, low-skilled tasks. But the same technology that may displace people can also help them find new opportunities. Affordable broadband connections will enable people to use online education to reskill and retrain for new occupations, to start new small businesses, and to compete for new jobs by working remotely. I will be a voice for those who would otherwise be left behind by the coming technological revolution.

Finally, I would like to thank this Subcommittee for its hard work in passing legislation regarding net neutrality. Millions of Americans have spoken with the same voice – that they want the internet to remain open and unfettered – and the Save the Internet Act has given action to that voice. I will continue to champion this issue.

There's a lot to do, and I look forward to working with my colleagues to address these challenges and many more. Thank you for having me here today. I look forward to answering your questions.

Mr. DOYLE. Thank you, Commissioner.

So we have concluded our opening statements. We will now move to Member questions. Each Member will have 5 minutes to ask questions of our witnesses. I will start by recognizing myself for 5 minutes.

Chairman Pai, I have a number of questions I would like to ask you that I need to get through that just require yes or no answers. So I would appreciate you answering yes or no.

Regarding mobile carriers sharing their customers' location data, can you tell us, yes or no, has this practice stopped?

Mr. PAI. Chairman Doyle, I appreciate the question. I cannot comment on a pending law enforcement investigation.

Mr. DOYLE. Can you tell us—since the statute of limitations for these violations is only 1 year, and a year has already passed since we first learned about these violations—has the FCC put in place any tolling agreements with any mobile carrier to ensure that they can be held accountable for these illegal practices?

Mr. PAI. Here, too, Chairman Doyle, I cannot comment on a pending law enforcement investigation except to say with respect to this particular question that we are mindful of the relevant statute of limitations.

Mr. DOYLE. Do you know whether or not the wireless carriers have notified individuals whose locations was illegally tracked, yes or no?

Mr. PAI. Again, Chairman Doyle, this relates to the pending law enforcement investigation. I can't comment on it in an open setting.

Mr. DOYLE. As part of your investigation, have you found any members of law enforcement, agents of the Federal Government, or elected officials such as Members of Congress have had their locations tracked?

Mr. PAI. Again, Chairman Doyle, I cannot comment on a pending law enforcement investigation.

Mr. DOYLE. Let me just say I find your answers to these questions, given the time that has elapsed and the seriousness of this issue as wholly insufficient.

This committee expects you to do more than just sit on your hands.

I would like to talk a little bit about C-band. As we all know, many members of this committee care deeply about the deployment of broadband to rural communities and making it more accessible and affordable for others.

However, there is no business case for private investment the Government needs to pick up the slack. I have seen estimates that peg the market value of C-band upwards of \$70 billion, and for communities that currently have no Gs and see the promise of 5G as a pipe dream, do you think it is better for that money to go to funding broadband build out or into the pockets of foreign satellite companies?

Commissioner Rosenworcel, what do you make of this.

Ms. ROSENWORCEL. Thank you for the question.

Mr. DOYLE. Microphone.

Ms. ROSENWORCEL. Thank you for the question. I think that we need to consult with Congress to identify what to do with the C-band next. It appears that there is a lot of money at stake and, as

you point out, those funds could be used to expand broadband in rural areas, help students caught in the homework gap who don't have access to the internet service they need for homework.

But I think the first place to start is to find a neutral entity that can tell us with clarity just how much this spectrum is worth. It could be tens and tens of billions of dollars. We need to understand that as a matter of good governance.

Mr. DOYLE. Thank you.

Commissioner Starks, how about you? What do you think of this?

Mr. STARKS. I agree with that perspective. I think the most important thing is that we maximize the amount of spectrum that can come in here into the marketplace.

And then the second thing that I would point out is I agree that it's going to be important to make sure that we don't have a private windfall here as we consider the C-band.

Mr. DOYLE. Mr. Chairman, what do you think?

Mr. PAI. Chairman Doyle, I am sympathetic to the gist of your question. Three years ago, as the first member of the Commission to propose a rural dividend from spectrum auctions so we could retain those funds for deploying rural broadband, with respect to this particular issue, we've teed up a variety of different options we are meeting with stakeholders on.

My concern would be with respect to waiting for Congress to legislate on this particular matter we've been criticized by some, including members of the Commission, for not moving quick enough to free up mid-band spectrum.

If that's the case, waiting for legislation to emerge from a bipartisan—from a bicameral system along with enacting by the President could take some time.

So we have to trade off the time value of the spectrum and the need for spectrum for broadband deployment versus some of the concerns you have identified.

Mr. DOYLE. Well, if you think you're getting flak for not moving quick enough, watch how much flak you get if you let four foreign satellite companies keep all the money.

Chairman Pai, in the context of USTelecom's forbearance petition, I am very concerned that the Commission is using Form 477 data, which industry and policy makers widely agree is flawed and overstates broadband availability. I am also concerned that the Commission is considering data collected as part of the special access data request from 2015 as part of this petition as well.

This data is years out of date and does not accurately reflect the current state of deployment or competition. If the FCC were to base its decision on such inaccurate data, the decision would likely be challenged in court.

Will you commit to updating and fixing these data sets before using them as a basis for Commission decisions, particularly in supported claims that competitive policies that promote broadband deployment are not necessary such as in the case of USTelecom's forbearance petition?

Yes or no.

Mr. PAI. Chairman Doyle, unfortunately it's not a yes or no question with respect to the BDS data, for example. One of the reasons why we included the data from the 2015 data collection was be-

cause USTelecom relies on the conclusions from the BDS and the transport remand from the Eight Circuit.

We can't simply adopt those conclusions wholesale. We wanted to make sure that the data upon which those conclusions were based remains a part of the forbearance record in this particular case.

We haven't agreed with it. We simply want to make sure that we have all the data that the party petitioning for forbearance is including in its petition.

Mr. DOYLE. I see my time has expired. Thank you.

I now yield 5 minutes to our ranking member, Mr. Latta.

Mr. LATTA. Well, thank you, Mr. Chairman, and again to the Commissioners and the Chairman, thanks very much for being with us today.

Commissioner O'Rielly, if I could start my question with you. When you were in the district in March we heard from my constituents to build out broadband in rural America we need these accurate maps so that limited Federal funds are going to the areas that most need it.

How important is it that any new broadband funding is allocated based on these accurate maps?

Mr. O'RIELLY. So I would say maps can only be so perfect. But through revision and including a challenge process and verification we can improve them so the dollars go to only the areas that absolutely need them and they don't go to overbuilding, which is a really deep concern I have.

So I agree with your point wholeheartedly.

Mr. LATTA. Well, I know in the past I've always said that we have to differentiate to make sure we are talking about unserved and underserved areas and we have to look at these unserved areas.

Let me follow up. Which agency is best situated to manage substantial new funding and ensure it goes to the right areas? Quickly.

Mr. O'RIELLY. I hate to say I am biased here. I believe the FCC program is the most efficient program. It's not by any means perfect. It has its own flaws and we do improve it.

The Chairman has done great work in the last couple of years—things I've been working on for a decade in terms of reverse auctions. We've really improved our process.

I look at other agencies and what they've done in the past and what they currently do, and I see tremendous flaws and I would recommend to the—and humbly suggest to the subcommittee you consider FCC if additional dollars are made from the Congress.

Mr. LATTA. Thank you.

Mr. Chairman, what are your thoughts on which agency is the most appropriate to channel those new fundings?

Mr. PAI. Thank you for the question, Ranking Member Latta.

Unsurprisingly, I share my colleague's enthusiasm for the FCC as the repository for the additional funding and part of the reason why I see it established is that we now have a reverse auction mechanism along with accountability in terms of the distribution of that funding resulting in broadband deployment.

And with respect to the reverse auction in particular, I mean, I cannot understate how important that mechanism is for distributing funding efficiently.

If you talk to your electric utilities, Tribal carriers, cable companies, satellite companies, and others, now they have a chance to compete for that funding, which makes sure that the scarce taxpayer dollars are stretched as far as possible and as efficient a way as possible.

Mr. LATTA. Thank you.

Let me follow up, Chairman Pai. Last month I introduced the Stop Robocalls Act to give the FCC additional tools to go after these bad actors.

One of the things that the Stop Robocalls Act would do is make it easier for consumers to access technology that blocks illegal robocalls by allowing carriers to offer it for free on an opt-out basis.

Chairman Pai, again, I appreciate your announcement this morning that you are adding the opt out concept in my Stop Robocalls Act to your June meeting. I will continue to work on this with the chairman of this subcommittee so it becomes law.

And would you commit to working with Congress to ensure that consumers can have access to illegal robocall blocking technology?

Mr. PAI. Yes, sir.

Mr. LATTA. Thank you.

Chairman Pai, we've also heard criticism that the Commission is not moving quickly enough to make low and mid-band spectrum available, which is vitally important to U.S. leadership on 5G.

Would you share what you are doing on spectrum as part of the 5G FAST plan?

Mr. PAI. I appreciate the question, Congressman.

We have, obviously, been very active with respect to millimeter wave. We were in the middle of a 24 gigahertz auction. We just finished a 28 gigahertz auction.

We have upper 37, 39, and 47 scheduled for later this year. With respect to mid-band in particular, we have a lot on the table with respect to white spaces in the 2.5 gigahertz band.

We have an ongoing dialogue with the Department of Commerce on the 3.1 and 3.55 band. We've got the 3.5 band itself, which Commissioner O'Rielly will lead the effort on, where we expect commercial deployment soon and an auction next year.

The 3.7 band, which the chairman has mentioned, which will be potentially 200 to 500 megahertz, we also have an outstanding proceeding on the 4.9 gigahertz band, the 5.9 gigahertz band, and in particular the 6 gigahertz band, which is something that a lot of wireless innovators have thought of.

This would be, potentially, 1,200 megahertz for unlicensed spectrum. So turbocharging Wi-Fi, allowing consumers on an unlicensed basis to take advantage to some of the innovation that has now become common in their lives.

So we have a lot on the table, many thousands of megahertz, and we look forward to working with you and the members of the subcommittee to make it a reality.

Mr. LATTA. Well, thank you very much, and if I, in my last 40 seconds—Commissioner Carr, you know, you spent a day out in my district and maybe if you could just give me a quick takeaway of what you saw out there in your five visits across the northwest and west central Ohio.

Mr. CARR. Thank you, Congressman.

We had a great visit to your district. I think what we saw there was both sides of the digital divide. We saw communities that right now have high-tech Next Generation connectivity including at ProMedica Hospital where it is helping to change lives for stroke patients.

We were able to go to a farm in Napoleon and see the tremendous amount of data that smart ag is now pulling off of combines and connected soil moisture meters, and so the real economic upside.

There are many communities in between where we still have work to do and that's why we are reorienting our programs at the FCC including universal service to make sure we have connectivity whether it's 5G or other next generation services in every community across the country.

Mr. LATTA. Well, thank you very much.

Mr. Chairman, my time has expired and I yield back.

Mr. DOYLE. The gentleman yields back.

The Chair now recognizes Mr. McNerney for 5 minutes.

Mr. MCNERNEY. I thank the chairman. I thank the Commissioners for your testimony this morning and for your hard work. I know all of you have perspectives and I appreciate that.

Chairman Pai, the FCC recently delivered its veterans broadband report to Congress pursuant to legislation that I signed into law but missed the statutory deadline by over a month.

While the report did acknowledge that 1.3 million veterans participated in the Lifeline program, it failed to mention that your proposal to reduce the program by over 70 percent would have harmful effects on these veterans.

I am concerned that your proposal would have harmful impacts on veterans and millions of Americans including 56,000 households in my district.

There has been almost no support on the record for this proposal, even though the proceeding was started in 2017. Chairman Pai, please answer yes or no.

Will you put this proposal to rest and end the proceeding?

Mr. PAI. Congressman, the proceeding is still ongoing. We haven't made any final determinations yet.

Mr. MCNERNEY. Will you put this to rest? There is almost no support in the record for this.

Mr. PAI. Again, Congressman, it's still an ongoing proceeding. I can't forecast where the Commission is going to end up.

Mr. MCNERNEY. Commissioner Rosenworcel, what do you think about his?

Ms. ROSENWORCEL. There are people across this country that rely on Lifeline to stay connected. They've relied on this program since 1985 when it was first put in place to make sure everyone could connect to healthcare, to education, and jobs.

We are going to cut off veterans, elderly, people recovering in Puerto Rico and so many other places if we cut this program as the Chairman has proposed. It's time for us to end this proceeding and this effort.

Mr. MCNERNEY. Thank you.

Mr. Chairman, I have a letter—I would like to submit a letter for the record on this issue from the Leadership Conference.



Mr. DOYLE. Without objection, so ordered.

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

Mr. MCNERNEY. I am deeply concerned about President Trump's repeated attacks on journalists and broadcasters. Here is a tweet from the President on April 5th stating that the press is truly the enemy of the people. This is from the President of the United States.

The President has gone on to threaten the license of broadcasters who have reported news that he doesn't like. That's one of—rhetoric of a dictator and beneath the dignity of the office of our President.

Chairman Pai, a free and independent press is the foundation of our democracy. You are the head of the agency that is charged with overseeing the Nation's communication sector including broadcast and media marketplace.

Starting with you, Chairman Pai, and then all the Commissioners, do you agree with the statement that the press is truly the enemy of the people? Please answer with a yes or no.

Mr. PAI. Congressman, that is not language that I would or have used. No.

Mr. O'RIELLY. No.

Mr. CARR. Congressman, I have repeatedly made my views clear on the First Amendment.

Mr. MCNERNEY. Thank you.

Ms. ROSENWORCEL. Absolutely not.

Mr. STARKS. I agree this is an easy choice. Absolutely not.

Mr. MCNERNEY. Thank you.

Chairman Pai, just 1 week after that tweet on April 5th, you appeared at a press conference at the White House with President Trump. It's unusual for a Commissioner from an independent agency to appear at a press conference with the President.

Please answer this with a yes or no. When you saw President Trump on that day, did he mention anything to you related to FEC license concerns or any other issue pending before the FCC related to an entity he thinks unfairly covered him or his administration?

Mr. PAI. No, not to my knowledge.

Mr. MCNERNEY. Will you commit that if President Trump or anyone from the White House reaches out to you about anything like this that you will personally notify our committee and my office immediately?

Mr. PAI. Yes, and I've made, I recall, a similar commitment to the Senate Commerce Committee, your counterparts on the Senate side.

Mr. MCNERNEY. Thank you. We will hold you to that, Chairman.

On the spectrum, I know that having access to mid-band spectrum is crucial for U.S. leadership in 5G.

Commissioner Rosenworcel, why has the agency not moved more quickly to address the issue of the 3.5 band?

Ms. ROSENWORCEL. Thank you.

The rest of the world is running to 5G using mid-band spectrum. We are not doing that there in the United States and we are going to be left behind. Mid-band spectrum propagates far, which means it will bring 5G to rural areas.

But the United States has concentrated all of its energies on high-band spectrum in the last year and this one. We are going to have to pivot and make mid-band a priority if we want to catch up with the rest of the world and deliver 5G to rural communities.

Mr. MCNERNEY. Thank you, Commissioner.

Mr. Chairman, I yield back.

Mr. DOYLE. The gentleman yields back.

The Chair now recognizes the ranking member of the full committee, Mr. Walden.

Mr. WALDEN. Thank you, Mr. Doyle. Chairman in exile, as I like to say.

[Laughter.]

Mr. WALDEN. We have heard a lot today about the need to protect privacy of mobile customers. I don't think there is any disagreement with that on the Commission or up here.

I share my colleagues' concerns about the unauthorized use of wireless consumers' real-time geolocation data by third parties. That is why as chairman I started the bipartisan process—bipartisan process here with my Democratic colleagues last Congress that's still going on this year to look into this matter.

From the consumer's perspective, sharing location data can be helpful and in some cases lifesaving—services like emergency roadside assistance. So there can be a positive effect to this.

But from our bipartisan work on this issue, we learned that in some cases aggregators were selling data for unauthorized purposes without permission from either the consumer or the carrier.

The FCC is taking a deeper dive into this issue through its enforcement bureau, is my understanding, but the reality is that many carriers have already completely cut off these programs and they aren't coming back.

The alternative many of these services are now going to is the location data collected by tech companies, operating systems, and apps that are constantly tracking users.

The data are different and in many cases they're actually more pervasive and more precise. Not a few meters or hundreds of meters; it is what seat you're in.

My concern is the entire market for location data is being shifted to relatively unregulated entities. Is this really the best outcome for the consumer is the question I have.

So, Chairman Pai, you're investigating the interactions of carriers with location aggregators. Does the Commission have the authority to regulate data aggregators in these situations?

Mr. PAI. We do not. Typically, that would be under the jurisdiction of the Federal Trade Commission.

Mr. WALDEN. And can the Commission look into the sharing of geolocation data by other entities such as operating systems and apps?

Mr. PAI. Here too we don't have jurisdiction over some of the tech giants that have collected that information.

Mr. WALDEN. Commissioner O'Rielly, in your testimony you highlight additional mid-band spectrum the FCC should be considering for unlicensed use to support 5G including the 4.9 gigahertz band.

We have got a new discussion draft which would have the Commission conduct a census of the users and how they are utilizing

4.9 licenses and would separately provide a delay in the T-band relocation process for another 3 years.

You often hear Governors or legislators don't get the message on 9 091 091 fee diversion. So the other feature here is to tie the eligibility for the T-band delay to the integrity of the 9 091 091 fees.

I know you have put a lot of work into this. You talked about it in your opening statement as well. Do you think we are on the right path?

Mr. O'RIELLY. Well, sitting here I am really intrigued by your idea. There haven't been a lot of new ideas on how to address those recalcitrant States—New York, New Jersey, and Rhode Island.

Mr. WALDEN. Rhode Island especially.

Mr. O'RIELLY. So I am really intrigued by this that maybe what—the kick that is needed.

Mr. WALDEN. I will tell you what. If a business did this it would be mail fraud and I—government is a business, too, and they ought to be held accountable. But I think it's actually worse than the fraud that is being committed because they are denying rate payers the service they are promising them and you all ought to be united in this cause.

Does anybody disagree with what we are trying to do here?

All right. I am going to take all the shaking heads as yeses and move on, because I just think it is really, really critical.

Now, I want to talk about the role of what you are doing to build out especially 5G and all, and I appreciate the work you are doing. I met with some of my rural electric co-op friends and they are a little concerned about the effect of some of what the FCC is doing when it comes to their equipment and services and, literally, can this pole withstand that weight and this, that, and the other.

And I assume you are taking that into some level of understanding, right?

Mr. PAI. Yes, Congressman. And, additionally, we have reached out in particular to those utilities to participate in those reverse auctions I described.

Mr. WALDEN. All right. Perfect.

I want to go to this mapping issue. There is no disagreement the maps that are used stink. I mean, somebody said fake news. We have all known that. By the way, it happened in the last administration, the one before it.

I sat right on this side in the minority when the majority crammed through the stimulus bill and put \$7 billion for broadband knowing full well the money was going to get allocated before we knew where the mapping was for served and unserved.

And I had an amendment saying before the money goes out the door, could we at least know the unserved and underserved areas through mapping and that amendment was defeated by my friends over here.

So we both know on both sides the maps stink, the data stink. We got to get this right and not overbuild, and I would just like to say, finally, that we should not discount—and I know there are some that just want to trash corporate America or the ISPs or whatever—they are investing far more than this Congress has ever invested.

In the cable world they announced last night \$290 billion over the next decade to build out connectivity—broadband to the home.

And so I think we need to be in a partnership attitude here, not an adversarial attitude. There's a lot more we can get done on this committee when we are working together on these issues. Broadband shouldn't be partisan.

So thank you for being here. Thanks for the work you do. I know it's controversial but we want to be your partners.

With that, I yield back.

Mr. DOYLE. The gentleman yields back.

The Chair now recognizes the chairman of the full committee, Mr. Pallone, for 5 minutes for questions.

Mr. PALLONE. Thank you, Mr. Chairman.

I just—I just wanted to express my concern that, once again, on the eve of an oversight hearing, a number of Members finally receive answers to letters sent to the Commission, and it should not take scheduling a hearing to get a response from the FCC.

Even when we have gotten responses, the answers have often been incomplete or not followed the instructions that we gave in the letters, and I hope that this isn't an attempt to delay this committee's oversight.

So I just wanted to ask each Commissioner, yes or no, clear commitment from each of you—going down the line—to avoid this in the future.

So yes or no, will you commit to responding in a timely manner and following the instructions to Members' oversight letters, starting with the Chairman.

Yes or no?

Mr. PAI. Yes.

Mr. PALLONE. Thank you.

Mr. O'Rielly?

Mr. O'RIELLY. Yes.

Mr. PALLONE. Mr. Carr?

Mr. CARR. Yes, happy to respond.

Mr. PALLONE. Thank you.

Ms. Rosenworcel?

Ms. ROSENWORCEL. Yes.

Mr. PALLONE. I always mispronounce your name.

And Mr. Starks?

Mr. STARKS. Yes.

Mr. PALLONE. All right. I hope so. Thank you. Next.

Chairman Pai, as you know, putting a stop to the overwhelming number of robocalls Americans receive daily is a top priority of mine and many members of the committee.

This subcommittee in fact held a legislative hearing on my bill and a number of other legislative efforts to curb robocalls last month and I appreciate that in your opening you focused on this issue.

But as I noted in my opening statement, voluntary measures spurred by the FCC don't have a good track record and I fear aren't going to solve the robocall problem. So that is why in my bill the Commission would be required to ensure all carriers implement some sort of call authentication protocol.

And I know you have been an advocate of similar technology but, again, it seems to be adopted on a voluntary basis.

So will you commit to issuing an order by year end that requires, not, you know, hopes or volunteers but requires carriers to implement call authentication technology?

Yes or no.

Mr. PAI. Mr. Chairman, I can't—I share your commitment. I have said that, if they don't implement it this year, we will take regulatory intervention under the Administrative Procedure Act.

I can't commit to finishing that proceeding, but we will take regulatory action if—

Mr. PALLONE. Right. But my concern is not only over the time period but also over the fact that it's not enough to demand it or pressure the carriers because I consider that voluntary.

I want a requirement. So let's forget—let's put aside the time. Will you require it?

Mr. PAI. If they do not implement call authentication under the SHAKEN/STIR framework, yes, we will.

Mr. PALLONE. OK. And then what did you say about year end? Will you try to meet that?

Mr. PAI. Absolutely, Congressman.

Mr. PALLONE. All right.

All right. Now, let me ask—let me just go to a last series of questions—I know my time is running out—about the resiliency of our wireless and broadband networks.

The FCC had a report recently following Hurricane Michael that raised real questions about the effectiveness, again, of a voluntary network resiliency framework.

I have repeatedly asked the Commission to update the framework but I haven't gotten a response to that. This recent report indicates a need, in my opinion, for binding requirements on carriers—again, binding, not voluntary.

So let me ask Chairman Pai. The FCC is currently re-examining the voluntary wireless resiliency cooperative framework. Will you commit to creating enforceable requirements to protect consumers in the face of future disasters, yes or no? Not just voluntary.

Mr. PAI. Mr. Chairman, on this one I can't answer yes or no. The career staff and the Public Safety Bureau is actively working on that. I would be happy to keep you apprised of our efforts and if—

Mr. PALLONE. But I am not—I am asking basically that you make a commitment definitively to create an enforceable requirement—some sort of enforceable requirement—because otherwise I don't think anything happens.

You don't have to tell me how but I want an enforceable requirement. Can you say yes to that?

Mr. PAI. Mr. Chairman, I certainly share your concern about this problem with respect to that framework. It is currently—carriers don't have to participate in it and so we want to make sure that we ensure that they are adopting the best practices. But we would be happy to look at the mandates that you are suggesting.

Mr. PALLONE. Well, can I ask that you try to make it enforceable?

Mr. PAI. I would be happy to consider that, Mr. Chairman. We share that consideration.

Mr. PALLONE. I think that is not—that is not much of a commitment, Mr. Chairman.

After Hurricane Michael, the FCC issued very stern messages to the carriers asking them to waive charges and fees for customers affected by outages.

Did you—let me ask the Chairman—did you make even these types of bare minimum public statements to carriers serving Puerto Rico after Hurricane Maria, yes or no?

Talking about you waiving the charges and fees. You did that for Michael. Was it done for Maria?

Mr. PAI. Mr. Chairman, I personally went to Puerto Rico twice in the wake of Hurricane Maria and Irma, and you can ask the Governor of Puerto Rico. You can ask the congresswoman from Puerto Rico.

Mr. PALLONE. Yes, but what about waiving the charges and fees for customers affected?

Mr. PAI. In addition to delivering \$1 billion to the people in Puerto Rico through the Uniendo a Puerto Rico Fund, we took many other steps to make sure consumers were—

Mr. PALLONE. Well, you didn't—again, you're not saying whether you actually did that with regard to waiving the charges and fees. I don't want to get into it, Mr. Chairman.

But I am just very concerned about, you know, the FCC's response to Hurricane Maria has not been adequate. But we will have to deal with that another day.

Thank you, Mr. Chairman.

Mr. DOYLE. The gentleman yields back.

The Chair now recognizes Mr. Olson for 5 minutes.

Mr. OLSON. I thank the Chair, and welcome to the entire FCC. A special welcome to Chairman Starks. This is your first hearing that I've been here. Congratulations. Glad to have you here.

And a special recognition to Chairman Pai. You are a man of your word. You may recall the last time you came before this committee we found out that Mr. Carr climbed up a tall cell tower. I challenge you as a chairman of the committee to act and lead and, my friend, you did it.

Apparently, on August 27th of last year, you climbed up a 131-foot tower in Colorado. So thank you for keeping your word, and it was pointed out earlier Mr. Carr climbed up a 1,000-foot tower. So you have 900 feet to go to catch up with Mr. Carr.

[Laughter.]

Mr. PAI. My wife still hasn't forgiven you or him for goading me on.

Mr. OLSON. My hometown of Sugar Land, Texas, had a mini Harvey Hurricane last week. Had nine inches of rain in less than 2 hours. Our streets were flooded all across the city and across Fort Bend County. The Brazos River rose very high.

As you know, viable communications are critically important during disasters like floods and hurricanes. You guys have done a great job on all these alerts that go out—emergency alerts.

During Harvey just got spammed with alerts. Tornadoes that are 30 miles away and opening—coming—sent to me, all we got this

time was what was relevant to Sugar Land, Texas. So that is well done.

As you know, communication are important during a storm for first responders and families trying to get information—should they evacuate, is that road flooded, are the hospitals open. They made great progress, but as you know, in 16 days the Atlantic hurricane season starts. How is the Commission preparing for the upcoming storm season?

Mr. PAI. I appreciate the question, Congressman.

In a variety of ways, and I've had a chance to see some of the great work in your district. I saw Sugar Land after Hurricane Harvey, visited Harris County 9 091 091, visited the local NBC station that stayed on during the storm to keep people apprised.

So we've taken a number of steps. One is by putting out a number of best practices, recommendations for everybody to use in advance of a hurricane. We have also been working cooperatively with the entire industry, not just communications providers but power companies and others, do encourage them to work together.

We have been working on updating our wireless emergency alert system to be more targeted so that people in this particular neighborhood get the information they need.

Mr. OLSON. And I saw it firsthand last week. You guys did that magnificently. Thank you so much.

Mr. PAI. The credit goes to our fantastic career staff at the FCC and the Public Safety Bureau and the Wireless Bureau for helping make that happen.

But we are looking forward to making sure that we equip public safety officials, first responders, and communications companies and others with all the tools they need. We don't want to see an active hurricane season. But if history is any guide, it, unfortunately, might be.

Mr. OLSON. It is coming.

The next question is for you, Commissioner Pai. In your testimony you mentioned that there has been a problem in Texas with a overbuilding of what is called the E-rate program.

This is a program that is supposed to provide affordable access to advanced telecom services for schools in mostly poor parts of the State, mostly rural parts of the State.

You sent a letter to a group called Universal Service Administrative Company—the USAC. These are the people who approve E-rate funds for Texas schools—for approving funds for schools that already have access to fiber networks. So, in effect, they're double dipping, taking money from the program that is supposed to create these networks but they already have them.

Can you share with us your actions you have taken and the response you have gotten through your questions about the E-rate program in Texas?

Mr. PAI. I appreciate the question, Congressman.

My understanding is that Commissioner O'Rielly sent the letter. So I might defer to him in the first instance to—

Mr. OLSON. I am sorry.

Mr. O'Rielly, I understand the question was for you. My apologies.

Mr. O'RIELLY. That is OK. Thank you, Congressman.

So you are right, I did write to USAC on this specific issue to try to get to the—whether E-rate dollars are being—overbuilding our high cost fund as I met with a number of Texas representatives and it turns out the USAC came forward and said yes, it is happening.

We can't tell you how much but we can tell you that it is happening because they came forward with the lowest bid and it was a competitive process. And my answer is, well, they haven't taken everything into account and they have also manipulated the process to make it the lowest bid.

So I am in the process of trying to figure out how to best address that, and I have to have conversations with the Chairman on whether we need to change the rules so USAC reflects what's happening in the marketplace today.

Mr. OLSON. Thank you. If I can help in any way, let me know.

Last question, very quickly, for you, Commissioner Pai. Other members of the committee right here don't think the FCC is doing enough to stop robocalls. You guys have this upcoming summit on robocalls.

What do you expect that summit to do to show you guys have been, are, and working hard to stop robocalls?

Mr. PAI. I appreciate the question, Congressman.

It is going to do two basic things. Number one, recognize the progress that has been made by other carriers who have been developing and implementing the SHAKEN/STIR framework, and number two, calling out those who have not done the requisite work, who are not on track to meet the Commission's expectation that they implement call authentication this year. We want to know who's making progress and who is not.

Mr. OLSON. A final challenge to the whole Commission. There's a 2,000-foot tower in Missouri City, Texas—Texas 22. If you want to come climb it, I am all in.

I yield back.

Mr. DOYLE. The gentleman yields back.

Now I would like to recognize the vice chair of the full committee, Ms. Clarke, for 5 minutes.

Ms. CLARKE. Thank you very much, Mr. Chairman, and I thank our ranking member for convening this subcommittee hearing today on the accountability and oversight of the Federal Communications Commission.

It's nice to have full bench before us today. All five of our FCC Commissioners are here, and I would like to give a hearty welcome to our newest Commissioner, Geoffrey Starks.

Chairman Pai, I've written you a letter dated May 9th regarding my concerns about a proposed rulemaking in the matter of the implementation of Section 621(a)(1) of the Cable Communications Policy Act of 1984 as amended by the Cable Television Consumer Protection and Competition Act of 1992.

In particular, the proposed reinterpretation of franchise fee to include cable-related in-kind contributions in the definition.

You know, Congress set up the 1984 Cable Communications Act to compensate communities for the use of their property and public rights of way and to provide local PEG stations the ability to meet the information needs of Americans.



I, along with a number of my colleagues, have urged you not to harm local communities in this rulemaking and as vice chair of the committee I joined them in expressing my concern that these proposed rules will harm communities in my district and I will be closely monitoring the process to ensure that PEGs are held harmless.

Chairman Pai, last week Senator Van Hollen I wrote to you about the FCC's Form 395-B, a wonky name for what is a critical issue for people of color.

Your agency has a statutory mandate to collect information about broadcasters' racial, ethnic, gender diversity in the workplace. But it has been 15—let me say it again—15 years since the FCC has required broadcasters to submit a Form 395-B disclosing their workforce diversity.

How can we work to solve the disparities in the workforce without a complete picture of the data? Now, I understand that the FCC has been working to address some issues about the form. But I would like to find out how to resolve those issues and how we can move forward.

And I understand that a draft NPRM on these issues is currently in circulation. Does it include an action to refresh the record on the stalled 395-B issues?

Mr. PAI. I appreciate the question, Congressman, and your leadership on these issues, a goal that I share of getting more diversity of ownership into the broadcast sector.

As you pointed out, that proceeding has been pending for some 15 years due in part to some constitutional and statutory obstacles that our general counsel's office for many years has flagged and that chairs of various parties over the past 15 years have recognized.

Nonetheless, as you pointed out, we have a pending notice of proposed rulemaking to target overall issues with the Equal Employment Opportunity in broadcast framework and I look forward to working with my colleagues to finalize that notice of proposed rulemaking and release it so that we can work together.

Ms. CLARKE. Mr. Starks, can I get your take on this?

Mr. STARKS. Yes. Thank you so much for your leadership on this issues, Congresswoman, and from behind the camera to in front of the news we need to make sure that we have diversity that looks like America—the cross section of America.

It is deeply important. That is why I asked the Chairman to make sure that we did refresh the record on this 15-year-old rulemaking.

And the thing that I would say is in making that offering I am happy to hear from commenters that there are constitutional issues. I would like those to be raised—would love to hear the merits there.

What I am asking the Chairman to do and what I have asked him and will repeatedly ask him to do is make sure that that issue gets the attention it deserves and then we can have a full record built, and then we can close this out. That's just good government.

Ms. CLARKE. Well, let's make this a priority. It's becoming more and more increasingly clear to the American people that, particularly in front of the cameras, that diversity is really lacking.

Chairman Pai, the FCC sent out a consumer alert last week about so-called one-ring scams. Beyond alerting the public to the scam, which I am glad you did, is there another action the FCC can take to ensure consumers don't fall victim to these scams?

Mr. PAI. I appreciate the question, Congressman—Congresswoman, rather. That advisory has proven very useful. We've gotten a lot of consumer feedback—positive feedback on it.

Ms. CLARKE. And what else can we do?

Mr. PAI. But we are not stopping there and that's why the proposal I announced this morning to allow carriers to block calls by default—robocalls—I think would be a significant step.

Right now, because of legal uncertainty over whether it's consistent with the FCC's rules and regulations, some carriers have only allowed those call-blocking tools if the consumer affirmatively opts in. Very few consumers do. And so as a result, companies have not developed the technology fully, certainly have not deployed it fully.

Ms. CLARKE. Commissioner Rosenworcel, your take on that?

Ms. ROSENWORCEL. Look, I used to think it was Rachel from card member services I hated most and then I thought it was that IRS individual with the imminent threat of lawsuit.

But none of us should have to choose. It is crazy the number of scams that are coming in over our phone. Whatever we've done to date with robocalls it is not enough.

We need call authentication technology. Every carrier should make free tools available to consumers and the FCC should set up a robocall division because consumers are angry and that's where we get the bulk of our consumer complaints.

Ms. CLARKE. I yield back. Thank you, Mr. Chairman.

Mr. DOYLE. The gentlelady yields back.

The Chair now recognizes Mr. Bilirakis for 5 minutes.

Mr. BILIRAKIS. Thank you, Mr. Chairman. I appreciate it.

I want to follow up on Mr. Olson's question with regard to the hurricanes. As you know, just last week, the FCC released its report, Mr. Chairman, on Hurricane Michael recovery and I appreciate that you actually went down to see the devastation over there.

So one of the key findings of this states that many of the communications systems were repaired reasonably quickly and I appreciate that, only to be, unfortunately, subsequently and accidentally taken down by debris clean-up crews, unfortunately.

Again, Chairman Pai, I also understand, again, you toured the area and the damage, which is great. What issues did you see on the ground and what are the best practices to help ensure that the delays with recovery from Hurricane Michael do not happen again?

Mr. PAI. I very much appreciate the question, Congressman.

There were a number of lessons that we learned. Number one, there needs to be better prearranged roaming agreements among the carriers to ensure that if one network goes down consumers are able to get connectivity.

Another one was making sure that companies that are in the communication space communicate with those in the power space and vice versa.

One of the biggest issues I heard when I was in Mexico Beach was the fact that some of the fiber crews out there that were going around making sure the fiber lines were back up and running they would do their work and then there might be a fiber cut a hour or two after because the power crew would come through with an augur perhaps and snipped that fiber.

So I want to make sure that those folks are on the same page. Ultimately, we all have the same goal getting energy and getting comms back up and running quickly. Making sure they're on the same page is a critical part of that.

Mr. BILIRAKIS. So you think in this respect we are ready? Because, I mean, hurricane season is upon us.

Mr. PAI. I think we are in a much better position than we were. For example, recently I visited Georgia Power down in Atlanta and one of the things they observed is that they do have a much more integrated relationship with all the communications providers in their service area.

And so I think we are much more aware of the situation and I think both the carriers and the energy companies have taken that to heart.

Mr. BILIRAKIS. That's good to know. Thank you.

Again, Chairman Pai, many of our veterans, retirees, and other Americans with hearing loss—I am one of them—rely on the IPCTS service that they—that you administer. Currently, you're considering allowing fully automated speech recognition to replace humans in ensuring accuracy of the service.

I am concerned that such action could result in inferior service as the testing already done does not replicate real-world conditions. Again, Mr. Chairman, would you commit to additional study and testing before you certify any ASR on the provider or service?

Mr. PAI. I appreciate your concern, Congressman, and that's why in our proposal we make clear that before we grant any certification to an IPCTS provider that provider has to ensure that any ASR technology they use meets the mandatory minimum standards for service, that those with disabilities who rely on that service would require.

So yes, that is built in to make sure that the service is top notch.

Mr. BILIRAKIS. That's so very important and, again, if it's not right and it's just not going to work—it's not suitable—and we'd have to have somebody with hearing loss actually test it to make sure that it's actually performing well.

So I appreciate you doing that, and if you could follow up with us to make sure that happens I would appreciate it.

Thank you very much, and I yield back, Mr. Chairman.

Mr. DOYLE. The gentleman yields.

The Chair now recognizes Mr. Loeb sack for 5 minutes.

Mr. LOEBSACK. Thank you, Mr. Chairman. I want to thank Ranking Member Latta also for having this hearing today. A lot of great issues that we are discussing here—very significant issues.

I continue to have significant concerns about the accuracy of broadband maps and I think many of my colleagues share that concern as well.

Chairman Pai, I know we've talked about this in the past. You have spent some time up in northwest Iowa. I remember talking

to you about dropped calls and all the rest from—between Sioux City, my hometown, and I think it was Worthington, Minnesota—up that way.

Commissioner Rosenworcel, you spent some time in my district. I am glad you mentioned Baxter first. That's the smaller of the two towns, Baxter and Newton. Thank you. We talked about the homework gap, any number of things, when you were there.

And everybody here knows the business case for deployment is really hard to make in a lot of these areas and that's a big part of why we have these problems in the first place.

It's one of the many reasons I am proud to, again, be an original cosponsor of Chairman Pallone's LIFT America Act because this works toward that goal, making sure that we get broadband out, we get sufficient cell service for all these folks as well.

And we have to make sure that we know where there's good service and where there isn't in the first instance, why—Congressman Costello is no longer with us—and I worked on our bill to make sure that we have good maps.

And in the interest of getting more accurate maps, what do you think of a challenge or validation process to help improve the accuracy of broadband maps? I know there are several private companies like Ookla and Microsoft that have compelling about who isn't served out there and I think there are nonprofits working on this as well.

But even further, I think there's an opportunity for individual citizens to challenge these maps that misrepresent the service they receive.

And I want to start first with you, Commissioner Rosenworcel. I would like to start with you. What do you think about third party challenger verification process when it comes to mapping?

Ms. ROSENWORCEL. Thank you for the question. I agree with you. Our maps are a mess and we are not going to fix them sitting here alone by ourselves in Washington.

We have to go out and get the lived experience of the American people who know where they get service and where they don't get service, and we have to find a way that that kind of crowd sourcing and challenge can come into our process, because the best map is not going to be built by the people at this table. It's going to be built by the American public.

Mr. LOEBSACK. And Commissioner Starks, thank you for joining the Commission. Did you want to respond to that as well?

Mr. STARKS. Yes, I agree, and making sure that we have accurate data—validated data—is going to be critically important. I know there are parties out there that are very interested.

Obviously, it was a public interest group that, looking through the FCC's data, is the one that bird dogged the fact that there was a huge issue with barrier free in their submission.

I think also all the tools are going to be helpful here. I think the newly Open Government Data Act is also something that requires the FCC to make sure that data is published in a machine readable format is going to be an important way also to make sure that folks are able to validate and test this data.

Mr. LOEBSACK. Thank you. I would like to move on now.

Chairman Pai and other Commissioners here, I have a question about E-rate. In particular, there's been recent reporting about an NPRM before the FCC.

Likely it will be published this week perhaps, which proposes the Universal Service Fund cap, and this has me rather concerned, as you might imagine, because we are talking about a cap on the whole Universal Service Fund. Under that we have a lot of different programs that compete for the moneys, obviously, potentially.

In particular, one of my concerns is the contention that E-rate and rural healthcare—RHC programs—be combined under a single cap.

Commissioner Pai, do you think a cap will help consumers meet their broadband needs and shrink the digital divide and what would this proposal—would this proposal close the broadband homework gap facing rural students or not?

Mr. PAI. Congressman, your question presupposes a conclusion. We are now in the process of thinking about the notice of proposed rulemaking that would tee up a lot of different ideas.

Mr. LOEBSACK. All the more reason why I ask it now, so that you get the input from us.

Mr. PAI. Yes, and we are not moving forward with a report and order at this stage. What is on the table is a notice of proposed rulemaking that tees up the question that if all of the four subsidiary programs under USF themselves have a cap or a budget should the overall program have a cap that it institutes fiscal responsibility and the like.

And so that's one of the things we'd be happy to work with you on, going forward.

Mr. LOEBSACK. Thank you.

Commissioner Rosenworcel?

Ms. ROSENWORCEL. I agree with you, Congressman. I think this is a problem. I don't think it's a good idea to have kids in rural classrooms fighting with telemedicine providers to get dollars for broadband. That's like the Universal Service Hunger Games. I don't think we need it.

Mr. LOEBSACK. Thank you.

I am running out of time. I did want to talk about ACAM, an Alternative Connect America cost model, and in particular, talk about the eligibility of home-based businesses between this original order and the subsequent guidance.

We have a lot of companies in Iowa. We need, you know, clarification about this. I've got a petition here from a couple of companies in Iowa having to do with small businesses who are at home, how we count them in all of this as well, how we account for them, and I would like to submit that petition for the record if I could, Mr. Chair, and I yield.

Mr. DOYLE. Without objection, so ordered.<sup>1</sup>

Mr. LOEBSACK. Thank you.

Mr. DOYLE. The gentleman's time has expired.

The Chair now recognizes Mr. Kinzinger for 5 minutes.

<sup>1</sup>The petition has been retained in committee files and also is available at <https://docs.house.gov/meetings/IF/IF16/20190515/109479/HHRG-116-IF16-20190515-SD004.pdf>.

Mr. KINZINGER. Well, thank you, Mr. Chairman, for yielding. I would like to thank all of you for being here and your service, and I am sure it's always a blast. So thank you for doing it.

I would also like to thank the FCC for its work to get multiple high bands of spectrum to auction, which helps our global rates to 5G.

I understand that NOAA recently expressed some anxiety about the FCC's auction of the 24 gigahertz band—a band that's critical to building out 5G services.

These concerns revolve around possible interference with weather sensors that operate in a nearby spectrum band. But, apparently NOAA only raised these issues right before the 24 gigahertz auction started.

So my top priority when I come to work every day is U.S. national security and the safety of the constituents I represent and I tend to view policy through that lens, first and foremost.

So, Chairman Pai, with that in mind, will you take a moment to make the FCC's case on this matter and can you assuage these concerns?

Mr. PAI. I would be happy to, Congressman, and appreciate your concern.

Back in 2017, the FCC teed up the 24 gigahertz band, in particular, the appropriate protection limits in terms of the power emissions and the like for devices that would be using these bands for purposes of 5G.

And what we said to all Federal agencies was if you have technical studies that can be validated that suggest that a protection limit that is different from the one that the FCC has applied for two decades is appropriate, let us know, and we'd be happy to take that into account.

We never got a validated study over the subsequent 2 years. Shortly before the 24 gigahertz auction commenced and after the official position of the United States Government was formed for the purposes of an international conference that would be considering the appropriate protection limits for the 24 gigahertz band, among others, we heard this concern.

We still have not received a validated study. We have not gotten access to the data underlying that study. But nonetheless we have been working cooperatively with all Federal partners to see if there's a way to accommodate or at least to understand what their concerns are.

In the middle of the 24 gigahertz auction, however, that is not the time to produce invalidated studies and do the other sorts of public relations campaigns that I don't think advance the ball in terms of leadership on 5G or reinforce the importance of these passive weather sensors or other important Federal functions that are in bands that are nearby.

Mr. KINZINGER. Do you think that the Commission needs to tighten the limits for out of band interference or is that more what you're trying to figure out?

Mr. PAI. Congressman, to be frank, this is an engineering problem. This is not a policy or political problem. That is always the lens that I have used to scrutinize this.

And so one of the things we have established for our satisfaction at least and for the purposes of the official U.S. Government position is that a protection limit of -20 dB is the appropriate one.

If we get technical studies suggesting that a different dB level is appropriate for a protection limit, we'd be happy to hear that.

But what we don't want to see is the—sort of the hyperbolic commentary that is not based on technical studies but is more of a political shot at the agency—at the entire U.S. Government at this point, which is designed not to advance the ball in terms of 5G or protecting those weather sensors, but is simply trying to score points up here on the Hill.

Mr. KINZINGER. And, of course, I assume you will commit to work with other agencies and Congress to assess any reported cases—

Mr. PAI. We have consistently had an open door, and I can tell you I've consistently instructed my staff from the international bureau, wireless bureau, every bureau and office at the agency if you get a request for information or a request for coordination, have an open door. Talk to them. And our teams have always been willing to do that.

Mr. KINZINGER. Thank you.

And last week you guys voted unanimously to prohibit China Mobile from doing business in the U.S. on national security grounds.

You're also in the midst of proceedings to consider a prohibition on USF resources being used to purchase equipment from companies that pose similar threats.

Just yesterday, the White House indicated the President is preparing to sign the executive order to ban telecom equipment from certain providers. We are talking Huawei, ZTE, and others.

I applaud the Commission's proposal to protect our telecom networks and, by extension, the privacy and security of the American people and the Government.

Some organizations have filed comments opposing these proposed actions on supply chain security and network integrity while others believe they don't go far enough.

I, personally, find myself in that latter camp. In the digital age our communications networks simultaneously serve as the hammer of Thor but also our Achilles' heel.

Networks allow our military services to coordinate operations from opposite ends of the Earth. But if a foreign adversary were able to disrupt or degrade our networks, we'd face severe consequences and if they were able to actually direct our networks that would be catastrophic.

That being said, if there's a way to secure ourselves while bolstering commerce and protecting smaller companies who have made substantial investment in rural networks. I think it's a preferable option.

Would you just briefly explain in 20 seconds why the FCC is only considering applying these to the USF fund and why the rule would only be prospective?

Mr. PAI. Congressman, the short answer is that we have jurisdiction over the Universal Service Funding that we distribute and so we can condition that funding on making sure that it is not used on equipment or services that have been determined by the intel-

ligence community, the national security community and others to present a national security threat to the United States.

We don't have, necessarily, jurisdiction over all of other activities in the communications space. That said, if Congress augments our authority, I can tell you that we would be happy to administer that authority.

This is a major issue for American national security. When it comes to this issue, we cannot take a risk and simply hope for the best. When you're talking about a 5G network, for example, that is managed using software from abroad, that—those small cells are near a military installation, the last thing we want is for somebody that presents a national security threat to be able to gain access to that or otherwise exploit it.

Mr. KINZINGER. Well, I thank you all for your leadership on that issue, and I yield back, Mr. Chairman.

Mr. DOYLE. The gentleman yields back.

The Chair now recognizes Mr. Veasey for 5 minutes.

Mr. VEASEY. Thank you, Mr. Chairman, and good morning to the Commissioners for being here today to speak with us.

I represent the Dallas/Fort Worth area and many of you probably have read that we are one of the fastest growing areas in the entire country. I think we've got over a million people—new residents in the Dallas/Fort Worth area according to early preliminary census numbers since 2010 and that's really great.

But in spite of that, I have one of the lowest income districts in the entire country, based on per capita household income, and out of the constituents that I represent over 800 are veterans and over 5,000 senior citizens that are taking advantage of the—of some of the programs that you guys offer.

And I wanted to ask you specifically—and as a matter of fact, the district that I represent has—is the seventh-highest congressional district in Texas with Lifeline subscribers.

And I wanted to specifically ask you is—because it's come to my attention that the FCC has introduced an item on circulation that would put in place overall caps on four programs that serve many low-income and elderly Texans.

And, Commissioner O'Rielly, I specifically wanted to ask you, you discussed the need for fiscal responsibility using the taxpayers—using funds that taxpayers contribute to the Universal Service Fund fees and the need to prevent fraud and waste and abuse in the Universal Services Fund program.

Do you think the lack of transparency the FCC has exhibited in providing the number of enrolled subscribers to these programs is helpful in determining whether an overall cap should be implemented with the purpose of deterring waste, fraud, and abuse?

Mr. O'RIELLY. So I appreciate your question. Congressman Loeb sack before you talked about what the overall cap would do. This belief—and I've been called a corporate shill and now, you know, Hunger Games in terms of this effort.

I brought a map with me. I am happy to submit it for the record—or not map, a graph to highlight what the cap and where the delta is between the two—the two lines in terms of where the spending is today, where it's expected to go, and where the proposed cap is. It's a \$2 billion delta.



So the idea that there's going to be any cuts to the four programs, which, by the way, all have caps today, the Lifeline cap is a soft cap but it does require action by the Commission.

And I am—people said, “Oh, this is a back door way to do a Lifeline cap.” I will do a front door approach on a Lifeline cap because I think we need to have responsibility.

To your question do I think that there is adequate information regarding the data in Lifeline, I think more can be available. I think there are some questions regarding the verifier program and its application.

I have been meeting with a number of providers who have been worried about the re-enrollments rate and the adoption rates in different States that we've adopted that, and I've been preparing to talk to USAC about that because there's discrepancy between where we think the numbers are going and where the providers are going in terms of that behavior.

Mr. VEASEY. What is the FCC doing to ensure that people who are eligible for these programs understand what benefits are available to them and what is being done to give providers incentives to continue to participate in the programs?

Mr. O'RIELLY. I think the Chairman is better in terms of answering some of those parts of the equation.

Mr. PAI. I appreciate that, Commissioner, and I appreciate your question, Congressman.

We are doing a number of things. Most notably, in the context of the national verifier we are working very hard to link up with other databases to enable them to be eligible.

For example, currently there are three States that I believe by early June are going to be up and running. I think Texas might be one of them but let me double check and get back to you on that.

But the FCC's national verifier database would essentially link up with the SNAP and there is another database that we connect with.

Additionally, I personally requested to Seema Verma, who is the head of the Center for Medicare and Medicaid Services, to work with us on the IT integration that is necessary to make sure that our databases mesh.

And assuming we can solve those IT problems I would hope that later this year we'll be able to make sure that that is fully integrated, which would be another way of ensuring that we ping those low-income consumers on a variety of different axis. So whether it's healthcare, I would like to make sure they get those benefits.

Mr. VEASEY. Real quick, Commissioner Rosenworcel, would you please follow up on that?

Ms. ROSENWORCEL. Thank you, Congressman.

Your concerns are totally valid. We have before us a proposal to cut Lifeline by 70 percent. That would cut off the veterans in your district, the elderly people who rely on it and some of the least connected people in this country.

I think it's cruel. I think we need to end this proceeding right now.

Mr. VEASEY. Thank you. Thank you very much.

Mr. Chairman, I yield back.

Mr. DOYLE. I thank the gentleman.

The Chair now recognizes Mr. Scalise for 5 minutes.

Mr. SCALISE. Thank you, Mr. Chairman. I appreciate the time, and I want to thank the Commissioners for your service, for coming here and, you know, just having this conversation with us as the marketplace keeps expanding.

It's exciting as we talk about 5G, as we talk about also confronting some of the challenges within the industry and the growth in the industry. We want to make sure that the industry can keep growing as it is and America leading the world in technology and really you all are at the forefront of it.

The policy is real important to make sure that we are not having policy that gets in the way. I want to talk about a couple of things first on something that we had worked on together for years and that is the consolidated reporting—to actually have all of the different various reports that the FCC had to do that were ridiculous, outdated.

You all had to do a report—required by law to do a report on competition within the telegraph industry. I know a lot of people out there in the telegraph industry probably eagerly anticipated that report. But Samuel Morse would probably agree that that time has come and passed.

And, finally, we were able to get rid of that report among a number of others, and then with some of them you had to do annual reports that really didn't make sense and they were all done in siloes.

And now that we do have this first report that came out—the consolidated report—it put a lot of work on you all's plate to come up with the first report that came out in December.

And I want to first ask how did that process work, is it working the way we anticipated in terms of how the law gave you that ability to stop having to do things that didn't make sense and to come up with something that can actually help people, guide people, about where the industry should go.

If you, Chairman Pai, would fill us in.

Mr. PAI. I appreciate your question, Congressman, and the leadership this entire committee showed in passing that legislation sorely needed. It was something that I believed in strongly.

When I was a Commissioner I used to complain about the sixteenth, seventeenth iteration of the ORBIT Act report, which reported to Congress yes, the satellite was indeed privatized in 2001, and nothing has changed since then.

I can now tell you that I know as the Chairman, having stewarded the first such report under the Consolidated Reporting Act, it is a tremendous benefit to be able to free up those staff resources that otherwise would be spent compiling these reports that nobody would read or that were otherwise outdated.

On things that really deliver value for the public interest, it's been a huge help. And so we'd be happy to work with you if there are additional consolidations in the works, so to speak, and I can tell you though that it's—from an administrative perspective alone it has been worth its weight in gold.

Mr. SCALISE. Well, I appreciate that. It's good to hear. I do want to know because we've talked a lot about this too and that is that

many of the laws that govern the video marketplace today are governed by the 1992 Cable Act.

Now, back in 1992 I am sure it was a good bill. You had cable companies. You had, literally, monopolies and monopolies. Cable companies would negotiate with, at the time, the three broadcast networks and that was most of what you had.

And then as you had some of the different cable companies starting to develop and emerge, in time we came up with satellite and broadband, fiber, and so many other things.

Now you have over the top. People are cutting their cord because they can do so many things whether it's Sling or Roku or you have got streaming services, and all of that is kind of the wild, wild West because the 1992 law is outdated.

And so as we talk about how to get a more updated version of this, and I know I've worked on some things. You have worked on some things. Some other members of the committee have been working on ways to update these laws.

If you can give us any of your input, both Chairmen Pai and O'Rielly. I know we've talked about these, too—about things that we need to do or should be thinking about to update what maybe was modern at the time in 1992 but now is very outdated and not up to date with all of the changes that have happened in the video market place.

Mr. PAI. Congressman, that issue you have targeted, which is the transformation of the marketplace, matched by stasis in our rules, is one of the most fundamental challenges we have with respect to our media regulations.

I would defer to you, of course. You have done a lot of great bipartisan work on this issue in terms of the particular legislative vehicle.

What I will say is something that I proposed 6 years ago as a Commissioner. Congress cannot always act, certainly, not quickly, with respect to some of these issues.

But what would be extremely helpful is if we had something similar to what we have on the telecom side. Under Section 10 of the Telecom Act of 1996, for example, Congress extended to the FCC forbearance authority if the Commission determines that it's no longer in the interest of the competition or the public interest to retain a particular regulation or statutory mandate.

We have the power to refrain from enforcing it. To have similar authority for non-telecom services would enable the FCC to work with much greater dispatch, it would allow us to align our rules with the realities of the current marketplace, and would now allow you to see the benefits of the innovation and investment that could take place if we didn't have rules on the books that were holding it back.

Mr. SCALISE. Thanks. I know I am running out of time but I appreciate all of you being here, and as we continue to work to make sure ultimately it's the consumers that we want to see get the best benefit because competition benefits the consumer and we want to make sure that the laws that we pass and that we have on the books are up to date and recognize where we are today so the consumers can continue to benefit from that competition and lower prices and more options for them.

So with that, I appreciate the work you do and I yield back, Mr. Chairman.

Mr. DOYLE. The gentleman yields back.

The Chair now recognizes Mr. McEachin for 5 minutes.

Mr. MCEACHIN. Thank you, Mr. Chairman, and let me start by thanking you and Chairman Pallone for holding this important hearing.

Despite funding and bipartisan support, rural broadband deployment in this country has lagged behind where it should be for far too long.

In the past few years, we have spent billions of dollars on efforts to expand broadband internet services in rural America, and yet, while some progress has been made, we are still in need of greater expansion.

We all know the detrimental effects lack of internet access can have on communities including creating disincentives for businesses to locate in such areas.

I know this firsthand. Before coming to Congress I was a small business owner and when attempting to expand my business we had to make decisions in terms of not just which populations we wanted to serve but also which communities had sufficient connectivity.

In one instance, we were forced to abandon a promising location because of inadequate broadband access. This experience reinforced why it is so important that we do better and an important first step for us to expand broadband is to understand where it exists or, in other words, ensure that we have accurate data in mapping.

Chairman Pai, first of all, thank you for appearing before the subcommittee today. Is it safe to assume that you believe it is important to have accurate, more granular data in maps regarding where broadband currently exists? Yes or no.

Mr. PAI. Yes, sir.

Mr. MCEACHIN. I also gather from your August 2017 press release on the FCC's 2017 FMPRM regarding the improvements to Form 477 you believe it does not currently reflect the best possible way to collect this data, especially the form's language that allows ISPs to claim coverage of an entire census block if one household or establishment is connected within said block. Is that correct? Yes or no.

Mr. PAI. Yes.

Mr. MCEACHIN. Excuse me. Are there current steps in place to verify ISPs' self-reported 477 data is accurate? Briefly, what are those steps?

Mr. PAI. Congressman, we are currently in the process of re-vamping that Form 477 process, working with stakeholders from different sectors of the industry to figure out how to improve it.

And the problem you identified about the census block being deemed covered if a single household in the block is getting service but nowhere else is, that's one of the things we are trying to get at is how do we get more granular information.

So we are evaluating different proposals for how to move forward on it. But we share that goal. We want to make sure working with stakeholders including some of the rural broadband advocates you

described that we get a better sense of where broadband is and, more importantly, where it is not.

Mr. MCEACHIN. Thank you.

In March of this year, BarrierFree made claims on its 477 data asserting it went from serving zero census blocks as of June 30th, 2017, to serving nearly 1.5 million blocks containing nearly 20 percent of the U.S. population in just 6 months.

This level of deployment would have made BarrierFree the fourth largest U.S. provider in population coverage. One of the States allegedly—they allegedly had complete coverage was Virginia.

In a press release earlier this month, you stated that—you stated you have since corrected the data in that report, which I do appreciate. But I am curious as to how BarrierFree's 477 Form was not realized through the verification process before your office put out a press release.

Are there other providers whose data is also inaccurate within the report? If not, how confident are you that that is the case and what steps have you taken to verify said data?

Mr. PAI. I appreciate the question, Congressman. Immediately after learning about that issue I directed staff to look into it and we made the appropriate corrections and we've also asked them to scrub all of the data to make sure that everything in the report is accurate.

And so we issued to the fellow Commissioners the revamped report where those numbers would still show the digital divide closing, albeit not as much as was originally projected.

Mr. MCEACHIN. Mr. Starks, while I know that you have only been there a hundred days, would you share your perspective with us?

Mr. STARKS. Yes. Thank you so much for the question. This gets to sound data practices—that there is not what I think I heard the Chairman just say, is that after the fact now he's asked for a scrub of the data.

The fact that there was not an outlier detection for a new entrant—in my mind a new entrant probably should have been scrubbed even more on the front end because they haven't previously submitted 477 information.

The fact that a red flag didn't pop up when somebody goes from zero to nearly 62 million households is something that I think the data process needs to be corrected.

And, obviously, when we are talking about 477s we need to make sure that we have a better understanding of not at the census block level but at the address level I think is going to be important.

Mr. MCEACHIN. Thank you.

Mr. Chairman, I yield back.

Mr. DOYLE. The gentleman yields back.

The Chair now recognizes Mr. Johnson for 5 minutes.

Mr. JOHNSON. Thank you, Mr. Chairman, and I want to thank the Commission for being with us this morning.

Chairman Pai, thank you especially for making yourself available last week to sit down and chat. During our session we talked about how we are just now learning about the educational broadband services capability and the 2 gigahertz band and how that might

be a tactical solution to roll out some broadband access to rural parts of the country, my district being one of those, and you know they're very, very hard to serve.

I understand there are a number of rural operators that would love to partner with educational groups to deploy broadband quickly and in some cases have already done so in some of the most remote areas of the country.

I even heard about a Native American Tribe in Arizona getting a special license waiver and deploying a network in one day for under \$20,000.

Now, I think if we can use EBS technology to deploy broadband to the bottom of the Grand Canyon, we can just as easily get it out to rural parts of my district.

So how does a qualified entity from my district apply for an EBS license?

Mr. PAI. So, Congressman, that proceeding is pending right now. We have made a notice of proposed rulemaking a while ago to figure out how best to use that 2.5 gigahertz resource for the benefit of consumers in rural areas, and that is one of the concerns that was expressed in the record was the fact that historically it has not been used to the maximum extent it could be.

And so that is one of the things we are exploring is how to work with various stakeholders including—

Mr. JOHNSON. I am just curious. Do you have any idea when that's going to be finalized?

Mr. PAI. I don't have any announcements to make today. But what I can tell you is that we do recognize the interest in this particular band and look forward to working with Congress and other stakeholders to make sure it's wisely utilized.

Mr. JOHNSON. OK. Well, good. Well, I look forward to hearing more about that because it is—from the little bit that I know it seems like it might have big promise in rural parts of the country.

You know, one of the—the solution we most frequently hear about in terms of broadband expansion is some sort of Government subsidization or assistance to bring broadband to underserved areas.

That is great. But it feels like this is only part of a solution that will have many different components. For instance, the private sector already invests billions in private capital each year in broadband.

Are there Federal regulations on the books that you believe disincentivize private investment in broadband deployment of wireless and wireline networks in rural areas?

Mr. PAI. I do believe there are a great many Federal rules and regulations, Congressman, that stand in the way.

Mr. JOHNSON. Well, could you—could you supply us with a comprehensive list so that we can go to work on those? Because as I mentioned to you last week, we need to start showing some real progress on rural broadband expansion.

Mr. PAI. I would be happy to—oh sorry.

Mr. JOHNSON. And also as I mentioned in our meeting last week I have heard many concerns from my constituents and other members and even some of the Commissioners about the FCC's current approach to mapping.

Chairman Pai, what is being done to improve the mapping process?

Mr. PAI. In addition to some of the work we have been doing, as I mentioned in response to a previous question, we have an ongoing proceeding on the From 477 process to make sure that we get more granular detail on where broadband is.

It is not enough to say that a census block is covered if only a household within that block is covered. So we are working with various stakeholders to figure out how to make that data more granular.

On the mobile side, when I first came to office we started a new data collection for wireless broadband because we did not think that the data that we were getting was sufficient.

And so in the context of the Mobility Fund Phase II, we started to bespoke a data collection effort. Unfortunately, we have not started an enforcement investigation to a provider or providers who we believe may have submitted inaccurate data.

But what I can tell you is we are looking to make sure that we have a more accurate sense of mobile broadband coverage as well.

Mr. JOHNSON. Well, I can tell you, you know, I, for one, and I am sure Members on both sides of the aisle would agree, I stand ready to help and if there's anything that we can do, get us that list of regulations that we need to tackle to begin breaking down the barriers so that we can show some real results in broadband expansion to rural America.

Mr. PAI. I would be happy to do that, sir.

Mr. JOHNSON. Thank you, Mr. Chairman, and I yield back.

Mr. DOYLE. The gentleman yields back.

The Chair now recognizes Mr. Soto for 5 minutes.

Mr. SOTO. Thank you, Mr. Chairman. I have the honor of representing central Florida, a very diverse area from tourism and technology in the north and suburbs to rural areas in the south, and I think about how whether it is cell phones, the internet, you name it, in technology how it is so integral to our lives

One of the areas that we have is the busiest space port in the Nation and in the world at Cape Canaveral and we are concerned about finishing up rulemaking for the area of the spectrum that is utilized for American rockets.

More specifically, the FCC regulates spectrum used almost every day by American rockets launched to space including our missions to the Space Station.

But we haven't finished with the rulemaking that started in 2013, and even as the number of launches have dramatically increased.

Chairman Pai, you were supportive of that rulemaking when it first came out. Will you commit that the FCC will finish that rulemaking so that as we get into a busier rocket season over the next couple of years that we'll be ready to go?

Mr. PAI. Congressman, I appreciate the question. I have been to a launch in the last year. So I have seen how impressive it is and how important it is.

We certainly want America to lead the way in space. Now, the frequencies that are used to support commercial space launches are allocated exclusively to the Federal Government.

And so, traditionally, we've had to go through the special temporary authority route to do that. Now, the proceeding that you're talking about deals with frequency allocations as opposed to the licensing processes for launches.

So one of the things we will have to explore is how to proceed to accommodate the concern which I share—American leadership in space—but also on the basis of a record that has been fully fleshed out.

So I would be happy to work with you on that and keep you updated.

Mr. SOTO. Well, please submit any proposed legislation and ideas that we could help to make sure that we can get this done because we are launching rockets with greater frequency and we'll have human space flight again probably this year at the Cape. So we want to be ready for that. Thank you.

My next question is regarding Hurricane Maria. I am of Puerto Rican descent and we have many of us. The largest diaspora in the Nation is in Florida.

You know, we saw the largest death toll in the modern history with nearly 3,000 people dying and some of that was because the electricity couldn't get back up. But some of it was by virtue of communication.

I know, Commissioner Rosenworcel, you had talked a little bit about it with Chairman Pallone's question. But what could we—what have we learned and can do better with regard to responding to hurricanes, particularly those in islands?

We have States that are islands. We have parts of States that are island. We have territories that are islands. What could we do better?

Ms. ROSENWORCEL. Thank you for the question. I spent time in Puerto Rico after the hurricane. I also spent time there as a child, as I had family that lived there, and it was devastating beyond description what I saw.

And it is now a year—more than a year later and they're still rebuilding. There are two things right now that the FCC should do.

First, we have got to stop the threat to their Lifeline program. Half a million individuals in Puerto Rico rely on that program to stay connected. They are trying to put their lives back together. We have got to stop threatening to take their service away.

Second, the Chairman started a proceeding to identify over the long term how Puerto Rico and the Virgin Islands can rebuild their networks as a result of Hurricane Maria. We need to bring that to a conclusion.

And then finally, in the aftermath of all of these storms I think we have to stop acting like voluntary procedures next time are going to work better.

We need to put some requirements in our rules and learn from these disasters to make sure these problems do not happen again.

Mr. SOTO. Thank you for that. One of the issues we are looking at is whether to activate FM chips in cell phones during disasters. It is something I encourage you all to look at and if we do need some legal authority to empower you for that it's something I am interested in working with you on.



Overall survey question for all of you, very quickly. We had the FTC in last week. So who—which institution is best positioned to enforce potentially new net neutrality rules, the FCC or FTC?

It would be great to go down the line, starting with you, Chairman. Which institution is better positioned to enforce those rules?

Mr. PAI. Depending on which rules you were talking about, I would say the Federal Trade Commission.

Mr. SOTO. Mr. O’Rielly?

Mr. O’RIELLY. I don’t support the rules. But I would say—

Mr. SOTO. That is not the question.

Mr. O’RIELLY. Sure.

Mr. SOTO. Which institution is better?

Mr. O’RIELLY. I think the FTC has the appropriate authority in this space.

Mr. SOTO. Mr. Carr?

Mr. CARR. Thank you. We are now in—we are now in a situation where we don’t have to make that choice. Right now, the FCC can work—

Mr. SOTO. OK. But which—that is not the question. Is FCC or FTC better situated to enforce those rules?

Mr. CARR. Right now we have the best of all worlds. We have the FCC that can work with the Federal Trade Commission to—

Mr. SOTO. OK. Nonresponsive.

Ms. Rosenworcel?

Ms. ROSENWORCEL. The answer is the FCC. The Congress made us—

Mr. SOTO. Mr. Starks? My time is limited. Sorry, everyone.

Mr. STARKS. There is no doubt it’s the FTC.

Mr. SOTO. Thank you, and I yield back.

Mr. DOYLE. The gentleman yields back.

The Chair now recognizes Mr. Walberg for 5 minutes.

Mr. WALBERG. Thank you, Mr. Chairman, and thanks to the panel for being here, and Mr. Pai—Chairman, we appreciate your work and willingness to take the hits at times.

Chairman Pai, like you, one of my top priorities is expanding broadband access to rural America and I know Commissioner Carr understands that, having been in my district, heard my repeated whining about broadband needs, and Commissioner O’Rielly as well. Thank you for listening to my whining also.

But it’s an important thing and yesterday I led a letter with my colleagues from the delegation to you outlining the need to reform the Commission’s broadband availability maps.

And, Mr. Chairman, I would like to enter this letter into the record.

Mr. DOYLE. Without objection, so ordered.

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

Mr. WALBERG. Thank you.

As you know, the Commission’s proceeding to modernize its data collection has been open for almost a year. I also want to thank our Republican Leader Walden for his focus on this issue, going back a number of years.

My question is when examining potential fixes to this process, have you coordinated with other Federal agencies that track broadband availability or other Federal support for the deployment

of broadband facilities to ensure your data collection is standardized to the greatest extent possible?

Mr. PAI. I appreciate the question, Congressman. The answer is yes. For example, we have worked with the Department of Commerce, the Department of Agriculture, as well as non-industry stakeholders to figure out the appropriate way forward.

Mr. WALBERG. This certainly seems like a building block to better interagency coordination and—

Mr. PAI. I would agree.

Mr. WALBERG [continuing]. Lacking wasting of resources.

Chairman Pai, yesterday the Commission announced it authorized the release of another \$111 million in CAF II funding to expand broadband to unserved areas, while none of it went to Michigan, including where I live and where I am unserved myself.

I am hopeful subsequent authorizations recognize the unserved communities in my district and throughout the State. The Commission recently announced that it is contemplating a \$20 billion rural digital opportunities fund to offer high cost universal service support.

How do you plan to coordinate with Federal agencies like the Rural Utility Service at the Department of Agriculture to ensure those funds aren't used to support projects that are competing against other federally subsidized projects?

Mr. PAI. A great question, Congressman.

First, though, I want to make sure that I make clear that the initial disbursement of funds that you referenced yesterday there are other winners for the Connect America Fund who are in Michigan. It wasn't just in this tranche, however. So we will keep you posted.

We certainly want your constituents and you to get the benefits of broadband.

Mr. WALBERG. Well, we look forward to that.

Mr. PAI. Absolutely.

With respect to your question, there are a few different things that we would like to see in the rural digital opportunities and I would like to see, depending, of course, on the Commission's assent.

One is to use that basic mechanism of the reverse auction to encourage all kinds of companies to compete. For example, electric utilities, cable companies, and others might have a deeper footprint in your district than a traditional recipient of those funds. We want to encourage all of them to compete.

Additionally, we have service thresholds that we believe will encourage the highest quality service. It's not enough to say, as the previous Connect America Fund did, well, 10.1 megahertz per second service that is good enough. 25.3, we think, should be the standard and our hope is we will be able to encourage that.

Additionally, accountability—we want to make sure those funds are used for the purpose that they were intended for. And so there will be accountability mechanisms to make sure that if somebody says we are going to serve that district in Michigan they do in fact serve it within the time frame and at the service threshold they promise us they will.

Mr. WALBERG. Good. We don't just want talking points and—

Mr. PAI. Absolutely.

Mr. WALBERG [continuing]. We feel we deserve that service as well. So thank you.

Commissioner O'Rielly, is there anything you would like to add?

Mr. O'RIELLY. Well, I would just add that as nice as—and I agree with my colleague's point—other agencies will have the coordination, will have the conversation. But absent congressional statutory language, they have a tendency to go their own route, as we have seen in conversations with outside parties, what's happening at the Department of Agriculture, and we've seen that in the past as it relates to the Department of Commerce.

So absent Congress saying that this is what we expect, it is not just coordination but actually duplication that no overbuilding happen. Then the areas that we are going to spend time on are not going to be the unserved areas such as in your particular case.

Mr. WALBERG. One final point, and I know I am running out of time. Workforce—what is the Commission doing to ramp up the workforce?

Mr. PAI. Great question, and Commissioner Carr has done a lot of work on the infrastructure side. I will say, just very briefly since time is short, we set up a working group as part of our broadband deployment advisory committee to look at the jobs training and other necessary steps to build that workforce of the future.

These are high-quality good-paying jobs. But they won't be filled if we don't make an effort to encourage that pipeline of workers. So be happy to work with you on that and this is something that I think would have application around the country. This infrastructure is needed everywhere.

Mr. WALBERG. Thank you. Thank you.

I yield back.

Mr. DOYLE. The gentleman yields back.

The Chair now recognizes Mr. O'Halleran for 5 minutes.

Mr. O'HALLERAN. Thank you, Mr. Chairman, and thank you, Commissioners, for appearing before us today to discuss your role in overseeing today's rapidly evolving telecommunications landscape.

Since joining the Energy and Commerce Committee, I have made addressing rural broadband my number-one priority. According to Congressional Research Services, only 39 percent of Arizonans in rural areas have access to broadband at 25.3 speeds.

Even the FCC's latest Tribal broadband reports states that 36 percent of Tribal households lack any access to broadband at 25.3 speeds.

I believe, based on what I have heard so far, that that number is probably much lower. This is simply unacceptable in America today. Access to reliable broadband means access to cutting-edge capabilities of modern technology, including telemedicine, online education, and global connectivity.

Closing the digital divide is not only important for rural America but also for Indian country. For instance, I represent the Havasupai Tribe at the bottom of the Grand Canyon, making them the most remote Tribe in the lower 48 States.

This Tribe was previously unserved by any commercial solution, yet was recently able to leverage an educational broadband service

spectrum license to provide a broadband network to their community in just one day.

Mr. Chairman, I ask for submission of a Seattle Times article for the record.

I urge the FCC—

Mr. DOYLE. Without objection.

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

Mr. O'HALLERAN. Thank you, Mr. Chairman.

I urge the FCC to pursue license spectrum strategies to target the truly underserved areas.

Chairman Pai, per Section 508 of the RAY BAUM'S Act, what steps will your Commission take to issue a robust proceeding to address Tribal connectivity following the FCC's recent report on broadband deployment in Indian Country?

Mr. PAI. I appreciate the question, Congressman, and I have personally been to a Navajo Nation on and around and so I've seen the connectivity challenges on Tribal lands in your district.

We have taken a number of steps—for example, Tribal OpEx support, increasing the amount of support that Tribal carriers get for operational expenses, not just the CapEx to build a network.

Additionally, we have been exploring a Tribal broadband factor to give Tribal carriers an extra bump if they are serving Tribal lands.

In addition to that, one of the things we proposed in the context of the educational broadband spectrum—EBS—was to create a window for Tribal entities or entities serving Tribal lands to participate to get access to that spectrum.

And additionally, I want to make sure I point out that the announcement I made earlier about the Connect America Fund auction recipients, folks in your district got funding from that just this week. And so we are going to see—or they will get the funding by the end of the month. The announcement was made they will be getting funding this week.

So we hope that as the dollars start to flow that broadband connectivity will start to increase as well.

Mr. O'HALLERAN. I hope so too, and I will be asking you for a list of time lines and how this is going to be accomplished in a way that indicates—identifies clearly the critical needs in these areas.

The GAO has clearly stated that using Form 477 may vastly overstate true broadband availability since it is based on a broad census block model.

Commissioner Rose—I have problems just like Chairman—

Ms. ROSENWORCEL. It is all right.

Mr. O'HALLERAN. Rosencel—I am not even close.

[Laughter.]

Mr. O'HALLERAN. Would you say the findings in the latest Tribal broadband report could depict inaccurate coverage levels throughout Indian Country?

Ms. ROSENWORCEL. Thank you for the question. Listen—

Mr. O'HALLERAN. We just met the other day.

[Laughter.]

Ms. ROSENWORCEL. I know. I know.

Native Americans shouldn't be the last Americans to see the digital age and all the information around us suggests that is true.

The GAO has criticized the very data that the FCC just used in its late report that we just filed pursuant to the RAY BAUM'S Act.

We have 18 more months to complete a proceeding to fix this situation and I encourage this committee to keep pressure on us because we have so much work to do.

Mr. O'HALLERAN. Well, I guarantee we will, Commissioner.

Chairman Pai, could you elaborate on where the Commission stands in its open proceeding to update broadband availability mapping using Form 477 and will the FCC remain committed to finding a granular approach that balances timeliness, cost, and personal privacy.

I, personally, as a business person can't understand how you make decisions at all with this current mapping process. So please.

Mr. PAI. I appreciate the question. The answer to your second question is yes, we do understand the balance that you just described and are seeking to find that balance in our proceeding.

With respect to the first question, we are working with stakeholders and I am going to be briefed by our staff soon on where things stand and how to move forward. A number of different stakeholder groups have advanced different proposals in terms of shape files or other mapping initiatives.

We want to evaluate all those in addition to thinking about crowd sourcing and other third party data that we could use to make sure that we get a better understanding of where broadband is, including in the first district.

Mr. O'HALLERAN. Thank you, Mr. Chairman.

I yield.

Mr. DOYLE. The gentleman yields back.

The Chair recognizes Mr. Gianforte for 5 minutes.

Mr. GIANFORTE. Thank you, Mr. Chairman.

And Chairman Pai and Commissioners, thank you for being here today.

Montanans have told me that one of the worst things they face day to day are illegal robocalls. They are getting called with bogus insurance offers, threats of legal action and promises of government grants.

Robocall scams put Montanans at risk of being robbed or having their identity stolen. I have told the story before about a young Montanan who received a robocall from her younger brother's number except her younger brother had died of a heroin overdose a couple of months before.

These kinds of robocalls are malicious and deceptive. Chairman Pai, could you just outline what you are doing to prevent robocalls?

Mr. PAI. I appreciate the question, Congressman.

I am sorry to hear that distressing situation that that woman had to face. We have been taking aggressive action.

We have empowered, for example, companies to block calls from obviously spoofed numbers. We have set up a reassigned numbers database so that legitimate callers don't have to worry about bombarding consumers who didn't want those calls.

We have also taken aggressive enforcement action against some of the robocallers including the largest fines ever imposed in the FCC's history.

I have personally demanded that the phone industry adopt call authentication by the end of the this year. Also, the FCC will take regulatory intervention.

And just today, as I mentioned in my opening statement, I am proposing—and I hope my colleagues will agree—to allow robocall blocking by default so that consumers don't have to affirmatively opt in to those services.

Phone carriers will block them by default so, in many cases, a consumer wouldn't even know that a robocall had been placed because it would be blocked at the outset.

Mr. GIANFORTE. OK. Thank you for those actions. If there's things that—actions we need to take if you could inform us. I think we have bipartisan support for action in this area.

Mr. PAI. Absolutely.

Mr. GIANFORTE. Many Members have raised their concerns with the accuracy of our broadband maps. The lack of clarity in Montana leads to maps showing coverage areas where there is no coverage.

This restricts USF dollars from getting to communities that need it the most. Chairman Pai, you answered Mr. Johnson earlier so I appreciate your response to this question.

I had a question for Commissioner O'Rielly, if I could. Do you think a challenge or a validation process could help us improve the accuracy of the broadband maps?

Mr. O'RIELLY. Absolutely, and we do have a challenge process and that's somewhat how we found some of the problems with our current maps. So I pushed for that in the past and the Chairman has been accommodating, and so I think both are important components to that.

Mr. GIANFORTE. It is critically important we get accurate maps so we know where the USF dollars have to flow.

Chairman Pai, 5G is going to come to rural America if and only if lower bands of frequencies are put to good use, and my understanding is that the mid-band spectrum is particularly important.

These bands of frequencies provide the right mix of capacity and coverage that will enable network operators to deploy in rural America. I am interested in learning more about your efforts around the reallocation of C-band.

As you consider the best way to provide mid-band spectrum in a timely manner, how will you ensure that this frequency is built out in rural America?

Mr. PAI. A great question, Congressman, and the 3.7 to 4.2 band in particular sits at one of the sweet spots in terms of spectrum. It is low enough to get good coverage and high enough to offer good capacity.

One of the things that we have been working through as some of the complicated issues—legal, technical, economic, and others—in terms of how much spectrum to reallocate from that band, whether it's 200 or more megahertz, and also what the mechanism is for getting that spectrum freed up.

One of the things that we've been working through along with Members of Congress is the right way forward. Our goal here is pretty simple—to allocate as much of the spectrum as possible as

quickly as possible and as fairly as possible for the benefit of the consumers.

You know better than most Montana is a pretty rural State. I have seen it in the Absaroka Wilderness, in the Beartooths and elsewhere. There are some pretty remote parts of that State.

But we want to make sure that wireless coverage extends to as many areas as possible. The C-band could be a good use of that.

Mr. GIANFORTE. And are there build out requirements or guarantees that the FCC could put in place if the bandwidth transfers in a private sale? Do you have oversight there?

Mr. PAI. We do. We would have oversight if we went to the private sale mechanism. I would have to look at it carefully at what the legal ramifications are in terms of imposing build out requirements. I can't recall off the top of my head if there's—

Mr. GIANFORTE. Keep us informed. One last question, if I could, Chairman Pai.

Mr. PAI. Sure.

Mr. GIANFORTE. The U.S. Small Business Administration submitted a letter to the FCC recently indicating concerns with your UNE forbearance and its impact on small business.

What is the Commission doing to address those concerns?

Mr. PAI. I have personally met several times with then-Administrator McMahon including about these issues. We received the letter. We incorporated it into our proceeding and that is one of the things we are working through as we go forward is how to accommodate the concern that she expressed in that letter.

Mr. GIANFORTE. OK. Montana is a small business State so I appreciate your attention there.

And with that, Mr. Chairman, I yield back.

Mr. DOYLE. The gentleman yields back.

The Chair now recognizes Ms. Matsui for 5 minutes.

Ms. MATSUI. Thank you very much, Mr. Chairman. I want to thank the Commission for appearing here today.

Last month, Congressman Guthrie and I, along with Senators Wicker and Schatz, introduced the Spectrum Now Act. Current law limits how much of the existing spectrum relocation fund resources can be used by the agencies to perform the research and related activities necessary to potentially reallocate or share their spectrum.

Specifically, the framework in the Spectrum Now Act could provide a pathway for NTIA and DOD to make an additional 100 megahertz of spectrum available in a 3.4 gigahertz band.

Commissioner O'Rielly and Rosenworcel, what potential does a 3.4 gigahertz band have in our effort to allocate additional mid-band spectrum for wireless use?

Mr. O'RIELLY. Well, I will go first.

To your point, if you can combine the 100 megahertz at 3.45 to 3.55, if we are able to convert it to commercial uses, you can combine it with the CBRs band at 3.55 up and then 3.7 to 3.4. You are talking about building 100 megahertz blocks, which most industry participants will say is the minimum necessary to be able to offer real 5G in mid-band.

So having big blocks and as much as you can possibly make available. Here's the sweet spot. We believe—I believe in multiple

conversations that DOD was ready to convert and then changed its mind.

Ms. MATSUI. I see.

Mr. O'RIELLY. I think we could be aggressive——

Ms. MATSUI. Do you agree?

Ms. ROSENWORCEL. I agree with my colleague. We need more mid-band spectrum. We need it fast. If want 5G service to get everywhere this is the band that we have been looking at and we understand DOD is also looking at. We've got to keep putting on some pressure to make it happen.

Ms. MATSUI. OK. As you are all likely aware, the effort to ensure our radio spectrum resources are used efficiently and effectively has been a long and ongoing focus of the 5.9 gigahertz band.

While this band is particularly well situated for next generation services, it has not seen widespread deployment. To that end, I am interested in a path forward that adequately balances the interests of all stakeholders and provides that regulatory certainty necessary to facilitate the deployment of services in this band.

One such proposal internationally suggests a sharing solution allocating a portion of the 5.9 band for intelligent transportation solutions including potentially cellular-based standards and a portion necessary for Next Generation Wi-Fi.

Chairman Pai, Commissioner O'Rielly, and Commissioner Rosenworcel, mindful of the competing interests and the need for more licensed and unlicensed spectrum to facilitate the 5G transition, how can the Commission best move forward with a rule-making to address these demands?

Mr. PAI. Grateful for your longstanding leadership on this particular band, Congresswoman.

I said yesterday publicly my belief that we need to have a full-fledged conversation about the future of the 5.9 gigahertz band. Key up all of the options including the status quo DSRC but also looking at some of the Next Generation technology of CV to X and particularly unlicensed to figure out what the right way forward is.

But it is time to have that conversation because over the past two decades, as you know better than anybody we have not seen optimal use of this public resource.

Ms. MATSUI. Exactly.

Commissioner O'Rielly? Yes.

Mr. O'RIELLY. I would say that a portion of this, in my opinion, a portion of the 5.9 band will need to be and should be made available for unlicensed services. It can be shared amongst participants and still accommodate the different CAR safety functionality.

Ms. MATSUI. OK.

Ms. ROSENWORCEL. I agree with my colleagues. We need more Wi-Fi. The sooner the better, and the place to look is the 5.9 gigahertz band and 6 gigahertz band.

Ms. MATSUI. That is—I am going to follow up with the 6 gigahertz.

Ms. ROSENWORCEL. Oh, I knew it.

Ms. MATSUI. OK. Last year, my Spectrum Caucus cochair, Congressman Guthrie, and I sent a letter to the Commission in support of additional spectrum allocations.



Inadequate supply of spectrum in the low, middle, and high bands will be necessary, as you know, to deployment of Next Generation spectrum-based services.

These networks will also require sufficient spectrum allocated to both licensed and unlicensed use. Congressman Guthrie and I also penned a joint op-ed with both Commissioners O’Rielly and Rosenworcel on the importance of moving forward with NPRM focus on additional uses on the 6 gigahertz.

Now, Commissioner O’Rielly and Commissioner Rosenworcel, can you discuss the need to expand wireless services in the 6 gigahertz band while, of course, ensuring the various important incumbent users are protected?

Do you want to start or you want to——

Ms. ROSENWORCEL. Sure. We have got 9 billion devices connected to Wi-Fi and the airwaves we use for it today are crowded. We need more unlicensed spectrum and the place to look is the 5.9 gigahertz band and 6 gigahertz band.

And plus, this committee told us in the appropriations legislation last year we have to find 100 megahertz of spectrum below 8 gigahertz by 2022. This is the place to go and make it happen.

Ms. MATSUI. Do you agree, Commissioner O’Rielly?

Mr. O’RIELLY. Absolutely I agree with my colleague on this.

Ms. MATSUI. OK. Great. Well, I will yield back.

Mr. DOYLE. The gentlelady yields back.

The Chair now recognizes Mr. Welch for 5 minutes.

Mr. WELCH. Thank you.

Mr. Chairman, I have observed that the Commissioners have all gone to charm school. No matter how stupid our question, it’s always a great question and you really appreciate it. So we——

[Laughter.]

Mr. WELCH [continuing]. We appreciate that. So I am going to ask some very intelligent questions.

[Laughter.]

Mr. WELCH. And you don’t have to thank me for doing it. I will waive the compliment, OK.

Chairman Pai, I want to talk to you a little bit. You know, this is a real situation about rural broadband and I know you and the President had a roll out, and that—about the \$20.4 billion rural digital opportunity fund and it proposes to spend \$20 billion to connect 4 million homes and small businesses over the next 10 years.

That opportunity fund appears to me to essentially be a re-branding of the current Universal Service Fund’s Connect America fund, which has awarded \$9 billion for rural deployment in the past 5 years. That is what it looks like to me.

So, first, you and the President are saying this program has the goal of getting broadband to 4 million homes by 2030. But we know that 25 million Americans currently lack access to broadband.

So it’s not that big a deal, number one, and what are we going to do about those other 21 million Americans?

Mr. PAI. Congressman, thank you for that greatest ever question at a congressional hearing.

[Laughter.]

Mr. PAI. And I say that objectively. So this is more than just a rebranding. I can tell you that what we are looking at is a fundamental rethink of the Connect America fund.

Mr. WELCH. If it's not rebranding—I am sorry to interrupt—but is there new money?

Mr. PAI. No, it's a rethink about how that money is allocated and distributed.

Mr. WELCH. So the answer is no?

Mr. PAI. No. It's a fundamental rethink of the program.

Mr. WELCH. Right. But there is no new money.

Mr. PAI. We don't have the authority to—we can't spend money that—

Mr. WELCH. But my point is this was—this was presented to the public as a big deal, all right. Rethinking, I am always for that and if we can do better with what we have I am all for that.

But it's not new money. We had a program that was intended to get these—this out to help Connect America, right?

Mr. PAI. No, Congressman. If we restructure it as I envision it, it will be a fundamentally different program. Using the reverse auction, having the speed tiers that get 25.3 service if not gigabit service in rural America, making sure there is accountability—

Mr. WELCH. All right. So that—I am for figuring out the best way to do it. But you, I think, have answered my question that it is not new money. It is a newly designed program using old money.

Mr. PAI. It would be a rethinking of the—yes, the Connect American fund term, which would end in 2020 with a 1-year extension under current law.

Mr. WELCH. And if it's successful we will still have 21 million Americans without broadband?

Mr. PAI. Well, the figure would go—I can't recall the exact figure. But, again, we are trying to allocate that funding to close the digital divide as much as we can.

Mr. WELCH. Well, it is not enough. OK. It really isn't, and, you know, the mapping issue too that we have been talking about those are just—are you prepared to say that those are bogus?

Mr. PAI. We recognize the shortcomings in the maps. That is why we are—

Mr. WELCH. No. I mean, they are not shortcomings. They are fiction. They really are. I mean, we had a person from the Vermont Public Utility Commission drive around and do the mapping in real time to get real signals and compare it to the supposed service that the carriers were bragging about. No connection. It was like fiction, and that has got to be, like, completely unacceptable to every single one of us here. We just want to get the information that Mr. Latta and I are concerned about for rural America.

So I am hopeful that you don't give credence to what we now know are bogus maps.

Mr. PAI. I hear your concern, Congressman, 100 percent.

Mr. WELCH. Well, I hope you do more than that.

Ms. Rosenworcel, by the way, I was in the Delta—my wife and I went to the Mississippi side of the Delta, the cotton, and it is an amazing place with really good people in a very poor location, and I really appreciated your advocacy for them getting broadband.

What are the three things we should be doing right now to accelerate the build out of broadband? And thank you for your homework gap work.

Ms. ROSENWORCEL. OK. First, we have got to get our maps accurate. We are never going to be able to manage a problem that we do not measure.

Second, we have to recognize this is not just a challenge of deployment. It also involves adoption. We have got to figure out how kids who don't have internet service to do their homework can get the service they need.

We are going to need programs to help make sure that there are wireless hot spots available for loan in every school library. We have got to solve this homework gap. It affects urban America and rural America alike.

And third and finally, we have got to auction mid-band spectrum faster. Those are the airwaves that will reach rural America. Right now, all of our 5G efforts are concentrated on high-band spectrum. We will never see 5G in rural America if we stick to that program.

Mr. WELCH. Thank you very much.

I yield back, but I want to thank all the Commissioners. I wish I had more time and welcome to our new Commissioner, Mr. Starks. Thank you.

Mr. STARKS. Thank you, Congressman.

Mr. DOYLE. The gentleman yields back.

The Chair recognizes Ms. DeGette for 5 minutes.

Ms. DEGETTE. Thank you so much, Mr. Chairman.

You know, Chairman Pai, I know you will agree that having laws and rules in place is really important but so is enforcing those laws and rules. And so I just wanted to ask you a couple of questions about the FCC enforcement.

We have been talking a lot today about all kinds of issues. But one of them that is—weighs most strongly on us is the robocalls. As you hear and as we found bipartisan unity in our recent hearing, the FCC has fined robocallers \$208 million but collected only \$6,790 as of March 28th of this year. Is that correct?

Mr. PAI. That is my understanding, Congresswoman.

Ms. DEGETTE. And it has been over a year—I think some of my other colleagues pointed out it has been over a year since the reports first surfaced detailing the widespread disclosure of America's real-time location data by wireless carriers.

But the FCC hasn't yet voted on any item to stop the sharing of location data by wireless carriers. Isn't that correct?

Mr. PAI. That law enforcement proceeding is still pending, yes.

Ms. DEGETTE. Yes. But the FCC has not taken any—has not voted on any item to do that, right?

Mr. PAI. That is correct.

Ms. DEGETTE. And 18 months after a \$13 million proposed fine against Sinclair for not disclosing when it had been paid to air content, the FCC still hasn't voted on a forfeiture order. Is that correct?

Mr. PAI. Yes.

Ms. DEGETTE. Now, Commissioner Starks, welcome, and you have been a prosecutor at both DOJ and an assistant chief in the

FCC's enforcement bureau. Are you concerned about this pattern and how it's impacting the FCC's enforcement authority?

Mr. STARKS. Yes. Thank you so much for the question, Congresswoman.

Ms. DEGETTE. And why is that?

Mr. STARKS. Well, the enforcement bureau is the largest bureau at the FCC and so I think it is incumbent upon them to deploy their resources and prioritize cases that are of mass public safety.

The geolocation tracking, privacy tracking, is a mass public safety issue. That case has to be prioritized. It has to be brought to resolution more quickly.

When you are talking about other issues of robocalling and Sinclair, those go to the core mission of the FCC and the enforcement bureau has to make sure that we are bringing those cases significantly.

Ms. DEGETTE. And what can—what can—I know you're brand new but sometimes it does take a new set of eyes, especially someone with an enforcement background. What can the Commission do specifically to improve its track record on enforcement?

Mr. STARKS. Yes. Thank you for the follow-up question.

I think the first thing is a speed of disposal on cases is going to be important. I know it's part of some of the process reforms that the enforcement bureau has otherwise taken.

It is really important to make sure that we are getting through the pipeline of cases for the enforcement bureau so that evidence in cases don't get stale.

The other thing that I would really raise is it's critically important for there to be a consistent application of policies that you don't have an asymmetry of enforcement where large actors and small actors get different treatment, big corporations and individuals get different treatment.

Ms. DEGETTE. Thank you.

Commissioner Pai, what is your view on those suggestions?

Mr. PAI. Appreciate the question, Congresswoman. I mean, certainly, we do prioritize those cases. I have instructed our enforcement bureau to make that particular location accuracy—location data investigation a priority.

Ms. DEGETTE. Well, do you think these are good suggestions that Commissioner Starks is making and would you consider those?

Mr. PAI. Oh, absolutely. Would be happy to, and I have met personally with Commissioner Starks on these issues and I think—yes.

Ms. DEGETTE. OK. Good. Good. Thank you.

I would hope to see more robust enforcement because that really is what is important.

In 2017, the National Digital Inclusion Alliance released research into low-income and minority neighborhoods in Cleveland and talked about it had been digitally red-lined, bypassed by the fiber deployments of the incumbent telecom provider that reached the wealthy suburbs and business districts of Cleveland.

The same was found in Detroit, and anecdotally, I hear similar claims about my—the core of my congressional district—Denver, Colorado.

So I wanted to ask you, Commissioner Rosenworcel, what tools and authority does the FCC need to prevent digital red-lining?

Ms. ROSENWORCEL. Thank you. We have got a problem. It is not just in rural areas that don't have service. We have pockets in urban that don't, too. I think right now the FCC should include in its regular broadband report a collection of data regarding those areas because we are never going to be able to fix this problem if we first don't understand where it exists. I think it is something that the FCC has to actively search to try to understand.

Ms. DEGETTE. Does the FCC have the power to do that?

Ms. ROSENWORCEL. I believe in our Section 706 process, which involves a regular broadband deployment this should be a feature of it.

Ms. DEGETTE. Thank you. Thank you very much, Mr. Chairman. I yield back.

Mr. DOYLE. The gentlelady yields back.

The Chair now recognizes Mr. Luján for 5 minutes.

Mr. LUJÁN. Thank you very much, Mr. Chairman.

I want to thank all the Commissioners for making themselves available today and for their work. Welcome to the Commission as well, Mr. Starks. It is good to see you here with us today.

There has been a lot of conversation today about mapping. I think my colleague here with me on the dais referred to it as fiction.

I think I want to join him in that chorus and from this perspective, and I would be interested in hearing perspectives as well from the Commissioners on this.

What can be done to make sure that we have updated accurate maps? We are talking right now about an infrastructure package which will include, I hope, broadband investments in underserved communities. We all know where phone calls drop, especially those of us that spend time on the roads in larger districts across America.

I often shared with Chairman Wheeler and, Chairman Pai, I think I have shared this with you as well—it makes no sense to me that I can get on an airplane in a big city in America, get to 30,000 feet, connect to the internet and have faster speeds than the communities that I am flying over just below us.

How can we fix this? This is a life safety issue. I shared this story with President Trump and with his team at the infrastructure meeting of Ashlynn Mike, an 11-year-old Navajo girl who was kidnapped, raped, and murdered in 2016.

The Amber Alert systems weren't working. No broadband connectivity. Many missing and murdered indigenous women, some who we know had smart phones. Even if they had a chance to make a phone call or send a text message or when they went missing law enforcement could not find them because there is no connectivity.

We need these maps to be accurate for many reasons. Chairman Pai, what are your thoughts on making sure that we are able to get something in place and a full support by the FCC to get this done so that way the infrastructure package that we have also reflects the needs? That way the American people don't just get to see a bar on their phone and say, oh, well, I am supposed to have

coverage but I can't make a call—I can't make an emergency call—I can't use it.

Chairman Pai?

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

I think, first and foremost, on the fix side we need to resolve the 477 proceeding to get a better understanding—more granular understanding—where broadband coverage is and we are in the process of working with stakeholders to do that.

On the mobile side, we need to make sure that we get accurate data on mobile coverage for GLTE in particular to understand where the gaps are.

But I couldn't agree with you more in terms of an infrastructure plan. In my first major speech as a Chairman, I said Congress has many important things on its plate. Nothing is more important to millions of Americans, especially in rural and Tribal lands, than getting that Next Generation broadband infrastructure.

I have seen the promise of it in places like the Jemez and Zia Pueblos. We need to make sure that everybody in rural America—

Mr. LUJÁN. Chairman Pai, are you willing to hold those phone companies accountable that give me a map that says I have connectivity when I know that I don't and can we set up a system within the FCC so that we can report that to you?

We can have—I can geolocate where I am and where I don't have a call. I can't get connectivity but I can stand there and take a picture or do something. Can we work on something like that together?

Mr. PAI. I would be happy to work with you on that, Congressman.

Mr. LUJÁN. Commissioner Rosenworcel, I note, you know, Senator Manchin has an idea, you know, with maybe using postal carriers who know every rural road in America.

Ms. ROSENWORCEL. Yes. We need every creative idea we can right now. The FCC should be using its field offices to go test where service is and is not. We have a mobile app for speed test that has been downloaded 200,000 times all across this country.

We could use data from that to help inform our maps. I mean, people want to help. We got to figure out how to take their lived experience and incorporate it into our maps and our rules.

Mr. LUJÁN. And, Mr. Chairman, this may be an area for us to work on in a bipartisan basis, get this thing updated, clear out those frustrations. That way we can get some answers and make sure this works.

So I would be happy to work with the Commissioners, Chairman Pai, Commissioner Rosenworcel, and we will reach out to the other Commissioners, see how we can work together on this issue as well.

Homework gap—Commissioner Rosenworcel, I appreciate the work you have been doing as well. Where I come from, like many rural districts, 47,000 square miles, 8 1A½ hours to drive across it.

Students get on buses for over an hour sometimes in one direction. You were out in New Mexico. We had a chance to go visit some students with one of the test projects with getting internet

on those buses. Can you talk about the importance of accurate mapping but making sure that we have a canopy across America where people can stay connected and what that means to students?

Ms. ROSENWORCEL. Yes. Seven in 10 teachers assign homework that requires internet access. But one in three households doesn't have it, and where those numbers overlap is a homework gap and it is the cruelest part of our digital divide.

It hits rural America really hard. What are we going to do for those students? Putting Wi-Fi on buses could be a game changer. Those students spend over an hour to get to school most days and an hour to return.

You and I went on a bus together. It was quiet. Every one of them was downloading homework and doing their school work. It will change their education and change their lives. We should figure out how we can use the E-rate program to make that available everywhere.

Mr. LUJÁN. Thank you, Chairman. As I yield back, just also making sure that we work with Tribal schools to ensure that they are not left out with the complexities associated with the E-rate program. It should work for every school, every student, every teacher in America.

So I look forward to working with you, Mr. Chairman. Thank you, Commissioners, again for your work.

Mr. DOYLE. Gentleman yields back.

The Chair recognizes Ms. Eshoo for 5 minutes.

Ms. ESHOO. Mr. Chairman, thank you for holding this hearing today. Welcome to the entire Commission and the warmest of welcomes, Commissioner Sparks. I wish you every success. Use your power. Know thy power. Use thy power.

I think that there is an advantage to being just about the last one, because I have listened to just about everyone on both sides, and there is a reoccurring theme on both sides in terms of the questions, even though my colleague, Mr. Welch, seems to think that stupid questions were asked. But I think they were great questions.

I want to say to you, Mr. Chairman, I don't have a good feeling today. I just—I wish I was going to leave the hearing room with a much better feeling. The same issue of maps keeps coming up.

Ten years ago, Google advanced Google Maps. It doesn't go blank when you look it up. It doesn't say, we can't find it—we don't know where it is. We are working on it. We've got some task force on it.

You really have to put the pedal to the metal. If this is a top priority, you can get it done. You can contract with someone that knows how to do this, produce it so that we have it so we know what the hell we are doing, in plain English.

This has gone on for too long. On robocalls, you know what? With all due respect, a summit doesn't cut it. You come to a town hall with me or any of my colleagues and you say to the people in that town hall meeting, we are having a summit, they will lunge at you because it's not an answer.

You should put together a division at this powerful agency and say put the pedal to the metal so that we resolve this. It keeps climbing. Forty-eight billion calls. I mean, it is hard to get our

minds around that. And these are scams. People are being ripped off.

They are not only being harassed, but there is criminal behavior in this. You should form a division and say to the American people within X number of months this is what we are going to accomplish and grade us on it—I am willing to be graded.

On Lifeline, I don't know how anyone with a conscience—Ronald Reagan established that program. There is a nexus between people that are very poor that were it not for the food stamps they get they wouldn't be eating, and the FCC is not going to allow them that Lifeline to their wireless handset? To get a job, to call for healthcare, to make a call to 9 091 091? This has to be part of your conscience in terms of what you are doing and I am saying that collectively.

In January, Motherboard reported that carriers were selling customers' geolocation data to bounty hunters. Just that term scares me—a bounty hunter, bail bondsmen and stalkers. As a female, that is pretty menacing to me.

This is—it is egregious. Carriers promised to stop the practice but they made the same promises a year ago. You have the power to do something about this.

Now, there are two Commissioners who you haven't even shared the information about the investigation with. Now, this is taking so long that you are running the clock on this darn thing.

I mean, pretty soon you are going to be up against the wall where the statute of limitations expires on it. Are you going to try to do something about that? You said today, I can't talk about it—I can't talk about it.

You know what? Don't talk about it. Do an investigation, and do something about it. That is the point here.

So do you promise today—can you tell us today that you are going to share information with two full-fledged members of the Commission? This is not a Democrat or Republican issue. It is a serious issue where people have—are frightened by what has happened and I don't what you are doing with it. You can't tell us. You are saying you can't tell us. But will you tell them?

Mr. PAI. Congresswoman—

Ms. ESHOO. Yes or no. Yes or no.

Mr. PAI. This is not a yes or no question, Congresswoman.

Ms. ESHOO. Yes, it is. Yes, it is. They are Commissioners—full Commissioners. They are not half. They are not quarter. They are not one-third. Just because they are Democrats, you shouldn't withhold the information from them. So will you or will you not?

Mr. PAI. Congresswoman, not only have I not withheld information, I affirmatively asked Commissioner Starks to lead this investigation months ago because I recognized the importance of this issue and respected his enforcement background.

Ms. ESHOO. They have requested information about the—you know what? You are a great talker. You are a great talker.

But I am just going to consider that you have said—that you have said no and I don't think that that is appropriate. So I am sorry that I don't find the scorecard to be a great one today.

There are other things that are going on. I appreciate Commissioner O'Rielly's work on—that we do something about the diver-



sion of fees and the States that are on the dishonorable list and I will continue with the legislation on that.

But I really think you have to up your game so that next time you come here you have a checklist of what you have accomplished, not what you keep talking about.

Mr. DOYLE. The gentlelady's time has expired.

Mr. STARKS. Mr. Chairman?

The Chair now recognizes Mr. Griffith.

Mr. STARKS. Mr. Chairman?

Mr. GRIFFITH. I thank—I thank the chairman very much.

Mr. Starks, you want to make a comment?

Mr. STARKS. Yes. Thank you.

Mr. GRIFFITH. I yield my time.

Mr. STARKS. I appreciate it. The Chairman did reference that he asked me to—he did in fact ask me to take on the geolocation investigation. It was right after I was sworn in, and so I did appreciate his gesture on reaching out to me on that.

I asked for a briefing from the enforcement bureau. The case had already been open for about 8 months. What I heard at that briefing did not give me confidence that that case was moving along quickly enough, and so I did inform the Chairman that I was not going to take on that matter.

And so the matter still stands that on the geolocation tracking it is of critical safety that that case be brought to resolution immediately. People are out there and you can track their phone immediately, and I cannot emphasize enough how important that is.

Mr. GRIFFITH. And if I might ask, Mr. Starks, and I am just trying to get information, but that enforcement proceeding—the FCC may collect data, but doesn't the FCC have to rely on the Department of Justice to go after the bad actors?

Mr. STARKS. No, we have—sir, we have Section 222 authority to go after—

Mr. GRIFFITH. So you can go after the bad actors?

Mr. STARKS [continuing]. To go after geolocation—yes, I believe you can go after—

Mr. GRIFFITH. On geolocation?

Mr. STARKS [continuing]. The carriers. Yes, sir.

Mr. GRIFFITH. OK. Chairman Pai, is there any information that Mr. Starks would like to have that he is not able to get? If he wanted it he could have it? Is that what I heard you saying?

Mr. PAI. I am not aware. I would be happy to talk with him about that. But what I will say in response to your question, I think you were going after the robocall enforcement and that there is a gap under current law.

To the extent that the FCC imposes a fine through a forfeiture order and the robocaller refuses to pay—

Mr. GRIFFITH. On the robocalls.

Mr. PAI. —only the Department of Justice has independent litigating authority to actually collect that fine and we have sent these matters—referred them to the Department of Justice for collection. But we don't have the ability to litigate affirmatively to collect those fines.

Mr. GRIFFITH. OK. All right. And the reason I wanted to clear this up is that, like my colleague on the other side of the aisle, I

don't see anybody being left in the dark who is authorized to have the information who should have that information.

And so on the geolocation issue—and I am not a regular member of this committee so forgive me for stumbling through some of the terms. I waived on because this is important to my district. All of these issues are.

Everybody can get the information who seeks it out and what can we do to—because people are concerned about that—what can we do if the information wasn't there that he wanted or he didn't feel like he was going in the right direction? What can we do to speed that along?

Mr. PAI. Again, I can't comment on—

Mr. GRIFFITH. I understand. Was there some—

Mr. PAI [continuing]. Enforcement as such. But I can say our enforcement bureau staff regularly briefs Commissioners on a variety of issues, including this one.

Mr. GRIFFITH. Just let them know that both sides of the aisle are concerned about that issue and if there's something we need to be doing on the congressional side to make this available or make resources available so that you can move faster, we would I am sure be happy to do that.

All right. Along those same kinds of lines, let me say that the mapping issues are huge in my area. I like the suggestion earlier of having the postal service contracted because they have got people going every nook and cranny of the country.

But, I mean, I represent the southwestern portion of the great Commonwealth of Virginia and I have Virginia Tech in my district, and I have people all around Virginia Tech within a few miles of Virginia Tech who don't have service.

One lady that comes to mind is a friend of mine. Has a house in between Virginia Tech and Interstate 81. Doesn't have service. And I doubt that is on anybody's maps that they—that there are these big holes.

But because it's a—although they are not as big as my friend from Montana's mountains, we have lots of mountains and they block signals and all sorts of things.

So my folks don't care whether it's mid-band or white space. They just want to make sure we are getting service because we do have that homework gap that one of the other Commissioners referenced, and it's all over the place in my district, and we are doing everything we can.

The Universal Service Fee helps in some areas. But we would like to see that expanded.

Now, that being said, I have always been interested in the experiments that were being done on the white spaces, and while not as technologically advanced and able to talk about it as some of my colleagues, can you explain to the folks back home what that is and where we stand on that experiment and how soon can we expect that to get out?

Because if I understand it even halfway correctly, every part of my district has got some white space.

Mr. PAI. A great question, Congressman, and thank you for it.

I have seen the promise of it in places like South Boston, where I saw one of the white spaces experiments and—

Mr. GRIFFITH. Which is about an hour east of me.

Mr. PAI. It's a little more urban than you—

Mr. GRIFFITH. You'd be surprised how big Virginia is.

Mr. PAI. Exactly. So in a nutshell, white spaces involves the prospect of using what used to be spectrum used by TV broadcasters to deliver wireless broadband, and there have been a lot of tricky technical policy issues that we have been working through.

Recently, the FCC adopted an order resolving some of the outstanding petitions for reconsideration on how the database would work, et cetera. We are now looking to a petition that is going to be submitted, we understand, from Microsoft—if it hasn't been submitted already—to figure out a way to resolve some of the remaining issues, get through those technical hurdles.

And I want to commend both Microsoft and the National Association of Broadcasters for working together on some of those to reach a consensus. And to the extent there is a consensus that allows us to move forward, we would like to be able to do so.

I can't give you a specific time line because these are complicated technical issues. But what I will say is we understand the promise of this technology and we were looking forward to working with you and others in your district to bring it to reality.

Mr. GRIFFITH. I can tell you that folks are frustrated. It does make a difference on our educational opportunities and in my district in particular, which is depopulating, we need to be able to keep some of our young people at home and some of our young minds at home.

And if they can't start a business in their home town because they don't have adequate service, then they're moving out of the district completely. And when we are trying to revitalize the coal fields section of my district economically, this is an absolute imperative.

So I appreciate it, and just do whatever you can to speed it up. And if we need to do something, please let us know because both sides of the aisle are willing to help on this.

I yield back.

Mr. DOYLE. The gentleman yields back.

The Chair now yields 5 minutes to Mr. Cárdenas.

Mr. CÁRDENAS. I agree that Congress needs to speed it up. Maybe we ought to increase our band—the broadband here.

Mr. Chairman, thank you so much for holding this important hearing, and there are so many issues to cover. Hopefully, we can cover a few in my—in the limited time that they give us.

I first want to visit the media ownership rules. I have been vocal about ownership rules since I was first elected to Congress because I care about diverse voices in the media.

I care about local stories and news being accessible to all Americans. The way consumers watch video may be changing but for most folks over the air is still how they receive local news, local weather, emergency alerts, and local entertainment.

Like, for example, in Los Angeles our L.A. Dodgers is limited to only a certain number of households.

Chairman Pai, for over a year you have had an open proceeding on raising the media ownership cap, which is currently at 39 per-

cent. That means one company can reach up to 39 percent of households.

The cap of 39 percent, Chairman Pai, is set by statute. Is that correct?

Mr. PAI. I do not necessarily agree with that position, Congressman.

Mr. CÁRDENAS. OK. Thank you for your answer.

I believe it is set by statute, which means that only Congress has the authority to change how many households a single broadcaster can reach.

Commissioner Rosenworcel, do you agree?

Ms. ROSENWORCEL. I agree with you, Congressman. The best reading of the 2004 Appropriations Act is that it is up to Congress to make that change and I would add that the Wall Street Journal's editorial board seems to agree.

Mr. CÁRDENAS. Thank you.

Commissioner Pai, you propose further changes to the media ownership rules in the Quadrennial Review NPRM. This is after you have already slashed media ownership rules to all the biggest media conglomerates to just get bigger.

So yes or no. Have you done an analysis of what effect those rule changes along with the media ownership changes you already made will have on diversity of content that is broadcast in America?

Mr. PAI. Congressman, that analysis is ongoing as part of our Quadrennial Media Ownership Review.

Mr. CÁRDENAS. OK. Well, hopefully, we will see that soon.

Yes or no, have you done an analysis on whether those changes have had or will have any effect on whether communities are receiving localized content?

Mr. PAI. Sorry, Congressman. Which changes are you referring to?

Mr. CÁRDENAS. I am referring to changes where a larger conglomerate actually has control of local stations and whether or not that local news type or information type is actually being broadcast from locally or is it being pushed down from the bigger corporation, in some cases thousands of miles away?

Mr. PAI. Well, Congressman, with respect to the current media ownership proceeding, we have not proposed any course of action. We teed up all the different options pursuant to Congress' instruction for the FCC to review those rules.

With respect to the incubator program, however, what I will say is we have encouraged some of the more established broadcasters to give opportunities to minority women and other disadvantaged populations to get a foothold in the business and that symbiosis might be one way of correcting the concern that you have identified.

Mr. CÁRDENAS. Well, I look forward to getting the hard data on how this is affecting minority businesses, smaller business, et cetera, in the ecosystem of media.

I would like to turn to ATSC 3.0, or Next Generation TV, which is a standard upgrade that promises over-the-air viewers higher quality video, audio, as well as more localized news, weather updates, and, more importantly, emergency alerts.

I understand that the FCC imposed only one technical requirement in this new standard, which is that Next Gen TV must use the bootstrap signal.

The bootstrap signal's patent is owned by, quote, "ONE Media"—O-N-E Media—which is a subsidiary of Sinclair, a company which the FCC has said lacked candor, essentially, that has misled the FCC in its filings. That is Sinclair I am talking about.

When the FCC has approved technologies like this in the past, they customarily require the use of reasonable and nondiscriminatory licensing for patent holders, taking out any incentive to abuse the licensing process—abuse that could lead to increased costs for consumers.

Chairman Pai, the reasonable and nondiscriminatory licensing requirements were not applied in this case. Is that correct?

Mr. PAI. I believe that is correct.

Mr. CÁRDENAS. OK.

Commissioner Rosenworcel, do you think the FCC should have applied RAND licensing requirements here and how do you think this might affect consumers?

Ms. ROSENWORCEL. Yes. When the Government chooses a new standard, it gives special rights to patent holders, and as a condition of those special rights it is typically required reasonable and nondiscriminatory pricing.

As you said, that is just what the FCC did with the ATSC 1.0 standard. We should be doing it with the 3.0 standard too, otherwise consumers are going to pay more.

Mr. CÁRDENAS. OK. And those consumers are American consumers we are talking about, right?

Ms. ROSENWORCEL. Absolutely. It is every American household with a television set or any device connected to it.

Mr. CÁRDENAS. Thank you very much. I yield back.

Mr. DOYLE. The gentleman yields back.

The Chair now requests unanimous consent to enter the following documents into the record: a letter from the National Association of Federally-Insured Credit Unions, a letter from the Electronic Privacy Information Center, a letter from the Intelligent Transportation Society of America, a statement from Edison Electric Institute, the National Rural Electric Cooperative Association and the Utilities Technology Council.

Without objection, so ordered.

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

Mr. DOYLE. I want to thank all the witnesses for your participation in today's hearing. I want to remind Members that, pursuant to committee rules, they have 10 business days to submit additional questions for the record to be answered by the witnesses who have appeared.

I ask that each witness respond promptly to any such questions that you may receive.<sup>2</sup>

I want to thank all the witnesses for your participation in today's hearing. Thank you again for your presence today, and at this time the subcommittee is adjourned.

<sup>2</sup> All five witnesses' answers to submitted questions have been retained in committee files and also are available at <https://docs.house.gov/Committee/Calendar/ByEvent.aspx?EventID=109479>.

[Whereupon, at 1:04 p.m., the subcommittee was adjourned.]  
 [Material submitted for inclusion in the record follows:]

PREPARED STATEMENT OF HON. ANNA G. ESHOO

Chairman Doyle, thank you for holding this critical hearing to ensure the Federal Communications Commission (FCC) is meeting its responsibilities consistent with the public interest and the laws Congress has written.

Unfortunately, the FCC under the leadership of Chairman Ajit Pai continues to serve the interest of companies at the cost of consumers and local communities, ignore facts and data, limit public transparency, and resist Congressional oversight. Under this FCC, the number of robocalls has skyrocketed with no end in sight, wireless carriers have been caught selling customers' geolocation data on two occasions, and the National Verifier program is denying low-income Americans access to Lifeline. This is an outrage.

Last fall, the FCC preempted municipalities from having a say in deployment of small cell sites, the infrastructure needed for 5G. America needs to win the race to 5G, but this must be done equitably. Local officials need to have a say in infrastructure. This is why I introduced H.R. 530, the Accelerating Wireless Broadband Development by Empowering Local Communities Act of 2019, overturns FCC regulations limiting the ability of local governments to regulate the deployment of 5G infrastructure. Over 145 municipalities and 135 public power utilities endorsed this bill. This legislation wouldn't be needed if the FCC hadn't steamrolled local government.

I worry that even though the FCC has taken steps to ensure spectrum is available for 5G, this is being done in such an inequitable way that the FCC's moves will actually put us further behind in the race to 5G. For example, nearly 100 municipalities, public power utilities, and associations are suing the FCC over its small cell site regulations. Further, Mozilla and Santa Clara County are suing the FCC over its repeal of net neutrality protections.

I've introduced H.R. 2355, the Regulatory Oversight Barring Obnoxious (ROBO) Calls and Texts Act, which creates a Robocall Division at the FCC to combat the scourge of robocalls. Robocalls are the number one source of consumer complaint at the FCC, and the agency should organize its work to respond to consumer complaints. Chairman Pai has the authority to do this on his own but has failed to act.

I've written to the FCC with Rep. Yvette Clarke about major issues with the rollout of the National Verifier. As the FCC pushes National Verifier ahead in more States, it is denying Americans access to the Lifeline Program when they should be considered eligible.

I've introduced legislation and written letters to rectify some of the issues at the FCC. What is lacking at the FCC is strong leadership committed to solve these problems. The American people don't care if a Federal agency announces a summit or hosts meetings. They want and deserve a Government that puts an end to the scourge of robocalls, ensures that wireless carriers aren't selling their geolocation data, and gives low-income Americans access to Government programs they're eligible for.

I'm hopeful that this hearing will provide us with answers about all of the ways this captured agency is putting corporate interests ahead of the public interest.

**The Leadership Conference  
on Civil and Human Rights**

1620 L Street, NW  
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Washington, DC  
20036  
202.466.3311 voice  
202.466.3435 fax  
www.civilrights.org



May 14, 2019

**Rep. Mike Doyle**  
**Chairman**  
**House Committee on Energy and Commerce**  
**Subcommittee on Communications and Technology**

**Rep. Robert Latta**  
**Ranking Member**  
**House Committee on Energy and Commerce**  
**Subcommittee on Communications and Technology**

Dear Chairman Doyle and Ranking Member Latta:

On behalf of The Leadership Conference on Civil and Human Rights, a coalition charged by its diverse membership of more than 200 national organizations to promote and protect the rights of all persons in the United States, we write to thank the Subcommittee for holding an oversight hearing of the Federal Communications Commission (FCC). We are particularly encouraged that the hearing will focus on the consumer impacts of FCC decisions. We want to highlight two critical civil rights priorities under the FCC's purview for the Subcommittee's attention. We ask you to: (1) carefully review the FCC's quadrennial review process and its failure to address the dearth of ownership by women and people of color; and (2) closely examine the FCC's recent proposals to drastically cut the Lifeline program, the only program that helps low-income consumers access vital communications services, such as broadband.

**Media Ownership and Equal Employment Opportunity**

Media diversity has long been a top priority of The Leadership Conference because we understand that meaningful protection of civil rights and advancement of key policy objectives rely in great measure on an accurate, independent, and diverse media that serves our constituencies. Racial, gender, and ethnic diversity in broadcast media ownership is essential to preserving a multitude of opinions and points of view in the marketplace of ideas that is accessible to all people. The Local Radio Ownership Rule, the Local Television Ownership Rule, and the Dual Network Rule (collectively the "Media Ownership Rules") serve the public interest and media diversity by assuring an accurate, diverse, and independent media and are the last bulwark against already abysmally low ownership diversity rates.

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Vanita Gupta



Despite their vitally important role in maintaining ownership diversity, the FCC proposes to modify or eliminate all of the Media Ownership Rules.<sup>1</sup> Its proposals to radically restructure the radio industry are particularly concerning following similarly detrimental changes to TV regulation in 2017. Moreover, the agency made these proposals without having collected sufficient data to know what effect eliminating the rules will have on ownership diversity.<sup>2</sup> The Commission has persistently failed to obtain reliable data on which broadcast outlets are controlled by women and people of color. The Commission has never corrected identified reporting gaps and numerical tracking errors, nor has it released a report summarizing the 2017 race and gender broadcast data, although it has had these data since March 2018.<sup>3</sup>

The numbers we do have, while unreliable, paint a dire picture of ownership diversity. Women own only 7.4 percent of all full power TV stations, Hispanics and Latinos control 4.5 percent of those stations, and all tracked racial groups collectively controlled 2.6 percent of all full power TV stations.<sup>4</sup> As the following examples show, these groups are, overall, not making progress. African-American ownership has had zero or negative percent increases in all television categories, with African Americans owning less than 180 stations in all categories.<sup>5</sup> In Commercial AM and FM radio, African Americans are experiencing fractions of even 1 percent of growth.<sup>6</sup> Asian full-power TV ownership dropped precipitously between 2013 and 2015, from 1.4 percent to .7 percent.<sup>7</sup> Female ownership growth is only 2 percent, with women now owning less than 11 percent of any industry despite making up over half the U.S. population.<sup>8</sup> In all, Hispanics and non-Hispanic minorities are experiencing no more than 3 percent growth in media ownership.<sup>9</sup>

<sup>1</sup> MB Docket No. 18-349; FCC 18-179, 2018 WL 6589803 (2018) [hereinafter “2018 Quadrennial Regulatory Review”].

<sup>2</sup> Comments, Leadership Conference on Civil and Human Rights, 2018 Quadrennial Regulatory Review, at 2.

<sup>3</sup> Media Bureau Restricted FRN Public Notice, DA 17-1088, 32 F.C.C.Rcd.9330 (2017).

<sup>4</sup> *Federal Communications Commission’s* Industry Analysis Division of the Media Bureau. “Third Report on Ownership of Commercial Broadcast Stations from FCC Form 323 Ownership Data as of October 1, 2015.” May 2017. <https://www.fcc.gov/biennial-forms-323-and-323-e-broadcast-ownership-data-and-reports>.

<sup>5</sup> *Id.* Full Power Commercial TV: “Black or African Americans owned 12 stations (0.9 percent) in 2015 and 9 stations (0.6 percent) in 2013” at 7. For Class A TV: “Black or African Americans owned 1 station (0.3 percent) in 2015 and 8 stations (2.0 percent) in 2013” at 9. For Low Power TV: “Black or African Americans owned 8 stations (0.7 percent) in 2015 and 16 stations (1.3 percent) in 2013” at 11.

<sup>6</sup> *Id.* citing Commercial AM Radio statistics: “Black or African Americans owned 87 stations (2.5 percent) in 2015 and 93 stations (2.5 percent) in 2013” at 13; Commercial FM radio statistics: “Black or African Americans owned 72 stations (1.3 percent) in 2015 and 73 stations (1.3 percent) in 2013” at 15.

<sup>7</sup> *Id.* at 7.

<sup>8</sup> *Id.* citing Broadcast ownership and gender statistics: “Women collectively or individually held a majority of the voting interests in 1,024 broadcast stations, consisting of 102 full power commercial television stations (7.4 percent) of 1,385 stations; 15 Class A television stations (9.3 percent) of 396 stations; 125 low power television stations (11.0 percent) of 1,137 stations; 314 commercial AM radio stations (8.9 percent) of 3,509 stations; and 446 commercial FM radio stations (8.1 percent) of 5,492 stations.”

<sup>9</sup> *Id.* citing “Hispanic/Latino persons collectively or individually held a majority of the voting interests in 671 broadcast stations, consisting of 62 full power commercial television stations (4.5 percent) of 1,385 stations; 53 Class A television stations (13.4 percent) of 396 stations; 152 low power television stations (13.4 percent) of 1,137 stations; 176 commercial AM radio stations (5.0 percent) of 3,509 stations; and 228 commercial FM radio stations (4.2 percent) of 5,492 stations” at 3; “Racial minorities collectively or individually held a majority of the voting interests in 402 broadcast stations, consisting of 36 full power commercial television stations (2.6 percent) of 1,385 stations; 7 Class A television stations (1.8 percent) of 396 stations; 27 low power television stations (2.4 percent) of





Given the apparent lack of broadcast ownership diversity, which we can only assume to be true without reliable data, we urge the Subcommittee to press the FCC to collect and publish thorough and reliable data on broadcast ownership by women and people of color before eliminating any of the remaining Media Ownership Rules. Furthermore, prior to adopting any further relaxation of the Rules, we hope the Subcommittee will insist that the FCC analyze any proposal specifically for its likely impact on increasing or decreasing media ownership diversity.

The Subcommittee should also consider legislative options, such as the minority tax certificate, to promote diversity in broadcasting and to work with appropriations colleagues to end budget restrictions on the Commission's ability to enforce its local television ownership rules, as those rules promote diversity of ownership.

Similarly, the Commission recently rejected a request to consider its failure to comply with its statutory obligation to collect equal employment opportunity (EEO) data in the broadcast and cable industries. While the FCC spent time and resources considering an inconsequential standardized form that was no longer needed,<sup>10</sup> it did not address its failure to implement a 2004 Bush Administration decision to collect employment data across broadcasting and cable as required by Sections 334 and 554 of the Communications Act.<sup>11</sup> The FCC has not complied with these laws in nearly twenty years.

#### **Broadband Access for All**

The federal Lifeline program provides eligible low-income households with a \$9.25 monthly discount on qualified voice and/or broadband service.<sup>12</sup> It has never been more important to ensure that low-income people, communities of color, and other vulnerable populations have access to affordable communications services, especially high-speed broadband. Reliable high-speed broadband is essential for students of color to do their homework, for working mothers to earn their degrees online at night, and for senior citizens and people with disabilities to access tele-health services. Lifeline helps to provide those services.

The program began in the Reagan administration, in recognition that subsidized telephone service for low-income Americans was essential to full participation in the nation's political, social, and economic life. In the George W. Bush administration, Lifeline was modernized to include wireless phone service. The Obama administration further modernized the Lifeline program by extending its support to broadband service.

1,137 stations; 204 commercial AM radio stations (5.8 percent) of 3,509 stations; and 128 commercial FM radio stations (2.3 percent) of 5,492 stations" at 4.

<sup>10</sup> Elimination of Obligation to File Broadcast MidTerm Report (Form 397) Under Section 73.2080(f)(2), Report & Order, FCC 19-10 (rel. Feb. 15, 2019).

<sup>11</sup> *Id.*, Statement of Commissioner Geoffrey Starks; 47 U.S.C. § 334(a) (mandating retention of broadcast reporting rules); see also 47 U.S.C. § 554(d)(3)(A) (imposing obligation on MVPDs).

<sup>12</sup> USAC Spreadsheet, *L108 Lifeline Subscribers by State or Jurisdiction*. Available at <https://www.usac.org/about/tools/fcc/filings/2019/q2.aspx>.

May 14, 2019  
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Despite this progress, the FCC is considering and has issued proposals that would gut the program. Recent news reports revealed the FCC was considering pitting the four universal service programs, including Lifeline, against one another with a budget cap.<sup>13</sup> Further, the FCC's proposed rulemaking in 2017 proposes to eliminate non-facilities-based providers, which would leave a majority of Lifeline subscribers with no service.<sup>14</sup> It also would also impose a "self-enforcing" budget cap, which would create unpredictability and drive eligible low-income households away from the program. Finally, the proposal would mandate a co-pay, which would effectively eliminate the most popular Lifeline services, leaving some of our most vulnerable communities unconnected. These proposed changes would devastate families currently enrolled in the program and further widen the digital divide. They have received virtually no support in the FCC's docket and at the same time, the mere possibility of their adoption is destabilizing the program. These proposals should be rejected, and the rulemaking should be promptly brought to a close. At the same time, it is unclear whether the FCC is placing a sufficient priority on the actions that would assist low-income people, such as ensuring access to the most complete databases for the new Lifeline national eligibility verifier and ensuring that the verification process is accessible and usable for low-income people.

We urge the Subcommittee to inquire about the status of these proposals and urge the FCC Commissioners to commit to protecting the Lifeline program and ensuring access to broadband and other eligible communications services for everyone.

We look forward to working with the Subcommittee to encourage and promote media ownership opportunities for women and people of color, as well as to ensure the continued viability of the Lifeline program. Please contact Leadership Conference Media/Telecommunications Co-Chairs Cheryl Leanza, United Church of Christ, Office of Communication, Inc., at 202-904-2168, or Kate Ruane, American Civil Liberties Union, at (202) 675-2309, or Corrine Yu, Leadership Conference Senior Program Director at 202-466-5670, if you would like to discuss the above issues.

Sincerely,

Vanita Gupta  
President and CEO

Kristine Lucius  
Executive Vice President for Policy and  
Government Affairs

<sup>13</sup> Eggerton, "FCC's O'Reilly Promotes Cap on USF Fund," *Broadcasting & Cable* (April 2, 2019).

<sup>14</sup> *Bridging the Digital Divide for Low-Income Consumers et al*, Fourth Report and Order, Order on Reconsideration, Memorandum Opinion and Order, Notice of Proposed Rulemaking, and Notice of Inquiry, 32 FC Rcd 10475 (2017) ("2017 NPRM").

**Congress of the United States**  
**Washington, DC 20515**

May 14, 2019

The Honorable Ajit Pai  
Chairman  
Federal Communications Commission 445  
12th Street, S.W.  
Washington, DC 20554

Dear Chairman Pai:

We are writing to you regarding the Federal Communications Commission's ongoing review of its fixed and wireless broadband availability maps. As the Commission contemplates future Universal Service Fund (USF) support mechanisms that could directly affect broadband deployment in unserved and underserved areas in Michigan, we urge you to carefully address the Commission's broadband availability maps.

The Commission's broadband availability maps are based largely upon whatever information may be received from providers through its Form 477 survey data collection. Although the FCC's database may represent the most consistent data collection mechanism and provide a complete repository of such information available today, there are several problems with the current maps. Specifically, the maps are not granular enough; in the context of fixed broadband, an entire census block will appear as served even if service is offered to only one location within that census block. This can result in denial of USF funding in such areas, leaving many locations without essential broadband service simply because they share a census block with a household considered as served. We are additionally concerned that the provider-originated reports used to compose these maps are largely *unvalidated*. The providers must certify the accuracy of their submitted reports, but the information verification processes used before funding or financing determinations are made can significantly vary—or, in many cases, such processes do not exist at all. Furthermore, these processes can be very costly and expensive, especially for smaller providers who are most likely to benefit from more granular maps. If funding or financing decisions flow directly from the maps, we must ensure they are sufficiently accurate, granular, and up to date.

We are writing to ask the FCC to continue to take steps to address these concerns. First, it is critical that the FCC to develop a more granular and standardized reporting process to demonstrate broadband availability—while also balancing the burdens of reporting, especially for smaller providers. It is additionally important to ensure separately and distinctly the accuracy of that more granular data, including data held by interagency partners at the National Telecommunications and Information Administration or the U.S. Department of Agriculture. As the Mobility Fund experience indicated, reliance only upon self-reported data has presented challenges for the agency, and flawed data has directly impacted the ability of rural broadband

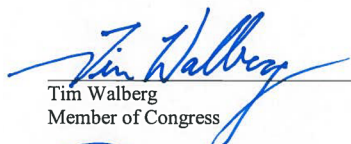
Letter to Chairman Pai  
Page 2

providers to deploy service to new areas. We therefore encourage the FCC to establish a robust and meaningful challenge process that will enable better validation of both fixed and mobile data *prior* to relying upon such data in making funding or financing decisions, and working with other Federal agencies to coordinate such efforts.

Access to affordable, reliable broadband is critical for the business, educational, health care, and other daily needs of Michiganders. Our constituents should not be left behind in the 21<sup>st</sup> century digital economy due to flawed broadband availability maps. Thus, it is critical to ensure inaccurate information will not result in a denial of access to fixed or mobile broadband support. A validated set of data based upon standardized methods of granular reporting will help better achieve universal service.

Thank you for your attention to this issue. I look forward to working with you as the FCC continues working to ensure all Americans have access to robust, reliable, and affordable broadband.

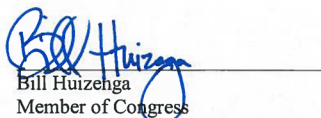
Sincerely,

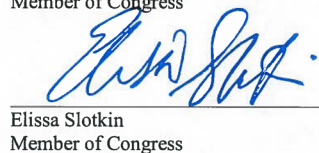
  
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Member of Congress

  
Jack Bergman  
Member of Congress

  
Paul Mitchell  
Member of Congress

  
John R. Moolenaar  
Member of Congress

  
Bill Huizenga  
Member of Congress

  
Elissa Slotkin  
Member of Congress

cc: The Honorable Michael O'Rielly  
Commissioner, Federal Communications Commission

The Honorable Brendan Carr  
Commissioner, Federal Communications Commission

Letter to Chairman Pai  
Page 3

The Honorable Jessica Rosenworcel  
Commissioner, Federal Communications Commission

The Honorable Geoffrey Starks  
Commissioner, Federal Communications Commission

5/15/2019

Tribes across country push for better internet access | The Seattle Times

## Tribes across country push for better internet access

May 14, 2019 at 12:40 pm Updated May 15, 2019 at 3:53 am



This undated photo provided by Amy Martin shows Ophelia Watahomigie-Corliss, a member of the Havasupai Tribal Council, at Red Butte, a site that the Havasupai... (Amy Martin via AP) [More](#)

By [FELICIA FONSECA](#)

*The Associated Press*

FLAGSTAFF, Ariz. (AP) — In a remote, roadless Arizona canyon that is home to a small Native American tribe, there's a natural skepticism toward the internet.

The telemedicine equipment that health care officials promised would work gathers dust. School children who have online homework struggle to get online. And streaming a web-based conference or taking classes remotely? Well, "that's a lot of luck you'd have to get," said Ophelia Watahomigie-Corliss, who sits on the Havasupai Tribal Council.

Things started to change after a small company approached the tribe with a plan to broaden coverage for educational use. It's now using the experience to help push the federal government to give tribes priority for broadband spectrum largely unassigned across the western United States.

The Federal Communications Commission has not issued any new permanent licenses for the Educational Broadband Services spectrum in more than 20 years. It asked the public a year ago to weigh in on possible changes to the licensing system to better define geographic areas, build in flexibility, create priorities for tribes and educational institutions, and possibly auction off the 2.5 GHz-band spectrum. It's not clear when the FCC will act.

The agency estimates that about one-third of the people living on tribal lands don't have access to high-speed internet, but others say the figure is twice as high. That's partly because homes on remote reservations are spread far apart.

And tribes say large telecommunications companies are unwilling to expand to tribal lands because of the cost.

ADVERTISING

The internet on the Havasupai reservation has been a mixed bag. Tribal employees could sign on to their email and do internet searches but not much else. Public access for 450 residents was centered on the community building in the village of Supai. Thousands of tourists who trek 10 miles (16 kilometers) down a winding trail to see the reservation's famed blue-green waterfalls have no internet access at their campsites away from the village.

The tribe began working with a company called MuralNet in 2017 to get teachers and students better access. They successfully sought temporary authority from the FCC to use the Educational Broadband Services spectrum — a sort of channel of electromagnetic waves — that wasn't being used. Flagstaff-based Niles Radio Communications helped build the network.

"We're really putting our chips on EBS," said Mariel Triggs, chief executive of MuralNet. "It works in extreme cases. It's cheap; it's reliable."

Jacqueline Siyuja now has a wireless router to take online classes for her job at the tribe's Head Start program. A few years ago, she and her colleagues had to fly out of the canyon and drive more than two hours to a community college in Flagstaff for classes. She also had to take her young daughter with her.

"It was really challenging for us," she said.

Jordan Manakaja eventually wants to get her bachelor's degree and become a therapist in the community. She prefers online classes at home where she can interact with an instructor.

"We have the opportunity to wind down and get comfortable before we're in a classroom," she said. "That was more beneficial to us mentally."

ADVERTISING

The tribe won't know whether it can make other plans for the spectrum, like using telemedicine, transmitting medical records electronically or starting an online high school, until the FCC decides whether to grant the tribe's application for a permanent license.

5/15/2019

Tribes across country push for better internet access | The Seattle Times

Nearly 2,190 licenses that generally cover a 35-mile radius have been granted to 1,300 licensees, according to the FCC. The agency has asked for public comment on realigning the boundaries of the licenses, eliminating the educational use requirement, and allowing tribes, current licensees or new educational entities to access unassigned spectrum before a possible auction.

Despite its name, the spectrum isn't used solely for educational purposes. Licensees can lease it to commercial providers. Sprint is among the largest users.

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Tribes in Oklahoma, Wisconsin, Washington, Idaho and others in Arizona also are pressing the FCC for a priority filing window.

On the Havasupai Tribal Council, Watahomigie-Corliss is dubbed the telecommunications member and she's the youngest at 33. When she presented the project to colleagues, she was well aware of their doubts.

<https://www.seattletimes.com/business/tribes-across-country-push-for-better-internet-access/>

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5/15/2019

Tribes across country push for better internet access | The Seattle Times

"It was my job to prove to them it could possibly work, and that comes with the territory of so many people trying to make things work at Supai that work on the outside," she said.

*FELICIA FONSECA*



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**National Association of Federally-Insured Credit Unions**

May 14, 2019

The Honorable Michael Doyle  
Chairman  
Subcommittee on Communications &  
Technology  
Committee on Energy and Commerce  
U.S. House of Representatives  
Washington, D.C. 20515

The Honorable Robert Latta  
Ranking Member  
Subcommittee on Communications &  
Technology  
Committee on Energy and Commerce  
U.S. House of Representatives  
Washington, D.C. 20515

**Re: Tomorrow's Hearing on the Federal Communications Commission (FCC)**

Dear Chairman Doyle and Ranking Member Latta:

I write to you today on behalf of the National Association of Federally-Insured Credit Unions (NAFCU) in conjunction with tomorrow's hearing entitled "Accountability and Oversight of the Federal Communications Commission." NAFCU advocates for all federally-insured not-for-profit credit unions that, in turn, serve over 116 million consumers with personal and small business financial service products. NAFCU would like to reiterate our concerns as the FCC continues to work on defining "automatic telephone dialing system" ("autodialer") under the *Telephone Consumer Protection Act* (TCPA) and Congress examines the issue of illegal robocalls.

Since the Federal Communications Commission (FCC) issued its problematic 2015 Declaratory Ruling and Order (2015 Order), the risk of facing a costly lawsuit over inadvertent TCPA violations has kept many credit unions from freely communicating needed financial information with their members. The March 2018 *ACA International v. FCC* decision invalidated the 2015 Order's overly expansive definition of "autodialer" and the FCC's approach to liability for calls to reassigned numbers under the TCPA. Since then, courts have taken a variety of approaches in determining what qualifies as an "autodialer" – leading to a maze of judicial interpretations of Congress's intent and meaning in passing the TCPA.

NAFCU ultimately supports a broad definition of "autodialer" that only includes equipment that uses a random or sequential number generator to store or produce numbers and dial those numbers without human intervention. NAFCU also supports other reforms to help credit unions contact their members with important information about their existing accounts, such as permitting callers to establish a reasonable opt-out method for revoking their consent to be contacted.

NAFCU appreciates the Subcommittee's continuing focus on the issue of stopping the scourge of illegal robocalls. It is important that any action by the FCC or Congress does not hamper the ability of credit unions to communicate important information to their members without fear of inadvertently violating the TCPA and potentially facing expensive, and oftentimes meritless, lawsuits.

Thank you for your attention to this matter. If my colleagues or I can be of assistance to you, or if you have any questions regarding this issue, please feel free to contact me or NAFCU's Associate Director of Legislative Affairs Alex Gleason at (703) 842-2237.



Brad Thaler  
Vice President of Legislative Affairs

cc: Members of the Subcommittee on Communications and Technology



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May 14, 2019

The Honorable Michael F. Doyle, Chair  
The Honorable Robert Latta, Ranking Member  
U.S. House Committee on Energy and Commerce  
Subcommittee on Communications and Technology  
2125 Rayburn House Office Building  
Washington, D.C. 20515

Dear Chairman Doyle and Ranking Member Latta:

We write to you regarding the oversight hearing for the Federal Communications Commission<sup>1</sup> and the critical issue of consumer privacy protection. In EPIC's view, the FCC needs to do far more to protect consumers from "robocalls," location tracking, and the unnecessary collection of their call records.

EPIC is a public interest research center established in 1994 to focus public attention on emerging privacy and civil liberties issues.<sup>2</sup> For over twenty years, EPIC has worked to ensure that the FCC protects the privacy of American consumers.<sup>3</sup> We are now concerned that the Commission has abdicated one of its most important responsibilities to the American public. The FCC must do more to safeguard American consumers—from the daily deluge of robocalls, from the unnecessary and invasive requirement to maintain detailed call records, and from the rampant mishandling of sensitive cell phone location data.

*The Commission Has Failed to Protect Consumers Against Robocalls*

Americans are suffering from an epidemic of robocalls. In 2018 alone, it is estimated that 47.8 billion robocalls were made in the United States, an increase of more than 50% over the prior

<sup>1</sup> *Accountability and Oversight of the Federal Communications Commission*, 116<sup>th</sup> Cong. (2019), H. Comm. on Energy and Commerce, Subcomm. on Communications and Technology (May 15, 2019), <https://energycommerce.house.gov/committee-activity/hearings/hearing-on-accountability-and-oversight-of-the-federal-communications>.

<sup>2</sup> See EPIC, *About EPIC*, <https://epic.org/epic/about.html>.

<sup>3</sup> See EPIC, *CPNI (Customer Proprietary Network Information)*, <https://epic.org/privacy/cpni/#EPIC> (outlining the history of EPIC's advocacy for consumer privacy rules at the FCC, including two successful campaigns for pro-consumer rule changes); EPIC, *US West v. FCC – The Privacy of Telephone Records*, <https://epic.org/privacy/litigation/uswest/> (1997) (describing the efforts of EPIC and others to defend the FCC's customer proprietary network information ("CPNI") rules); see also EPIC *Amicus brief, NCTA v. FCC*, 555 F.3d 996 (D.C. Cir. 2009) (defending the FCC's CPNI privacy rules); Letter from EPIC to the U.S. House of Representatives Committee on Energy and Commerce on FCC Privacy Rules (June 13, 2016), <https://epic.org/privacy/consumer/EPIC-FCC-Privacy-Rules.pdf>.

EPIC Statement  
House Energy & Commerce Committee

1

FCC Oversight  
May 14, 2019

Privacy is a Fundamental Right.

year.<sup>4</sup> The Federal Communications Commission is charged with enforcing the Telephone Consumer Protection Act (“TCPA”), the law that Congress passed in 1991 to prevent precisely this problem.<sup>5</sup> The FCC knows of the scope of the problem.<sup>6</sup> But so far the Commission has been unable to stop or even reduce the flow of unwanted calls. And the Commission is simultaneously soliciting proposals from telemarketing industry groups to would weaken the TCPA rules that are supposed to protect consumers from nuisance calls.<sup>7</sup>

EPIC has repeatedly warned the Commission about the need to strengthen, not weaken, privacy protections in the TCPA rules. For example, in response to the FCC’s notice in May 2018, EPIC filed detailed comments explaining why the Commission should not modify the regulations to exempt millions of unwanted calls and leave consumers without legal rights.<sup>8</sup> The Commission has twice sought comment on the question of “what constitutes an ‘automatic telephone dialing system’” under the TCPA.<sup>9</sup> This definition is central to the entire structure of the law, and if the Commission improperly narrows the definition, many consumers will be left without legal protection from unwanted calls. The FCC’s willingness to eliminate consumer protections when we are experiencing an unprecedented increase in robocalls contradicts the agency’s mission and would further the TCPA’s deterrent effect.

***Chairman Pai and the Commissioners should be asked what he is doing to ensure that consumers are protected from unwanted calls and why he is considering proposals to weaken the robocall rules.***

*The Commission Is Proposing to Extend the Unnecessary and Invasive Data Retention Regulation*

The Commission has also failed to take simple steps to protect consumer data by withdrawing an outdated rule that requires all carriers to retain detailed data about customer calls.

<sup>4</sup> *Nearly 48 Billion Robocalls Made in 2018*, According to YouMail Robocall Index, PR Newswire (Jan. 23, 2019), <https://www.prnewswire.com/news-releases/nearly-48-billion-robocalls-made-in-2018-according-to-youmail-robocall-index-300782638.html>.

<sup>5</sup> 47 U.S.C. § 227.

<sup>6</sup> Fed. Comm’n Comm’n, *The FCC’s Push to Combat Robocalls & Spoofing* (2019), <https://www.fcc.gov/about-fcc/fcc-initiatives/fccs-push-combat-robocalls-spoofing>.

<sup>7</sup> Public Notice, Fed. Comm’n Comm’n, *Consumer and Governmental Affairs Bureau Seeks Comment on Interpretation of the Telephone Consumer Protection Act in Light of the D.C. Circuit’s ACA International Decision*, 33 FCC Red. 4864 (May 14, 2018), <https://www.fcc.gov/document/ceb-seeks-comment-tpa-light-de-circuit-decision-aca-intl>.

<sup>8</sup> Comments of EPIC to the Fed. Comm’n Comm’n, *Interpretation of the Telephone Consumer Protection Act in Light of the D.C. Circuit’s ACA International Decision*, DA-18-493, CG 02-278, CG 18-152 (June 13, 2018), <https://epic.org/apa/comments/EPIC-FCC-TCPA-June2018.pdf>; Reply Comments of EPIC to the Fed. Comm’n Comm’n, *Interpretation of the Telephone Consumer Protection Act in Light of the D.C. Circuit’s ACA International Decision*, DA-18-493, CG 02-278, CG 18-152 (June 28, 2018), <https://epic.org/apa/comments/EPIC-FCC-TCPA-ReplyComments-June2018.pdf>.

<sup>9</sup> Public Notice, 33 FCC Red. 4864, *supra*; Public Notice, Fed. Comm’n Comm’n, *Consumer and Governmental Affairs Bureau Seeks Comment on Interpretation of the Telephone Consumer Protection Act in Light of the Ninth Circuit’s Marks v. Crunch San Diego, LLC Decision*, DA-18-493, CG 02-278, CG 18-152 (Oct. 3, 2018).

The retention of this personal data creates an ongoing risk to American consumers from criminal hackers and foreign adversaries.

In 2015, EPIC and a coalition of consumer privacy organizations, technical experts, and legal scholars undertook a petition to the FCC to repeal the bulk collection and retention of telephone data of American consumers.<sup>10</sup> EPIC's petition urged the FCC to repeal an outdated rule that requires that telephone records be collected and saved for 18 months.<sup>11</sup> Law enforcement agencies have conceded that the need for the retention of such data on a mass scale is no longer necessary.<sup>12</sup> Further, the bulk collection of telephone records places consumer privacy at risk by revealing intimate details about their daily lives and subjecting consumers to an increased potential for identity theft.<sup>13</sup> And the European Union has recently determined that the bulk retention of telephone records violates fundamental rights, raising the real possibility that an inconsistent policy in the United States could lead to disruption in digital trade, similar to the recent "Safe Harbor" dispute.<sup>14</sup>

The EPIC Petition seeks an end to this FCC regulation that places at risk the privacy of users of network services. The Commission docketed EPIC's petition for public comment in 2017. Support for repeal of the data retention regulation is strong. Every comment submitted to the FCC expressed support for repealing this outdated and unnecessary regulation.<sup>15</sup> Yet the Commission has taken no action on EPIC's petition over the last two years. Instead, the Commission recently issued a Notice that it plans to extend the regulation for another three years.<sup>16</sup> This week, EPIC sent comments to the FCC in response to the proposal to extend the rule, again urging the repeal of the data retention regulation.<sup>17</sup> EPIC explained that "the regulation is unduly burdensome, ineffectual, and threatens privacy and security."

***Chairman Pai and the Commissioners should be asked why the FCC is continuing to require telephone companies to store detailed records of all their customers' telephone calls and has also ignored a petition to end the regulation.***

<sup>10</sup> EPIC, Petition to Repeal 47 C.F.R. §42.6, Federal Communications Commission ("Retention of Telephone Toll Records"), Aug. 4, 2015, <https://epic.org/privacy/fcc-data-retention-petition.pdf>; *End the FCC Data Retention Mandate!*, EPIC, <https://epic.org/privacy/fcc-data-retention/#legal>.

<sup>11</sup> 47 C.F.R. §42.6.

<sup>12</sup> U.S. Dep't of Justice & U.S. Dep't of Homeland Sec., Comment Letter on Notice of Rulemaking In the Matter of Implementation of the Telecommunications Act of 1996, at 10 (Apr. 28, 2006), CC Docket No. 96-115.

<sup>13</sup> *Petition to Repeal 47 C.F.R. §42.6*.

<sup>14</sup> Court of Justice of the European Union, *The Court of Justice Declares the Data Retention Directive to be Invalid*, (Apr. 8, 2014) ("It entails a wide-ranging and particularly serious interference with the fundamental rights to respect for private life and to the protection of personal data, without that interference being limited to what is strictly necessary."), [http://curia.europa.eu/jcms/jcms/P\\_125951/](http://curia.europa.eu/jcms/jcms/P_125951/).

<sup>15</sup> Docket 17-130, *Petition for Rulemaking to Repeal 47 C.F.R. 42.6 (Retention of Telephone Records)*, [https://www.fcc.gov/ecfs/search/filings?proceedings\\_name=17-130&sort=date\\_disseminated,DESC](https://www.fcc.gov/ecfs/search/filings?proceedings_name=17-130&sort=date_disseminated,DESC).

<sup>16</sup> Notice and Request for Comments, Fed. Comm'n's Comm'n, *Part 42, Sections 42.5, 42.6, 42.7*.

*Preservation of Records of Communications Common Carriers*, 84 Fed. Reg. 9121, 9122 (Mar. 12, 2019).

<sup>17</sup> Comments of EPIC to the Fed. Comm'n's Comm'n, *Information Collections Being Reviewed by the Federal Communications Commission Under Delegated Authority*, OMB 3060-0076, OMB 3060-0166 (May 13, 2019), <https://epic.org/privacy/FCC-Data-Retention-Comments-20190513.pdf>.

*The Commission Has Not Protected Consumers' Location Data*

In 2018 the U.S. Supreme Court ruled that cell phone location data is protected under the Fourth Amendment and that the government cannot obtain that data from telephone companies without a warrant.<sup>18</sup> Meanwhile multiple reports over the last two years have revealed that telephone companies have made their customers' location data available to third parties in bulk and without oversight.<sup>19</sup> As Commissioner Geoffrey Starks recently explained, "Wireless companies sell your location data. Federal regulators should stop them."<sup>20</sup> The FCC is responsible for protecting the privacy of "customer proprietary network information,"<sup>21</sup> yet the Commission has done absolutely nothing to protect cell phone location data. This data falls within the scope of the FCC's privacy authority, and Congress should demand that the agency protect consumers.

EPIC has long advocated for strong consumer protections under the Communications Act. After Congress modernized the law in 1996, EPIC successfully petitioned the FCC to adopt pro-consumer rules regarding the authorization for marking disclosures.<sup>22</sup> EPIC successfully petitioned the agency in 2005 to update its rules to protect access to customer information by "pretexters" and to improve carriers' data security practices.<sup>23</sup> In the 2016 CPNI Rulemaking, EPIC urged the Commission to adopt comprehensive privacy rules that would apply to both Internet Service Providers ("ISPs") and so-called "edge" providers, such as Google and Facebook, that dominate much of the Internet economy.<sup>24</sup> However, the FCC adopted a modest rule that only applied to ISPs.<sup>25</sup> The 2016 CPNI rules were subsequently repealed by Congress.<sup>26</sup>

The Commission has never conducted a rulemaking or otherwise established a comprehensive framework for protecting the privacy of customers' cell phone location data. The

<sup>18</sup> *Carpenter v. United States*, 138 S. Ct. 2206 (2018).

<sup>19</sup> Jennifer Valentino-DeVries, *Service Meant to Monitor Inmates' Calls Could Track You, Too*, N.Y. Times (May 10, 2018), <https://www.nytimes.com/2018/05/10/technology/cellphone-tracking-law-enforcement.html>; Joseph Cox, *Hacker Breaches Securus, the Company That Helps Cops Track Phones Across the US*, Motherboard (May 16, 2018), [https://motherboard.vice.com/en\\_us/article/gkgy9/securus-phone-tracking-company-hacked](https://motherboard.vice.com/en_us/article/gkgy9/securus-phone-tracking-company-hacked); Joseph Cox, *Verizon Says It Will Stop Selling US Phone Data That Ended Up in the Hands of Cops*, Motherboard (June 19, 2018), [https://motherboard.vice.com/en\\_us/article/nek87/verizon-stop-selling-phone-location-data-wyden-securus-locationsmart](https://motherboard.vice.com/en_us/article/nek87/verizon-stop-selling-phone-location-data-wyden-securus-locationsmart); Joseph Cox, *I Gave a Bounty Hunter \$300. Then He Located Our Phone*, Motherboard (Jan. 8, 2019), [https://motherboard.vice.com/en\\_us/article/npxbz/i-gave-a-bounty-hunter-300-dollars-located-phone-microbilt-zumigo-tmobile](https://motherboard.vice.com/en_us/article/npxbz/i-gave-a-bounty-hunter-300-dollars-located-phone-microbilt-zumigo-tmobile); Joseph Cox, *Hundreds of Bounty Hunters Had Access to AT&T, T-Mobile, and Sprint Customer Location Data for Years*, Motherboard (Feb. 6, 2019), [https://motherboard.vice.com/en\\_us/article/43z3dn/hundreds-bounty-hunters-att-tmobile-sprint-customer-location-data-years](https://motherboard.vice.com/en_us/article/43z3dn/hundreds-bounty-hunters-att-tmobile-sprint-customer-location-data-years).

<sup>20</sup> Geoffrey Starks, *Why It's So Easy for a Bounty Hunter to Find You*,

<sup>21</sup> 47 U.S.C. § 222.

<sup>22</sup> See EPIC, *CPNI (Customer Proprietary Network Information)* (2018).

<sup>23</sup> Petition of EPIC for Rulemaking to Enhance Security and Authentication Standards for Access to Customer Proprietary Network Information, CC 96-115 (Aug. 30, 2005), <https://epic.org/privacy/ici/opninet.html>; see also *Nat'l Cable & Telecomm. Ass'n v. FCC*, 555 F.3d 96 (D.C. Cir. 2009) (affirming the updated rules).

<sup>24</sup> EPIC Statement, *FCC Overreach: Examining the Proposed Privacy Rules*, hearing before the House Committee on Energy and Commerce, Subcommittee on Communications and Technology, Jun. 13, 2016.

<sup>25</sup> Fed. Comm'ns Comm'n, *Protecting the Privacy of Customers of Broadband and Other Telecommunications Services*, 81 Fed. Reg. 87274 (Dec. 2, 2016).

<sup>26</sup> Joint Resolution, Pub. L. 115-22, 131 Stat. 88 (2017).

FCC has never even addressed whether all types of cell phone location data are protected under the CPNI statute. Instead of moving forward to safeguard consumers, the FCC has been moving backwards, leaving users of new communications services exposed to unprecedented levels of identity theft, financial fraud, and security breaches.<sup>27</sup>

*Chairman Pai and the Commissioners should be asked what the FCC will do to ensure that consumers' location data is protected, including whether the Commission plans to issue updated rules under 47 U.S.C. § 222.*

We ask that this letter be submitted into the hearing record. EPIC looks forward to working with the Subcommittee on Communications and Technology on this issue.

Sincerely,

/s/ Marc Rotenberg  
 Marc Rotenberg  
 EPIC President

/s/ Alan Butler  
 Alan Butler  
 EPIC Senior Counsel

/s/ Caitriona Fitzgerald  
 Caitriona Fitzgerald  
 EPIC Policy Director

<sup>27</sup> Fed. Trade Comm'n, *Consumer Sentinel Network Data Book*, Feb. 2019, <https://www.ftc.gov/reports/consumer-sentinel-network-data-book-2018>.





May 14, 2019

The Honorable Mike Doyle  
Chair  
Communications and Technology Subcommittee  
Energy and Commerce Committee  
United States House of Representatives  
Washington, DC 20515

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

Dear Chairman Doyle and Ranking Member Latta:

In anticipation of the Communications and Technology Subcommittee upcoming hearing entitled "Accountability and Oversight of the Federal Communications Commission," the Intelligent Transportation Society of America ("ITS America") writes to underscore that the Federal Communications Commission (FCC) embraced the use of spectrum in the 5.9 GHz band to promote the development of technology that saves lives and improves the safety of roadways. It is time to move past the regulatory uncertainty that has hung like a cloud for the past six years and provide automakers and road operators the environment they need to make our roads safer and save lives. It is time to accelerate the deployment of Vehicle-to-Everything (V2X) safety transportation communications technologies.

New and developing V2X technology that depends on the 5.9 GHz band is allowing us to finally address the lives lost on our nation's roads. Vehicle-to-Vehicle (V2V), Vehicle-to-Infrastructure (V2I), and Vehicle-to-Pedestrian (V2P) – collectively referred to as V2X – have incredible potential to dramatically improve the safety, accessibility, and operational performance of our roads and vehicle safety.

Safety is the top priority of the nation's transportation system. According to the U.S. Department of Transportation's National Highway Traffic Safety Administration (NHTSA), 37,133 people lost their lives in motor vehicle crashes in 2017, which roughly breaks down to just over 100 fatalities per day. V2V deployments available today include systems that provide emergency braking. Another benefit of connected vehicles is their ability to be the "eyes and ears" of other vehicles. Non-Line-of-Sight awareness means that drivers and vehicles will be able to see around corners and receive information about hazards in the roadway, even if they cannot see the hazard. V2V communications help move traffic more efficiently with demand responsive traffic signaling and allow emergency response vehicles to preempt signals.

The concept of V2I is to provide the vehicle and the driver information about infrastructure operations -- weather and pavement condition, how signals are directing traffic, and even the location of potential hazards at intersections and other critical road safety hotspots. V2I applications include red light violation warnings, reduced speed zone warnings, curve speed warnings, and spot weather impact warnings. V2I soon will support other applications that will disseminate the condition of the infrastructure, such as bridge integrity, and may even collect data from cars that describe pavement condition. According to NHTSA, V2I technology helps drivers safely negotiate intersections and could help prevent 41 to 55 percent of intersection crashes. Another connected vehicle safety application that helps drivers with left turns at intersections could help prevent 36 to 62 percent of left-turn crashes, according to NHTSA. In addition to the lives saved, just these two applications alone could prevent up to 592,000 crashes and 270,000 injuries each year.

V2X will enable us to deploy safety solutions to protect vulnerable users of the system, which will be transformational. V2P is an extremely important component of communications. In Colorado, where the largest increase was in vulnerable users of the system, fatalities increased from 484 in 2014 to nearly 700



in 2017. By allowing vehicles to communicate with these users through sensors or vehicle to device communication, we can significantly reduce the number of pedestrians killed on our roadways.

Public sector agencies can also reap the benefits of V2X. Increasingly, vehicles will rely on digital formatting of roadway information to process roadway rules. ITS America member Regional Transportation Commission of Southern Nevada recently became the first in the world to put roadway information into a digital format. As connected vehicles drive over the actual roadway, they can pick up differences between the “digital” road and the actual road. This could eliminate the need for agencies to manually examine roadways for striping or automatically report potholes instead of waiting for enough drivers to incur tire damage before fixing them. These vehicles will also give an up-to-the-minute snapshot of the system – how it is performing, are there any incidents, live weather conditions, etc. Millions of dollars have already been invested in this effort, including incorporating connected vehicle technologies into infrastructure by states and cities. A majority of states and dozens of cities are deploying or planning to deploy connected vehicle technology. V2I deployments include expansions of the Safety Pilot Model Deployment in Ann Arbor (MI), large pilot deployments in New York City, Tampa (FL), and Wyoming, and the Smart City Challenge in Columbus (OH). These technologies can also enhance automated driving systems, which can provide numerous economic, environmental, and societal benefits, such as decreased congestion and fuel consumption, and increased access for older adults and people with disabilities.

However, V2X communications are by no means guaranteed. The 5.9 GHz band for V2X is being targeted by cable companies and their supporters who are seeking additional spectrum for WiFi and are aggressively pressuring the FCC to force V2X to share that spectrum with unlicensed consumer broadband devices. Speed matters when safety information is involved. Sharing the band could compromise the speed and put lives at risk. What if a driver knew, in fractions of a second, that an airbag deployed in a car in front of him/her? Alternatively, that the car in front, around the next curve, was sliding on black ice? Or a pedestrian is around the next corner? Thanks to V2X technology, that driver would react – and avoid a crash. Deploying life-saving technologies that allow cars, buses, trucks, bicycles, pedestrians, motorcycles, streetlights, and other infrastructure to talk to each other will ensure more people arrive home safely.

ITS America supports preserving the entire 5.9 GHz band for existing, new, and developing V2X technologies. We want to make sure all three phases of testing for the 5.9 GHz band are complete before the FCC rules on whether the spectrum can be shared between V2X operations and unlicensed devices like WiFi. Any unlicensed use in the band should be done without harmful interference to the incumbent technology or other intelligent transportation systems technologies. Finally, it is time to move past the regulatory uncertainty and accelerate the deployment of life saving V2X transportation technologies.

Sincerely,



Shailen P. Bhatt  
President and CEO  
Intelligent Transportation Society of America

Cc: House of Representatives Communications and Technology Subcommittee  
Ron Thaniel, ITS America Vice President of Legislative Affairs, [rthaniel@itsa.org](mailto:rthaniel@itsa.org)



May 15, 2019

**Statement for the Record of the Edison Electric Institute, the National Rural Electric Cooperative Association, and the Utilities Technology Council**

**House Energy and Commerce Committee Subcommittee on Communications and Technology  
Hearing on Accountability and Oversight of the Federal Communications Commission**

Thank you for the opportunity to submit this statement for the record regarding today's hearing on Accountability and Oversight of the Federal Communications Commission (FCC, the Commission). As the Subcommittee holds this oversight hearing of the FCC, we urge members to consider the ways the Commission's decisions and policies, particularly on spectrum, can impact our nation's energy and water delivery systems. Although often viewed primarily as a telecommunications regulatory agency, the FCC's jurisdiction over spectrum affects a multitude of critical-infrastructure industries (CII) such as those represented on this statement. We ask members of this Subcommittee to encourage the FCC to ensure that its spectrum decisions will adequately protect our nation's energy and water utilities' ability to provide their essential services and that it consider discussions with other federal agencies as it develops policies that impact these CII overseen by other agencies.

The undersigned organizations represent hundreds of electric utilities in the U.S. Our members are responsible for providing life-sustaining services which literally power our country's economy. While our collective members are regulated by numerous sector-specific federal, state, and local agencies, we all rely on the FCC as it relates to the ownership, operation, and maintenance of the essential communications networks most of our members use to underpin the reliable and safe operation of our infrastructure.

We applaud the Subcommittee for holding this hearing. The undersigned share the Subcommittee's desire to ensure the FCC is appropriately focused on ensuring its decisions and policies benefit the entire economy. This is especially true as the interdependencies between the electric and telecommunications industries strengthen due to advances in technologies that will enable utilities to become more resilient, efficient, cleaner, and responsive to customer needs.

Electric and water utilities, to varying degrees, deploy sophisticated communications networks to manage the safe, reliable, and secure operation of our nation's energy and water resources. These networks consist of both wireline and wireless components, depending on the location of the infrastructure. Because significant portions of energy and water infrastructure are in remote, rural areas, utilities rely on wireless networks for these hard-to-reach areas. For the most part, our collective members own and operate these networks privately, relying on the commercial companies for small segments of their networks, if at all.<sup>1</sup>

<sup>1</sup> Utility Network Baseline-April 2019 Update, Utilities Technology Council <https://utc.org/wp-content/uploads/2019/04/UTC-Utility-Network-Baseline-Final.0419.pdf>

According to a recent survey published by the Utilities Technology Council<sup>2</sup>, the most popular, reliable, and cost-effective wireless transmissions are done via microwave networks. Indeed, electric utilities use microwave communications for outage management, energy management, teleprotection and smart metering, among other functions.

Hundreds of electric utilities have licenses in the 6 GHz band for their microwave communications. Licensed spectrum offers our members the reliability and protection from interference that these networks require. Due to the criticality of these networks, electric utilities cannot tolerate even the risk that these communications systems could be degraded, as degraded situational awareness can result in diminished electricity reliability.

With the FCC considering expanding access to the 6 GHz band for unlicensed use, we have significant concerns that this proposal will threaten the integrity of our mission-critical communications networks. While our collective members fully understand and appreciate the need to make more efficient use of spectrum, members of this Subcommittee should ensure the FCC weighs the advantages of expanding access to the 6 GHz band with the potential negative impact this could have on critical infrastructure networks.<sup>3</sup>

For example, electric utilities use the 6 GHz band for teleprotection, a system of devices that relay information and monitor the health and status of power lines. If a line is experiencing a problem or fault, teleprotection systems automatically take actions to prevent the problem from escalating and possibly damaging other elements on the system or causing power outages. If these critical communications are degraded due to interference, utilities may be unable to take preventative action.

The undersigned entities are appreciative of our nation's need to become more efficient with our finite spectrum resources. Indeed, many of the technological advances which will make our energy and water utility systems more efficient, nimble, and responsive require access to interference-free spectrum. However, given the historical outcomes of FCC spectrum proceedings, we are concerned that the Commission will not adequately weigh the needs of utilities and other CII in its spectrum policies. To that end, we urge members of this Subcommittee to encourage the FCC to hold discussions with the Federal Energy Regulatory Commission (FERC) to better inform their decision-making.

This Subcommittee is uniquely suited for this discussion as it has jurisdiction over both FERC and the FCC. Members of this Subcommittee should foster a strong and viable dialogue between both agencies as the energy and telecommunications industries are becoming more interdependent by the day. The pending 6 GHz proceeding is a prime example as the undersigned have considerable concern that our operations could be negatively impacted if the FCC proceeds as planned.

FERC has a long history of working with other independent agencies on issues of common interest, including the Nuclear Regulatory Commission, the Environmental Protection Agency, and, more recently, the Pipeline and Hazardous Materials Safety Administration. We believe this is a simple, good government approach that will drive better decisions across the federal government.

The undersigned organizations thank the Subcommittee for holding this important hearing and appreciate the opportunity to submit this statement.

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<sup>2</sup> Ibid.

<sup>3</sup> Attached to this statement is a letter from CEOs and senior leadership of the American Public Power Association, the American Water Works Association, the Edison Electric Institute, the National Rural Electric Cooperative Association, and the Utilities Technology Council to FCC Chairman Pai regarding the FCC's 6 GHz proceeding

## ATTACHMENT



May 15, 2019

The Honorable Ajit Pai  
Chairman  
Federal Communications Commission  
445 12<sup>th</sup> Street SW  
Washington, DC 20554

**Re: Criticality of the 6 GHz Spectrum Band**

Dear Chairman Pai:

We thank you for seeking comments on the Federal Communications Commission's (FCC, the Commission) proposal to open the critical 6 GHz spectrum band to unlicensed use in ET Docket No. 18-295. We write to urge you and your colleagues to protect the licensed, mission-critical communications systems in the 6 GHz band that are used to monitor and support the reliable delivery of electricity and other critical utility services. Unfortunately, the mitigation measures proposed are not enough to protect these highly critical systems, and therefore, we have deep concerns with this proceeding.

The signatories to this letter represent nearly all of the electric utilities in the U.S., along with thousands of water and wastewater utilities. Our collective membership of critical-infrastructure industries (CII) delivers the most critical commodities necessary for sustaining life and public health—water, electricity, and natural gas. Each CII entity represented by our organizations is diverse in size, scope, and ownership structure, but each is committed to safely, securely, and efficiently providing these essential energy and water services.

The critical industries we represent own and operate massive infrastructure to deliver life-sustaining services for all aspects of the economy, including technology and telecommunications. This infrastructure consists of power plants, interstate and intrastate electricity lines, interstate and intrastate water and gas pipelines, control centers, and substations, among others. Because electricity travels at the speed of light, balancing the supply and demand of electricity requires intense planning, careful coordination, and robust and redundant infrastructure. Additionally, gas and water pipelines must be continuously monitored for safety and reliability.

To support the reliable delivery of these services on a real-time basis, our collective membership deploys a sophisticated array of private telecommunications networks throughout their service territories. CII communications networks consist of wireline and wireless technologies; while wireline services can provide faster and more reliable communications, wireline can be cost prohibitive in remote locations. Therefore, our collective members must rely on wireless networks for numerous mission-critical communications needs.

Often invisible or overlooked, these communications networks provide critical situational awareness, underpin safety functions, and enable crews to safely repair and restore services after storms. Additionally, for electric utilities, these networks are essential for our members to meet and exceed the stringent electric reliability requirements enforced by the federal government. These networks also support the greater deployment of distributed energy resources such as solar or battery storage, smart meters, and other technologies to enable grid modernization.

Hundreds of CII entities have licenses in the 6 GHz band for their microwave communications. Licensed spectrum offers our members the reliability and protection from interference that these networks require. Due to the criticality of these networks, electric utilities cannot tolerate even the slightest risk that these communications systems could be degraded, as diminished situational awareness can result in degraded reliability.

With the FCC considering expanding access to the 6 GHz band for unlicensed use, we have significant concerns that this proposal will threaten the integrity of our mission-critical communications networks. While our collective members fully understand and appreciate the need to make more efficient use of spectrum, we strongly encourage the Commission to weigh the advantages of expanding access to the 6 GHz band with the potential negative impact this could have on critical infrastructure networks.

For example, electric utilities use the 6 GHz band for teleprotection, a system of devices that relay information and monitor the health and status of power lines. If a line is experiencing a problem or fault, teleprotection systems automatically take actions to prevent the problem from escalating and possibly damaging other elements on the system or causing power outages. If these critical communications are degraded due to interference, utilities may be unable to take preventative action which could then lead to a system failure.

The Automated Frequency Coordination (AFC) system being proposed by the FCC to mitigate interference in the 6 GHz band remains untested and unproven. For reference, the National Telecommunications and Information Administration has raised concerns about a similar technology called Dynamic Frequency Selection (DFS) used to prevent interference to Terminal Doppler Weather Radar (TDWR) in the 5.8 GHz band. While the interference in that band was partly caused by illegal alteration of the equipment used for unlicensed operations, NTIA also found that interference was caused by the inability of the DFS systems to detect the TDWR signals and restrict unlicensed operations.

Should the FCC proceed with this concept, at the very least the Commission must make sure the interference-mitigation measures have been tried, tested, and proven to work. The need to make more efficient use of our nation's spectrum resources is critical but cannot be rushed at the expense of vital energy and water services that are essential to our economy and public health. It is imperative that the FCC ensure the mitigation measures are tested and proven before moving ahead.

As the agency proceeds, we urge you to take steps in this proceeding to adequately protect critical-infrastructure systems prior to expanding access to the 6 GHz band. These steps include:

- Requiring AFC for both indoor and outdoor unlicensed operations.

- Securing the AFC system, particularly considering the potential threat of cyberattacks to mission-critical communications by CII.
- Testing the AFC system so it is proven to protect against interference to microwave systems, prior to allowing any unlicensed operations in the 6 GHz band.

The CII represented here stand ready to work with the FCC to ensure our nation's spectrum needs can be met efficiently and effectively. Balancing the interests of all segments of the U.S. economy in this proceeding is essential to doing so.

Sincerely,



Sue Kelly  
American Public Power Association



G. Tracy Mehan, III  
American Water Works Association



Tom Kuhn  
Edison Electric Institute



Jim Matheson  
National Rural Electric Cooperative Association



Joy Ditto  
Utilities Technology Council

**Cc:**

The Honorable Brendan Carr  
The Honorable Michael O'Rielly  
The Honorable Jessica Rosenworcel  
The Honorable Geoffrey Starks

*The American Public Power Association (APPA) is the voice of not-for-profit, community-owned utilities that power 2,000 towns and cities nationwide. It represents public power before the federal government to protect the interests of the more than 49 million people that public power utilities serve, and the 93,000 people they employ.*

*The American Water Works Association (AWWA) is an international, nonprofit, scientific and educational society dedicated to providing total water solutions assuring the effective management of water. Founded in 1881, the Association is the largest organization of water supply professionals in the world. Our membership includes more than 4,000 utilities that supply roughly 80 percent of the nation's drinking water and treat almost half of the nation's wastewater. Our 50,000-plus total membership represents the full spectrum of the water community: public water and wastewater systems,*

*environmental advocates, scientists, academicians, and others who hold a genuine interest in water, our most important resource. AWWA unites the diverse water community to advance public health, safety, the economy, and the environment.*

*The Edison Electric Institute (EEI) is the association that represents all U.S. investor-owned electric companies. Our members provide electricity for more than 220 million Americans, and operate in all 50 states and the District of Columbia. As a whole, the electric power industry supports more than 7 million jobs in communities across the United States. In addition to our U.S. members, EEI has more than 65 international electric companies, with operations in more than 90 countries, as International Members, and hundreds of industry suppliers and related organizations as Associate Members.*

*The National Rural Electric Cooperative Association (NRECA) is the national service organization for America's Electric Cooperatives. The nation's member-owned, not-for-profit electric cooperatives constitute a unique sector of the electric utility industry – and face a unique set of challenges. NRECA represents the interests of the nation's more than 900 rural electric utilities responsible for keeping the lights on for more than 42 million people across 47 states. From booming suburbs to remote rural communities, America's electric cooperatives are energy providers and engines of economic development. Electric cooperatives play a vital role in transforming communities.*

*Founded in 1948, the Utilities Technology Council (UTC) is the international trade association for the telecommunications and information technology interests of electric, gas, and water utilities.*

*UTC's membership includes approximately 300 utilities across the U.S. and Canada, including large, for-profit, investor-owned electric and gas companies that serve millions of customers across multi-state service territories, as well as smaller, not-for-profit, rural electric cooperative and public power*

*utilities, which may serve only a few thousand customers in isolated communities or remote areas. UTC's core utility members own, manage, and control extensive communications infrastructure to support the safe, reliable, and secure delivery of essential energy and water services to the public.*