

**NOMINATION TO THE
FEDERAL COMMUNICATIONS COMMISSION**

HEARING

BEFORE THE

**COMMITTEE ON COMMERCE,
SCIENCE, AND TRANSPORTATION
UNITED STATES SENATE**

ONE HUNDRED FIFTEENTH CONGRESS

FIRST SESSION

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JULY 19, 2017
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SENATE COMMITTEE ON COMMERCE, SCIENCE, AND TRANSPORTATION

ONE HUNDRED FIFTEENTH CONGRESS

FIRST SESSION

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NOMINATION TO THE FEDERAL COMMUNICATIONS COMMISSION

WEDNESDAY, JULY 19, 2017

U.S. SENATE,
COMMITTEE ON COMMERCE, SCIENCE, AND TRANSPORTATION,
Washington, DC.

The Committee met, pursuant to notice, at 10 a.m. in room SD-G50, Russell Senate Office Building, Hon. John Thune, Chairman of the Committee, presiding.

Present: Senators Thune [presiding], Nelson, Lee, Markey, Moran, Schatz, Blumenthal, Gardner, Fischer, Peters, Cortez Masto, Booker, Udall, Wicker, Cantwell, Baldwin, Hassan, Klobuchar, and Duckworth.

OPENING STATEMENT OF HON. JOHN THUNE, U.S. SENATOR FROM SOUTH DAKOTA

The CHAIRMAN. This hearing will get underway. Welcome. We've got an opportunity today to hear from some nominees to the Federal Communications Commission, a critically important agency with a very wide and critical jurisdiction in our economy. So we're going to proceed right to that. Because we have some time constraints that we have to deal with today, I'm going to forego my opening statement and ask unanimous consent that it be entered into the record, and we'll proceed directly to some of the introductions that we are going to hear and then hopefully to our panel.

I think Senator Nelson wants to make an opener, and we'll do that right after we recognize Senator Roberts, the distinguished senior Senator from Kansas, who is here, and he is going to open things up for us this morning.

[The prepared statement of Senator Thune follows:]

PREPARED STATEMENT OF HON. JOHN THUNE, U.S. SENATOR FROM SOUTH DAKOTA

Today we welcome three well-qualified nominees to testify before the Committee as we consider their nominations to serve as commissioners at the Federal Communications Commission (FCC). I'd also like to welcome the families of the nominees who are here today.

While this is a confirmation hearing, given the issues we'll be discussing and the extensive experience of the nominees, it will also serve as this Committee's second FCC oversight hearing this year, fulfilling a commitment I've made to hold regular, biannual oversight hearings of the Commission.

It would be hard to imagine a group of nominees more well-versed in the agency they've been nominated to lead.

Ajit Pai, who has been renominated to a second term by President Trump, and was designated by the President to be the Chairman of the FCC this past January, has served as a Commissioner since 2012, when he was confirmed by voice vote in the Senate. Prior to becoming a commissioner, Chairman Pai worked on tele-

communications policy in both the public and private sectors, notably serving here in the Senate as a staffer on the Judiciary Committee, as well as in the general counsel's office at the FCC.

Jessica Rosenworcel, who has also been renominated by President Trump for a second term at the FCC, is well known to the Committee and has nearly two decades of experience in communications policy. She served as an FCC commissioner from May 2012 until January 2017, and before that, served as a senior staffer on the Commerce Committee for both Chairman Rockefeller and Chairman Inouye.

Brendan Carr, who is currently the FCC's General Counsel, has worked at the Commission for a number of years, first in the office that he now heads and more recently as lead advisor to then-Commissioner Pai on wireless and public safety issues. He previously worked in private practice for Wiley Rein in the firm's appellate, litigation, and telecom practices.

In my view, the FCC will be in very good hands when all three of these nominees are confirmed.

Since becoming Chairman, Mr. Pai has made much-needed reforms to improve transparency at the FCC and to improve the agency's processes. I am particularly heartened by Chairman Pai's efforts to treat fellow commissioners fairly by instituting the process of sharing documents with other commissioners before discussing them publicly, as well as starting a pilot project to publicly release the text of all agenda items in advance of Commission meetings. I frequently criticized the previous Chairman's hyper-partisan leadership approach on these issues because I believed it would lead to counter-productive outcomes over the long term. Chairman Pai's new approach should lead to more long-lasting and positive results at the FCC.

With respect to Internet regulations, I am pleased that Chairman Pai has sought to hit the reset button on the 2015 Title II Order, because, as I have previously said, the FCC should do what is necessary to rebalance the agency's regulatory posture under current law. I continue to believe, however, that the best way to provide long-term protections for the Internet is for Congress to pass bipartisan legislation. Two and a half years ago I put forward legislative principles and a draft bill to begin the conversation, and I stand ready and willing today to work toward finding a lasting legislative solution that will resolve the dispute over net neutrality once and for all.

Thankfully, the net neutrality debate has not distracted the FCC from important work in other areas. For instance, the FCC's proposed rulemaking on robocalls is a positive step in the right direction. The government must do everything we can to protect consumers from those who are truly the bad actors, which is one reason why this committee has advanced Senator Nelson's anti-spoofing legislation. But we also need to be sure the government's rules are not unfairly punishing legitimate callers who are not acting maliciously. The FCC's Notice of Inquiry will give that conversation a much-needed jumpstart.

Given the FCC's importance to the future of our economy and our society, it is important for the Commission to seek opportunities for common ground. As I noted last fall, the previous Chairman unfortunately led the Commission with unprecedented partisan zeal. I know that agreement is not always possible. Nevertheless, as a corrective to the Commission's recent history, I urge you all to treat each other fairly, to respect the law, to be willing to ask Congress for guidance, and to seek consensus whenever and wherever possible. Doing so will improve the agency's credibility and will result in actions that are more likely to endure.

Before I close, I want to extend my thanks to Chairman Pai for visiting my home state of South Dakota last month, as well as the emphasis the agency has placed on bridging the digital divide for rural states like mine where many are still without broadband service. The actions the agency has taken to advance the long-delayed second phases of both the Mobility Fund and the Connect America Fund will go a long way to ensure millions of Americans living in rural states will have access to an increasingly important service. I deeply appreciate it, and I also want to take the opportunity to invite Ms. Rosenworcel and Mr. Carr to visit South Dakota as well.

Thank you all for your willingness to serve the Nation in these important positions, and thanks again to your families for supporting your service. As I've indicated, I support all three of these nominees, and look forward to confirming them quickly. With that, I now turn to the distinguished ranking member for any remarks he would like to make.

The CHAIRMAN. Senator Roberts.

**STATEMENT OF HON. PAT ROBERTS,
U.S. SENATOR FROM KANSAS**

Senator ROBERTS. Well, thank you, Mr. Chairman. Thank you, too, Ranking Member Nelson, my statemate and fellow Senator, Senator Moran, and members of the Committee.

It is a great privilege for me to introduce a friend and fellow Kansan, Ajit Pai, for his reappointment to the Federal Communications Commission. It isn't often that I find myself on this side of the dais, but I have to imagine, Ajit, that on occasions such as this I must be calmer than you are.

[Laughter.]

Senator ROBERTS. That's sort of an inside story. My staff wrote that. I have no idea what it means.

[Laughter.]

Senator ROBERTS. Anyway.

Senator NELSON. You look really nervous.

Senator ROBERTS. Yes. It's hard to believe more than five years have already passed since Jerry and I introduced Ajit for his first confirmation hearing to serve at the FCC. At that hearing in 2011, I highlighted his impressive professional background, both in government and the private sector, a background that made clear he was a talented young man capable of leadership at the highest levels.

But today, having served as Commissioner and now Chairman at the FCC, Ajit's record of success speaks for itself. In his time at the FCC, he has taken on dreaded robocalls, he has increased transparency and accountability by releasing Commission documents to the public prior to agency votes, he has traveled the country highlighting challenges and opportunities for rural consumers who currently lack sufficient access to broadband. So more than anything, I want to thank him for his dedicated work on behalf of consumers across the country, and especially for Kansans.

Ajit, I want to thank you for joining me in Allen, Kansas, last fall to highlight the importance of the work rural providers are doing to connect families and small businesses in rural communities to the broadband that is so vital to success in today's economy.

As Chairman of the Agriculture Committee, I regularly hear from farmers and ranchers who have come to rely on broadband to run their operations and to connect to customers and markets all around the world. And I take heart in the fact that those constituents who feed the Nation and the world have a fearless advocate at the helm of the FCC who understands the great challenges that lie ahead in closing the digital divide between rural and urban communities.

So to my colleagues on this Committee, I urge a swift confirmation for my friend and proud Kansan, Ajit Pai.

Thank you, Mr. Chairman.

The CHAIRMAN. Thank you, Senator Roberts.

And I always tell Senator Roberts when he talks, if you could close your eyes and you can kind of hear Paul Harvey. Doesn't he sound a little bit like Paul Harvey?

[Laughter.]

The CHAIRMAN. Thank you, Senator Roberts.

I'm going to turn now to Senator Nelson for his opening remarks, and then we will go to some other introductions of some of our panelists today.

Senator Nelson.

**STATEMENT OF HON. BILL NELSON,
U.S. SENATOR FROM FLORIDA**

Senator NELSON. Thank you, Mr. Chairman. And there seems to be some passing interest in this subject matter today. It would be impossible to get all these people into our little committee room, so thank you all for being here. And it's because everybody here understands that the Commission plays such a vital role in protecting consumers and competition, and it's incumbent upon us to review the qualifications to carry out the role of Commissioners to this agency.

For Jessica Rosenworcel, it has been a long and winding road, when in reality, she should already be well into her second term on the agency. I want to thank you for your patience, your perseverance, and your continued willingness to serve the public. Your expertise, your good judgment, the dedication to the public interest is noted and it is essential.

Mr. Carr, congratulations on your nomination. There you are. It seems clear that you are well liked and well regarded by the communications bar. And I enjoyed my meeting with you yesterday. We have concerns about two consecutive terms, not one term, but two consecutive terms, to which the Senate is being asked to confirm you, and it would provide you with the longest single initial period of service of any nominee to the FCC. In addition, it's hard to recall a similar situation where someone was nominated to serve at the Commission alongside rather than to follow their current boss.

We must have Commissioners with an independent voice at this critical independent regulatory agency and ones who will fight for consumers and the public interest. And that's why I will urge our colleagues to take a particularly hard look at the question of two consecutive terms. It seems to me that the wiser course would be to hold this hearing, consider the gentleman's qualifications, and if he's confirmed, then see how he does over the next couple of years before confirming him to an additional term on top of the original one at this agency.

And finally let me welcome back Chairman Pai. You've been busy since your last appearance. I want to give you due credit for many of the actions the FCC took at the open meeting last week. They included several solid pro-consumer actions aimed at improving the lives of Americans.

Many view these most recent consumer protection actions, however, as mere icing on what is an unwise, unpalatable cake, a cake constructed out of actions that would eliminate competitive protections that threaten dangerous industry consolidation that make the Internet less free and less open and that weaken critical consumer protections for those most vulnerable.

Many of us cautioned you earlier in the year that we would judge your success at the agency on your ability to put the public interest ahead of certain special interests, and there are a number of us

that are concerned, are you heeding that advice? And that advice was offered from my heart.

Ultimately, we need Commissioners who have consumers' backs. We need Commissioners who are not afraid to use the robust statutory authority Congress has given to the FCC to protect consumers. And on behalf of those consumers, this Committee is going to be overseeing and doing our duty, as the oversight committee, and we will be doing that robustly.

Mr. Chairman, thank you for the opportunity.

The CHAIRMAN. Thank you, Senator Nelson.

And I'm going to ask if our three nominees would come forward, and they are very well-qualified nominees, so Chairman Pai, Mr. Carr, and Ms. Rosenworcel, as we consider the nominations to serve as Commissioners at the Federal Communications Commission. And I also want to, before we go any further, welcome, I know there are a number of the families of the nominees who are here today, and thank you for being here and thank you for being a part of public service, which I know comes in many cases with a great sacrifice on behalf of the families.

I'm going to flip it now to our other Senator from Kansas, a member of this Committee, Senator Moran, to introduce Chairman Pai. And then following that, I'm going to recognize Senator Blumenthal for 2 minutes to introduce Jessica Rosenworcel. And then Senator Gardner is going to introduce Brendan Carr. So we'll go in that order, Senator Moran, Blumenthal, and Gardner. And then we will get to the remarks from our nominees.

So, Senator Moran.

**STATEMENT OF HON. JERRY MORAN,
U.S. SENATOR FROM KANSAS**

Senator MORAN. Mr. Chairman, thank you. Thank you to the Ranking Member. I join my colleague from Kansas in welcoming Ajit Pai and his family to the Commerce Committee of the U.S. Senate. I consider Ajit a friend, which is a word that you have to choose carefully around here so that it retains any meaning. But I also consider Ajit one of the most intelligent and hard-working, diligent public servants that I've ever met in my time in Congress and as a citizen before elective office. And I've seen him in Kansas and I've seen him in Washington, D.C. We appreciate the fact that he remains a Kansan even when he's surrounded by the temptations and influences of the Nation's capital. So I consider him also a person of integrity, common sense, and good judgment.

I had conversations with both Jessica Rosenworcel and Mr. Carr in recent days. In both instances, I asked them to hold Ajit accountable and to bring the FCC to a point in which it was a significant amount of camaraderie and cooperation. And the last time that Chairman Pai was in front of this Committee, I indicated to the other Commissioners that if he failed to do that, that I would call his mom and dad at home and ask them to intervene. And I have no doubt that that will not be necessary.

We want an FCC Commission that works together that, even in differences of views and policy perspectives, takes the higher road that says we're going to find, when we can, common ground, and we're going to work together with respect and dignity for all Com-

missioners, something I think that this Committee would appreciate particularly based upon past circumstances.

So I'm really here to just say, Ajit, thank you for your public service. I look forward to your confirmation and believe that you are totally worthy of the opportunity to serve Americans in the capacity that the President has asked you to serve. And I will ask my colleagues to join me in that confirmation.

The CHAIRMAN. Thank you, Senator Moran.
Senator Blumenthal.

**STATEMENT OF HON. RICHARD BLUMENTHAL,
U.S. SENATOR FROM CONNECTICUT**

Senator BLUMENTHAL. Thanks very much, Mr. Chairman. I couldn't be more delighted and proud to welcome Jessica Rosenworcel here today along with her family, Emmett and Mark. They come from a wonderful family in West Hartford, and she has really served with extraordinary distinction and dedication, not only at the FCC, but also with this Committee.

And I would be remiss in letting this moment pass without paying tribute to two of the giants who have served on this Committee, Senators Jay Rockefeller and Daniel Inouye, because she worked with them as their counsel.

She has been a champion of issues so very important to everyone on this Committee on a bipartisan basis: our schools, our local emergency responders, everyday consumers. I've been privileged to welcome her several times to Connecticut, where she has championed the interests of victims of cramming and also the homework gap, which the *Hartford Courant* recognized just a few days ago in an editorial, a term that she coined.

She has been a tireless advocate of public safety, working to update the FCC's 911 rules to keep communities safe and protected. And she has been at the forefront of pushing the FCC to creatively update our spectrum policy and unlicensed use.

I hope to continue to welcome her back to Connecticut on issues like the pervasive scourge of robocalls, which she visited Connecticut to highlight.

And I want to thank her and again to her family, in fact, to all of the families who are here today, because I know that your service is really worthy of recognition. You are the ones who devote the time and effort to your spouses, your parents, your loved ones.

And I look forward to Commissioner Rosenworcel's very prompt confirmation. It is, as Ranking Member Nelson said, overdue. And I look forward to working with all of the nominees and congratulate you on your nominations.

Thank you.

The CHAIRMAN. Thank you, Senator Blumenthal.
Senator Gardner.

**STATEMENT OF HON. CORY GARDNER,
U.S. SENATOR FROM COLORADO**

Senator GARDNER. Thank you, Mr. Chairman.

And welcome, Ajit Pai, Jessica Rosenworcel, and Brendan Carr to the Committee today. I have the great privilege and honor of introducing Brendan to the Committee today. Before I begin that,

though, I would like to send a strong message to Ajit, as I do to all Kansans, just remember it's our water.

[Laughter.]

Senator GARDNER. And I am not from Virginia, but because Brendan does not have a Virginian on the Committee, they selected the next best thing, and that is Colorado, at least part of it's in the Union today because of a Virginian, thanks to the Louisiana Purchase. So welcome to the Committee today, Brendan. It's an honor to have you here.

Brendan has dedicated his professional life to telecommunications policy. After receiving his undergraduate degree at Georgetown University, he continued his education in telecommunications law at Catholic University here in Washington, worked as a telecom attorney before joining Chairman Pai's staff as his lead advisor on wireless public safety and international issues. He now serves as the FCC's General Counsel acting as the Chief Legal Advisor for the Commission.

During his time at the FCC, Brendan twice had the opportunity to visit the great state of Colorado. I was fortunate enough to have him accompany me around the state on one of those trips. We had the opportunity to visit startups in Denver—of course, Colorado, a great startup state. And we met with local broadcasters and rural broadband providers and toured a 911 emergency call center. Throughout the tour, I was impressed with his grasp of telecommunications policy across the wide range of issues before the FCC, and I believe he would make an outstanding Commissioner. And he is certainly committed to the success of our urban corridors of this country, but equally important, the rural corridors of our Nation as well.

It's my pleasure to introduce Brendan to the Committee. And I look forward to hearing him discuss what he sees is his potential role and opportunities ahead of him at the Commission.

Thank you. And welcome to your family as well.

The CHAIRMAN. Thank you, Senator Gardner.

We've got a vote at 10:30, and I will inform members of the Committee we're going to roll through that to try and keep the process moving forward, and I would ask the nominees, if they could, to confine their oral remarks as close to five minutes as possible to give an optimum amount of time for members of the Committee to ask questions.

So I'm going to start on my left and your right with Chairman Pai, and then we'll recognize Jessica Rosenworcel and Brendan Carr.

Mr. Chairman.

**STATEMENT OF HON. AJIT PAI,
NOMINEE TO BE A MEMBER,
FEDERAL COMMUNICATIONS COMMISSION (REAPPOINTMENT)**

Chairman PAI. Chairman Thune, Ranking Member Nelson, members of the Committee, thank you for holding this hearing today. It has been an honor to work with you on many issues. With the Committee's indulgence, I would like to introduce my family: my wife, Janine; our children, Alexander and Annabelle, collectively "the nuggets"; and my brother-in-law, Bob Van Lancker and his

fiancée, Rachel Vistica. I'm grateful to them for their love and support.

I would especially like to thank my parents, Varadaraj and Radha Pai, who traveled from Kansas to be here today. Forty-six years ago, they left India with little more than \$10 and a transistor radio. Today, here they sit before distinguished members of this august body, their son having been nominated by the President of the United States to this important post. Only in America.

I also would like to thank President Trump for nominating me to serve another term at the FCC, and to Senator Roberts and Senator Moran, for their longstanding support and their kind introductions this morning.

Finally, I want to congratulate Jessica Rosenworcel and Brendan Carr on their nominations. If confirmed, these talented public servants each will serve with great distinction.

Over the past several years you have come to know me and where I stand. Over the past several months, you have seen the FCC's work, from closing the digital divide to combatting illegal robocalls to making the agency more transparent. And I'm sure we'll discuss some of that work today.

But I'd like to share some perspectives from outside the Beltway. One of my favorite poems is Walt Whitman's "Song of the Open Road." In one passage, Whitman writes of the people he has met: "I carry them, men and women, I carry them with me wherever I go, I swear it is impossible for me to get rid of them, I am fill'd with them, and I will fill them in return."

I can understand what Whitman meant, for I have had the privilege of meeting countless people during my time at the FCC, both in Washington and around the country. Those stories stay with me; I carry them wherever I go. They fuel my passion to help deliver digital opportunity to all Americans.

I carry with me Steve Pourier. During my visit to the Rosebud Sioux Indian Reservation in Mission, South Dakota, he told me about a woman who was found dead in her home clutching her cell phone. She had dialed for help 38 times, but the call never went through because there was no wireless coverage.

I carry with me Mike Roth, of Allen, Kansas. Mike runs a feedlot called 2i Feeders that uses broadband-based technologies to monitor every cow's unique intake in real time. That way, he can assure particular top-end buyers that his beef is of the highest quality.

I carry with me Priya Narasimhan, a Carnegie Mellon professor. Several years ago, she founded YinzCam, a company that creates apps for sports teams and venues and sets up beacons that deliver highly localized information to fans. Its clients now include many sports teams, including her beloved Penguins. And her personal story is inspiring. Her family came to America via India and Zambia, and she is a great role model for Indian Americans and women in STEM fields.

I carry with me Dr. Shazam Hussain, of the Cleveland Clinic's mobile stroke unit. A stroke patient's brain loses 2 million brain cells every minute. Dr. Hussain explained to me how connectivity has allowed the unit to cut the average time for stabilizing a patient by 38 minutes.

I carry with me Mike Bosch, Andy Newton, Travis Carter, and Marc Hudson. Respectively, they help run competitive fiber providers, RG Fiber in Kansas, Southern Light along the Gulf Coast, U.S. Internet in Minnesota, and Rocket Fiber in Detroit. I had seen for myself how they are building high-speed fiber networks in small towns and big cities. And I've even strung some fiber myself in the bayou outside Hammond, Louisiana, and on a crowded city block in Minneapolis.

I carry with me Wayne Gilmore, who helps run my hometown radio station, KLKC. Wayne and others are enabling a new generation of Parsonians to make their own lifelong connections with the station and the town.

I carry with me Alex Algard and the team at Hiya, a Seattle-based company which helps consumers avoid unwanted robocalls.

[Cell phone sounds.]

Chairman PAI. And speaking of—

[Laughter.]

Chairman PAI. I carry with me Florence Friedman of New York City. Florence wrote to me calling robocalls “the Wild West, an area of lawlessness. . . . Hopefully, you will put this high on your agenda. It really is disruptive to one’s life.”

And last, but certainly not least, I carry with me my coworkers at the FCC. They are the strongest assets this agency, any agency, could have, and it is an honor to work alongside them.

Senators, these are just a few of the people and just a few of the stories that I carry with me every day. As Whitman put it, I am filled with them. Should I be confirmed, I will do my best to ensure that the FCC fills them in return by empowering them to help Americans everywhere improve their lives through connectivity and technology.

Chairman Thune, Ranking Member Nelson, thank you once again for holding this hearing. I look forward to answering your questions and to continuing to work with you and hopefully my colleagues in the time to come.

[The prepared statement and biographical information of Chairman Pai follow:]

PREPARED STATEMENT OF HON. AJIT PAI, CHAIRMAN,
FEDERAL COMMUNICATIONS COMMISSION

Chairman Thune, Ranking Member Nelson, and Members of the Committee, thank you for giving me the opportunity to testify today. For over five years, it has been an honor to work with many of you on a wide variety of issues. And should I be fortunate enough to be confirmed, I look forward to continuing to do so in the years to come.

I would like to recognize members of my family in attendance: my wife, Janine; our children, Alexander and Annabelle; and my brother-in-law, Robert Van Lancker, and his fiancée, Rachel Vistica. I'm grateful to all of them for their love and support. I would like to give a special thank you to my parents, Varadaraj and Radha Pai, who have travelled from Kansas to be with me today. Forty-six years ago, they emigrated from India to the United States, bringing with them little more than ten dollars and a transistor radio. Without their sacrifices, I would not be where I am today.

I also would like to thank President Trump for nominating me to serve another term at the Commission.

Finally, I want to congratulate Jessica Rosenworcel and Brendan Carr for being nominated to be members of the Commission. Each has served at the agency with great distinction for several years. If confirmed, they will bring a wealth of communications expertise to our labors.

Over the past several years, you have come to know me and where I stand. Over the past several months, you have been able to see some of the work the FCC has prioritized, from closing the digital divide to making the agency more open and transparent, from combatting illegal robocalls to modernizing the Commission's rules. I'm sure we will discuss those efforts this morning.

But I'd like to share some perspectives from outside the Beltway. One of my favorite poems is Walt Whitman's "Song of the Open Road." In one passage, Whitman writes this of the people he has met: "I carry them, men and women, I carry them with me wherever I go, I swear it is impossible for me to get rid of them, I am fill'd with them, and I will fill them in return."

I can understand what Whitman meant. For I've had the privilege of meeting countless people during my time at the FCC, both in Washington and around the country. Their stories stay with me. I carry them with me wherever I go, likely more often than they know. And they fuel my passion to help deliver digital opportunity to all Americans and advance the public interest.

I carry with me Stephen Poirier. During my visit to the Rosebud Sioux Indian Reservation in Mission, South Dakota, he told me about a woman on his reservation who was found dead in her home, clutching her cellphone. She had dialed for help 38 times—but never got a response because there was no wireless coverage.

I carry with me Lisa Kleinhandler and Cris Young, two hardworking women who run Hudson Fasteners, a family-owned company that goes back to 1946 and is now based in Youngstown, Ohio. Up until the 1990s, it sold things like nuts, bolts, and screws in a bricks-and-mortar store and kept inventory on notecards. Today, Lisa and Cris have created an online sales platform that, as they say, "put[s] the FAST in fasteners."

I carry with me Eric Hott of Kirby, West Virginia. Eric runs a chocolate business that is held back by the lack of broadband, which makes it harder for Eric to keep in touch with customers who want to be informed online.

I carry with me Mike Roth of 2i Feeders. Mike runs a feedlot in Allen, Kansas that uses broadband-based technologies to monitor every cow's unique intake at all times. That way, he can assure particular, top-end buyers that his beef is of the highest quality.

I carry with me Chelsea Pickner, a talented fashion entrepreneur in Sioux Falls, South Dakota. A few years ago, Chelsea had the foresight to create an online presence for her company. Today, thanks to broadband, she now sells her stylish wares to customers around the country and abroad and is creating local jobs.

I carry with me Sanjit Biswas, an engineer who co-founded a Bay Area startup called Samsara. Samsara deploys sophisticated sensors that allow companies like Chobani and Cowgirl Creamery to monitor storage and distribution temperature and humidity in real-time, to save drivers from having to do paperwork, and to efficiently manage trucking fleets.

I carry with me Priya Narasimhan, a professor at Carnegie Mellon University. Several years ago, inspired by her inability to see the action at a Pittsburgh Penguins game, she founded YinZCam. The company creates apps for sports teams and venues and sets up beacons that deliver highly-localized information to fans. Its clients now include many NFL, NBA, NCAA, and NHL teams—including her beloved Penguins. (It was also gratifying to me as an Indian-American to hear her story; her family came to America via India and Zambia, and she is a great role model for Indian-Americans and women in STEM fields.)

I carry with me Gabe Hopper, who's working at a startup in Reno, Nevada called Ustyme. Ustyme enables users to pick an online book, video-call another user, and read the book interactively together—something that appeals to me as a father of two young children.

I carry with me Dr. Shazam Hussain of the Cleveland Clinic's mobile stroke unit. Dr. Hussain explained how a stroke patient's brain loses two million brain cells every minute and how connectivity has allowed the Clinic's stroke unit to cut the average time for assessment and stabilization of a patient by an incredible *38 minutes*.

I carry with me Dr. Rick Embrey, Chief Medical Officer at Augusta Health in Fishersville, Virginia. Dr. Embrey and his team showed me how emergency room doctors and nurses leverage connectivity and technology to assess patients before they arrive, and how they've developed a software tool for real-time patient monitoring that has cut mortality rates from sepsis by 34 percent.

I carry with me Javier Peña, who was teaching an eighth grade class at the San Fernando Institute for Applied Media in California. He asked his students to research the term "tessellation" on their iPads (using the school's Wi-Fi network), to describe what they saw, and then outline why they thought Islamic art and architecture used tessellation so extensively.

I carry with me the students and instructors at Iḷisaġvik College in Barrow, Alaska. In addition to sharing some muktuk (whale skin and blubber) with me, they shared how important Internet access and technology was for them to be able to learn and to preserve their Alaska Native heritage.

I carry with me Mike Bosch, Andy Newton, Travis Carter, and Marc Hudson. Respectively, they help run competitive fiber providers RG Fiber in Kansas, Southern Light along the Gulf Coast, U.S. Internet in Minnesota, and Rocket Fiber in Detroit. I've seen for myself how they are building high-speed fiber networks in places as small as Baldwin City, Kansas and as large as the Motor City. And I've even had a chance to get on a rig and string some fiber in the bayou outside Hammond, Louisiana and on a densely-populated block in Minneapolis.

I carry with me Gwynne Shotwell, who is literally a rocket scientist. At SpaceX, she and her team are pioneering commercial space exploration, including sending communications satellites into space and creating rockets that can be reused—a technical feat that was once thought impossible, a massive cost saving, and a portent of broadband innovation to come.

I carry with me Wayne Gilmore, who helps run KLKC 1540 AM and 93.5 FM. I grew up with this radio station, and can still hear former sports announcer and DJ Steve Lardy's voice calling the 1987 5A high school basketball championship game. Wayne and others are enabling a new generation of Parsonians to make their own lifelong connections with the station and town.

I carry with me Danny Thomas, the President and General Manager of KOAM-TV in Joplin, Missouri. I grew up with this TV station, among others, and came to value the work of dedicated journalists like Dowe Quick. Danny ensures that the station reflects the best traditions of broadcast localism, such as round-the-clock coverage and community service when the deadly EF-5 tornado hit town in 2011. Oh, and Dowe is still reporting the news!

I carry with me Pervis Parker, the general manager of WLOO, a television station in Jackson, Mississippi owned by Tougaloo College, a historically African-American college. Pervis told me that WLOO has upgraded to HD, produces its own content, carries programming created by and targeting African-Americans, and trains student-interns to become the next generation of minority broadcasters.

I carry with me Pat Gottsch. A native of small-town Nebraska, Pat created Rural Free Delivery Television, or RFD-TV—the country's first and only 24-hour, rural-focused television network. I've been on RFD-TV's set in Nashville, Tennessee, where reporter Janet Adkison kindly allowed me to interrupt the day's commodities reports in order to discuss my ideas for FCC-led rural development.

I carry with me Alex Algard and the team at Hiya, a Seattle-based company which helps tens of millions of consumers avoid unwanted robocalls and tracks the origin of these calls. And speaking of robocalls, I carry with me Florence Friedman of New York City. She wrote to me, calling robocalls “the wild west, an area of lawlessness. . . . Hopefully, you will put this high on your agenda. It really is disruptive to one's life. . . . We deserve peace and quiet—and yes, even security. Please do something!”

I carry with me Gallaudet University's Dr. Christian Vogler, Director of the Technology Access Program, Research Associate Paula Tucker, and Senior Research Engineer Norman Williams. They've done amazing work on real-time text, which helps people with disabilities communicate in a much more natural way using Internet Protocol-based technology.

I carry with me Ed Owens and Robby Moore, the mayors of South Boston, Virginia and Lobelville, Tennessee. Each explained how rural Internet access was critical to linking small-town residents with economic and educational opportunities.

I carry with me Captain Robert Johnson, a former officer at Lee Correctional Institution in Bishopville, South Carolina. I had the honor of meeting him at a forum hosted by then-Governor Nikki Haley. In 2010, a gunman kicked in the door of his home and shot him six times in the stomach and chest. Why? Inmates were upset that Captain Johnson repeatedly foiled their efforts to smuggle in contraband cellphones. Ironically, they used one to order the hit on him.

I carry with me Hank Hunt. In 2013, Hank's daughter, Kari, and her three children met her estranged husband in a Marshall, Texas hotel room. Her husband immediately began stabbing her. Kari's nine-year-old daughter, who had accompanied her, tried repeatedly to dial 911 from the room's telephone, but the number didn't go through—because she first had to dial “9.” Hank couldn't save Kari's life, but he made it a mission to save others by pushing for direct access to 911. Legislation supported in this Committee bears Kari's name. And the FCC too has helped by urging hotels to update their systems to allow guests to immediately reach emergency personnel.

I carry with me Denise Holcomb, the 911 Director of Clay County, West Virginia. During major flooding just before my visit last summer, she and her staff handled calls from desperate county residents—even as floodwaters entered the call center itself. I could still see the residue of mud and water on the walls. At the end of our visit, she observed with a matter of fact tone that they simply did what they had to do to help and gave me a hug.

I carry with me Mark Mew, Chief of the Anchorage Police Department. He explained how communications helped his officers protect fellow Alaskans and patrol more efficiently.

And last but certainly not least, I carry with me my co-workers at the FCC. I love this agency. I've spent most of the last decade there. That's largely because of its wonderful, hardworking staff. It is such a privilege to work alongside and get to know them. And I'm so touched by the messages they send me from time to time. Near my desk, I keep a note from Debra Jordan, a talented staffer in our Public Safety and Homeland Security Bureau. She wrote me, unsolicited, "Chairman Pai, your comments to the FCC staff shortly after your appointment as the new Chairman reaffirmed your personal and professional respect for all peoples . . . regardless of their backgrounds or status. Thank you for keeping the FCC a respectful environment in which to work."

These are just a few of the people, and just a few of the stories, that I carry with me every day. As I work in my office, as Whitman put it, "it is impossible for me to get rid of them." Indeed, "I am fill'd with them." And should I be fortunate enough to be confirmed by the Senate, I will do my best to ensure that the FCC "fill[s] them in return" by empowering them to help Americans everywhere improve their lives through communications and technology.

Chairman Thune, Ranking Member Nelson, and Members of the Committee, thank you once again for holding this hearing. I look forward to answering your questions and working with you to promote the public interest.

A. BIOGRAPHICAL INFORMATION

1. Name (Include any former names or nicknames used): Ajit Varadaraj Pai.
2. Position to which nominated: Member, Federal Communications Commission*
3. Date of Nomination: March 7, 2017.
4. Address (List current place of residence and office addresses):

Residence: Information not released to the public.
Office: 445 12th Street, S.W. Washington, DC 20554.

5. Date and Place of Birth: January 10, 1973; Buffalo, New York.
6. Provide the name, position, and place of employment for your spouse (if married) and the names and ages of your children (including stepchildren and children by a previous marriage).

Janine Van Lancker, Assistant Professor of Medicine, George Washington University Medical Faculty Associates.

7. List all college and graduate degrees. Provide year and school attended.

Harvard University, B.A. (1994)
University of Chicago, J.D. (1997)

8. List all post-undergraduate employment, and highlight all management level jobs held and any non-managerial jobs that relate to the position for which you are nominated.

Federal Communications Commission, Chairman (January 2017 to present);
Commissioner (May 2012–January 2017).

Jenner & Block LLP. Partner (April 2011–May 2012).

Federal Communications Commission, Office of General Counsel. Special Advisor to the General Counsel (March 2010–April 2011); Deputy General Counsel (December 2007–February 2010); Associate General Counsel (July 2007–December 2007).

U.S. Senate Judiciary Committee, Subcommittee on the Constitution, Civil Rights, and Properly Rights. Chief Counsel (February 2005–June 2007).

U.S. Department of Justice, Office of Legal Policy. Senior Counsel (May 2004–February 2005).

*President Donald J. Trump designated me Chairman of the Commission on January 23, 2017.

U.S. Senate Judiciary Committee, Subcommittee on Administrative Oversight and the Courts. Deputy Chief Counsel (March 2003–May 2004).

Verizon Communications Inc. Associate General Counsel (February 2001–March 2003).

U.S. Department of Justice, Antitrust Division, Telecommunications Task Force. Trial Attorney, Attorney General’s Honors Program (December 1998–February 2001).

Hon. Martin L.C. Feldman, U.S. District Court, Eastern District of Louisiana. Law Clerk (September 1997–September 1998).

Kirkland & Ellis. Summer Associate (June 1997–September 1997).

Latham & Watkins. Summer Associate (June 1996–September 1996).

Lathrop & Norquist (now Lathrop & Gage LLP). Summer Associate (August 1995–September 1995).

Hon. Kathryn H. Vratil, U.S. District Court, District of Kansas. Summer Law Clerk (June 1995–July 1995).

The management-level jobs I have held include Chairman, Commissioner, Deputy General Counsel, and Associate General Counsel at the Federal Communications Commission; Partner at Jenner & Block LLP; Chief Counsel at the U.S. Senate Judiciary Committee’s Subcommittee on the Constitution, Civil Rights, and Property Rights; and Deputy Chief Counsel at the U.S. Senate Judiciary Committee’s Subcommittee on Administrative Oversight and the Courts.

The non-managerial jobs I have held which relate to the position for which I have been nominated include Special Advisor to the General Counsel at the Federal Communications Commission; Senior Counsel at the U.S. Department of Justice, Office of Legal Policy; Associate General Counsel at Verizon Communications Inc.; and Trial Attorney at the U.S. Department of Justice, Antitrust Division, Telecommunications Task Force.

9. Attach a copy of your resumé.

A copy of my resumé is attached.

10. List any advisory, consultative, honorary, or other part-time service or positions with Federal, State, or local governments, other than those listed above, within the last ten years. None.

11. List all positions held as an officer, director, trustee, partner, proprietor, agent, representative, or consultant of any corporation, company, firm, partnership, or other business, enterprise, educational, or other institution within the last ten years.

Partner, Jenner & Block LLP (April 2011–May 2012).

Co-Trustee, Radha V. Pai Children’s Trust (resigned August 2012).

Co-Trustee, Varadaraj S. Pai Children’s Trust (resigned August 2012).

12. Please list each membership you have had during the past ten years or currently hold with any civic, social, charitable, educational, political, professional, fraternal, benevolent or religious organization, private club, or other membership organization. Include dates of membership and any positions you have held with any organization. Please note whether any such club or organization restricts membership on the basis of sex, race, color, religion, national origin, age, or handicap.

Kansas Bar. Member during entire reporting period.

District of Columbia Bar. Member during entire reporting period. Member, Nominations Committee (November 2010–November 2011).

Federalist Society for Law and Public Policy Studies. Member during entire reporting period; Member, Executive Committee, Administrative Law Practice Group (January 2011–November 2011).

South Asian Bar Association—District of Columbia. Member during entire reporting period.

Federal Communications Bar Association. Member (2008–09).

13. Have you ever been a candidate for and/or held a public office (elected, non-elected, or appointed)? If so, indicate whether any campaign has any outstanding debt, the amount, and whether you are personally liable for that debt. No.

14. Itemize all political contributions to any individual, campaign organization, political party, political action committee, or similar entity of \$500 or more for the past ten years. Also list all offices you have held with, and services rendered to, a state or national political party or election committee during the same period.

I contributed a total of \$750 to the presidential campaign of Mitt Romney in 2012. I have not contributed \$500 or more to any other individual, campaign organization, political party, political action committee, or similar entity over the past ten years. I have not held any offices with any state or national political party, political action committee, or campaign committee during the same period. Between November 6–8, 2006, I served as a volunteer for the Republican National Committee in Montana.

15. List all scholarships, fellowships, honorary degrees, honorary society memberships, military medals, and any other special recognition for outstanding service or achievements.

2016 Freedom of Speech Award from the Media Institute.

2015 Herbert Brownell Award from the Tech Elders.

2015 Sports Fan Coalition Most Valuable Policymaker (along with all other Commissioners).

2015 Jerry B. Duvall Public Service Award from the Phoenix Center for Advanced Legal & Economic Public Policy Studies.

2011 Marshall Memorial Fellowship, awarded by the German Marshall Fund of the United States.

16. Please list each book, article, column, or publication you have authored, individually or with others. Also list any speeches that you have given on topics relevant to the position for which you have been nominated. Do not attach copies of these publications unless otherwise instructed.

Publications

“Consumer Protection Month at the FCC,” self-published on *Medium* (June 22, 2017), available at <https://medium.com/@AjitPaiFCC/consumer-protection-month-at-the-fcc-1dea0007d9c6>.

“How the U.S. can win the digital future,” *Manchester Union Leader* (June 21, 2017), available at <http://www.unionleader.com/Another-View-Ajit-Pai-Tech-Week-How-the-US-can-win-the-digital-future-06222017>.

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Article, “Congress and the Constitution: The Legal Tender Act of 1862,” 77 *Oregon Law Review* 535 (1998).

Comment, “Should a Grand Jury Subpoena Override a District Court’s Protective Order?,” 64 *University of Chicago Law Review* 317 (1997).

Speeches

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Remarks at the National Congress of American Indians Mid-Year Conference, Uncasville, CT (June 14, 2017), available at http://transition.fcc.gov/Daily_Releases/Daily_Business/2017/db0614/DOC-345347A1.pdf.

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Remarks at the National Association of Broadcasters Show, Las Vegas, NV (April 25, 2017), available at https://apps.fcc.gov/edocs_public/attachmatch/DOC-344558A1.pdf.

Remarks at the First Meeting of the Federal Communications Commission’s Broadband Deployment Advisory Committee, Washington, D.C. (April 21, 2017), available at https://apps.fcc.gov/edocs_public/attachmatch/DOC-344513A1.pdf.

Remarks before the World Radiocommunication Conference 2019 Advisory Committee, Washington, D.C. (April 18, 2017), available at https://apps.fcc.gov/edocs_public/attachmatch/DOC-344462A1.pdf.

Remarks at the Hudson Institute, “The Importance of Economic Analysis at the FCC,” Washington, D.C. (April 5, 2017), available at https://apps.fcc.gov/edocs_public/attachmatch/DOC-344248A1.pdf.

Remarks at the FirstNet Signing Ceremony, Washington, D.C. (March 30, 2017), available at https://apps.fcc.gov/edocs_public/attachmatch/DOC-344171A1.pdf.

Remarks at the U.S.-India Business Council, Washington, D.C. (March 29, 2017), available at https://apps.fcc.gov/edocs_public/attachmatch/DOC-344124A1.pdf.

Remarks at Carnegie Mellon University’s Software Engineering Institute, “Bringing the Benefits of the Digital Age to All Americans,” Pittsburgh, PA (March 15, 2017), available at https://apps.fcc.gov/edocs_public/attachmatch/DOC-343903A1.pdf.

Remarks at the Mobile World Congress, Barcelona, Spain (February 28, 2017), available at http://transition.fcc.gov/Daily_Releases/Daily_Business/2017/db0228/DOC-343646A1.pdf.

Remarks at the North American Broadcasters Association’s Future of Radio and Audio Symposium, Washington, D.C. (February 16, 2017), available at http://transition.fcc.gov/Daily_Releases/Daily_Business/2017/db0216/DOC-343529A1.pdf.

Remarks to the Staff of the Federal Communications Commission, Washington, D.C. (January 24, 2017), available at https://apps.fcc.gov/edocs_public/attachmatch/DOC-343184A1.pdf.

Remarks at the Free State Foundation’s 10th Anniversary Gala Luncheon, Washington, D.C. (December 7, 2016), available at https://apps.fcc.gov/edocs_public/attachmatch/DOC-342497A1.pdf.

Remarks at CTIA Wireless Foundation Smart Cities Expo, Washington, D.C. (November 2, 2016), available at https://apps.fcc.gov/edocs_public/attachmatch/DOC-342032A1.pdf.

Remarks at the Final Meeting of the Robocall Strike Force, Washington, D.C. (October 26, 2016), available at https://apps.fcc.gov/edocs_public/attachmatch/DOC-341999A1.pdf.

Remarks on Receiving the Freedom of Speech Award at the Media Institute’s 2016 Awards Banquet, Washington, D.C. (October 19, 2016), available at https://apps.fcc.gov/edocs_public/attachmatch/DOC-341825A1.pdf.

Remarks on the Need for a Digital Empowerment Agenda at Think Big Partners, Kansas City, MO (October 11, 2016), available at https://apps.fcc.gov/edocs_public/attachmatch/DOC-341689A1.pdf.

Remarks at the 2016 Kansas Association of Broadcasters Convention, Wichita, KS (October 10, 2016), available at https://apps.fcc.gov/edocs_public/attachmatch/DOC-341667A1.pdf.

Remarks at the 2016 Radio Show, Nashville, TN (September 22, 2016), available at https://apps.fcc.gov/edocs_public/attachmatch/DOC-341393A1.pdf.

Remarks at the Competitive Carriers Association's 2016 Annual Convention, Seattle, WA (September 21, 2016), available at https://apps.fcc.gov/edocs_public/attachmatch/DOC-341365A1.pdf.

Remarks at the Brandery, "A Digital Empowerment Agenda," Cincinnati, OH (September 13, 2016), available at https://apps.fcc.gov/edocs_public/attachmatch/DOC-341210A1.pdf.

Remarks at the First Meeting of the Robocall Strike Force, Washington, D.C. (August 19, 2016), available at https://apps.fcc.gov/edocs_public/attachmatch/DOC-340872A1.pdf.

Remarks at the Corrections Technology Association's Annual Conference [speech delivered via remote video] (May 16, 2016), available at https://apps.fcc.gov/edocs_public/attachmatch/DOC-339388A1.pdf.

Opening Remarks at the NAB Show's Panel on "Making It Back Down the Mountain: Repacking Broadcasters Following a Successful Incentive Auction," Las Vegas, NV (April 19, 2016), available at http://transition.fcc.gov/Daily_Releases/Daily_Business/2016/db0419/DOC-338939A1.pdf.

Remarks at Contraband Cellphone Field Hearing, Columbia, SC (April 6, 2016), available at http://transition.fcc.gov/Daily_Releases/Daily_Business/2016/db0406/DOC-338760A1.pdf.

Keynote Remarks at the Hispanic Radio Conference, Fort Lauderdale, FL (March 23, 2016), available at https://apps.fcc.gov/edocs_public/attachmatch/DOC-338537A1.pdf.

Remarks before the Heritage Foundation, "The FCC and Internet Regulation: A First-Year Report Card," Washington, D.C. (February 26, 2016), available at https://apps.fcc.gov/edocs_public/attachmatch/DOC-337930A1.pdf.

Remarks on Receiving the Inaugural Herbert Brownell Award at the Tech Elders' First Annual Herbert Brownell Dinner, Washington, D.C. (December 4, 2015), available at https://apps.fcc.gov/edocs_public/attachmatch/DOC-336719A1.pdf.

Remarks at the PLI/FCBA 33rd Annual Institute on Telecommunications Policy & Regulation, Washington, D.C. (December 3, 2015), available at https://apps.fcc.gov/edocs_public/attachmatch/DOC-336693A1.pdf.

Remarks on Receiving the 2015 Jerry B. Duvall Public Service Award at the Phoenix Center 2015 Annual U.S. Telecoms Symposium, Washington, D.C. (December 1, 2015), available at https://apps.fcc.gov/edocs_public/attachmatch/DOC-336644A1.pdf.

Remarks at NTCA's Telecom Executive Policy Summit, Washington, D.C. (November 16, 2015), available at https://apps.fcc.gov/edocs_public/attachmatch/DOC-336397A1.pdf.

Remarks at the Bill of Rights Institute's Kansas Public Lecture "A Free Market, If You Can Keep It: The Need For Online Innovation, Not Regulation," Wichita, KS (November 13, 2015), available at https://apps.fcc.gov/edocs_public/attachmatch/DOC-336380A1.pdf.

Remarks to the National Association of Farm Broadcasting Convention, Kansas City, MO (November 13, 2015), available at https://apps.fcc.gov/edocs_public/attachmatch/DOC-336386A1.pdf.

Remarks at 4G Americas' Technology Symposium: "The Future of Mobile Broadband in the Americas: LTE to 5G Network Innovation," Washington, D.C. (November 5, 2015), available at https://apps.fcc.gov/edocs_public/attachmatch/DOC-336219A1.pdf.

Remarks to the Policy Roundtable of the 2015 Convention of the Cable and Satellite Broadcasting Association of Asia, Hong Kong, China (October 26, 2015), available at https://apps.fcc.gov/edocs_public/attachmatch/DOC-336043A1.pdf.

Remarks to the National Religious Broadcasters' President's Council, Washington, D.C. (October 14, 2015), available at https://apps.fcc.gov/edocs_public/attachmatch/DOC-335778A1.pdf.

Remarks at the American Enterprise Institute's Roundtable Discussion on Decline in Investment Following the FCC's Title II Order, Washington, D.C. (September 9, 2015), available at https://apps.fcc.gov/edocs_public/attachmatch/DOC-335190A1.pdf.

Remarks before the Churchill Club, Palo Alto, CA (August 18, 2015), available at https://apps.fcc.gov/edocs_public/attachmatch/DOC-334437A1.pdf.

Remarks at the Nebraska Public Service Commission's Public Workshop on Accessing 911 Service From Multi-Line Telephone Systems, Lincoln, NE (June 30, 2015), available at https://apps.fcc.gov/edocs_public/attachmatch/DOC-334168A1.pdf.

Remarks at the International Institute of Communications Telecommunications and Media Forum, Miami, FL (June 24, 2015), available at https://apps.fcc.gov/edocs_public/attachmatch/DOC-333677A1.pdf.

Remarks at the International Institute of Communications Forum, London, United Kingdom (April 27, 2015), available at https://apps.fcc.gov/edocs_public/attachmatch/DOC-333190A1.pdf.

Remarks at the National Association of Broadcasters Show, Las Vegas, NV (April 14, 2015), available at https://apps.fcc.gov/edocs_public/attachmatch/DOC-332987A1.pdf.

Remarks at the 12th Annual NG9-1-1 Honor Awards Gala to Celebrate Heroes and Leaders in 9-1-1, Washington, D.C. (February 25, 2015), available at https://apps.fcc.gov/edocs_public/attachmatch/DOC-332231A1.pdf.

Keynote Address at the North American Broadcasters Association's Symposium on the Future of Radio & Audio, Toronto, Canada (February 19, 2015), available at https://apps.fcc.gov/edocs_public/attachmatch/DOC-332124A1.pdf.

Remarks at the Marshall, Texas Police Department, "On Connecting Americans to Emergency Personnel Whenever They Dial 911," Marshall, TX (January 28, 2015), available at https://apps.fcc.gov/edocs_public/attachmatch/DOC-331663A1.pdf.

Keynote Address at the Friends & Benefactors Awards Banquet of the Media Institute, Washington, D.C. (November 19, 2014), available at https://apps.fcc.gov/edocs_public/attachmatch/DOC-330571A1.pdf.

Remarks at the Free State Foundation's Policy Seminar, Washington, D.C. (November 14, 2014), available at https://apps.fcc.gov/edocs_public/attachmatch/DOC-330483A1.pdf.

Remarks at the Greater Dallas Asian American Chamber of Commerce Awards Gala, Dallas, TX (October 22, 2014), available at https://apps.fcc.gov/edocs_public/attachmatch/DOC-330088A1.pdf.

Remarks at the Texas Forum on Internet Regulation, Texas A&M University, Bush School of Government & Public Service, College Station, TX (October 21, 2014), available at https://apps.fcc.gov/edocs_public/attachmatch/DOC-330048A1.pdf.

Remarks at WISPAPALOOZA, Las Vegas, NV (October 16, 2014), available at https://apps.fcc.gov/edocs_public/attachmatch/DOC-329969A1.pdf.

Remarks at IX Taller Internacional de Regulación: "Tendencias Y Retos Del Sector TIC," Cartagena De Indias, Colombia (September 2, 2014), available at https://apps.fcc.gov/edocs_public/attachmatch/DOC-32912A1.pdf.

Opening Remarks at Ohio Association of Broadcasters' AM Radio Town Hall, Columbus, OH (August 13, 2014), available at https://apps.fcc.gov/edocs_public/attachmatch/DOC-328834A1.pdf.

Remarks on Sports Blackout Rule, Buffalo, NY (August 12, 2014), available at https://apps.fcc.gov/edocs_public/attachmatch/DOC-328807A1.pdf.

Remarks at the Citizens Against Government Waste Policy Breakfast, Washington, D.C. (July 28, 2014), available at https://apps.fcc.gov/edocs_public/attachmatch/DOC-328469A1.pdf.

Remarks before the Internet Innovation Alliance, "The IP Transition: *Great Expectations* or *Bleak House?*", Washington, D.C. (July 24, 2014), available at https://apps.fcc.gov/edocs_public/attachmatch/DOC-328418A1.pdf.

Remarks on "Reforming Communications Policy in the Digital Age: A View from the FCC," Washington, D.C. (June 25, 2014), available at https://apps.fcc.gov/edocs_public/attachmatch/DOC-327841A1.pdf.

Remarks before the Federal Communications Bar Association, Washington, D.C. (June 18, 2014), available at https://apps.fcc.gov/edocs_public/attachmatch/DOC-327725A1.pdf.

Remarks at PCIA's 2014 Wireless Infrastructure Show, Orlando, FL (May 20, 2014), available at https://apps.fcc.gov/edocs_public/attachmatch/DOC-327172A1.pdf.

Remarks at the FCC's E-Rate Modernization Workshop, Washington, D.C. (May 6, 2014), available at https://apps.fcc.gov/edocs_public/attachmatch/DOC-326945A1.pdf.

Remarks before the Pennsylvania Association of Broadcasters, Hershey, PA (May 5, 2014), available at https://apps.fcc.gov/edocs_public/attachmatch/DOC-326912A1.pdf.

Opening Remarks at the Mobile Future Forum, "Designing for Auction Success: Lessons Learned from Around the World," Washington, D.C. (April 24, 2014), available at https://apps.fcc.gov/edocs_public/attachmatch/DOC-326731A1.pdf.

Remarks before the University of Pennsylvania Law School South Asian Law Students Association, Philadelphia, Pennsylvania (April 17, 2014), available at https://apps.fcc.gov/edocs_public/attachmatch/DOC-326624A1.pdf.

Remarks before the 2014 Spring Meeting of WTA—Advocates for Rural Broadband, Las Vegas, NV (April 9, 2014), available at https://apps.fcc.gov/edocs_public/attachmatch/DOC-326517A1.pdf.

Remarks at the 9–1–1 Goes to Washington Conference, Arlington, VA (March 24, 2014), available at https://apps.fcc.gov/edocs_public/attachmatch/DOC-326214A1.pdf.

Keynote Address at FICCI Frames 2014, Mumbai, India (March 13, 2014), available at https://apps.fcc.gov/edocs_public/attachmatch/DOC-326016A1.pdf.

Remarks at the Emerging Technology Forum of APCO International, "Public Safety Communications in the Digital Age," Orlando, FL (February 27, 2014), available at https://apps.fcc.gov/edocs_public/attachmatch/DOC-325815A1.pdf.

Remarks Introducing the Panel on MultiLine 911 Issues of the Congressional NextGen 9–1–1 Caucus, Washington, D.C. (February 7, 2014), available at https://apps.fcc.gov/edocs_public/attachmatch/DOC-325522A1.pdf.

Remarks at TechFreedom's Forum on the 100th Anniversary of the Kingsbury Commitment, Washington, D.C. (December 19, 2013), available at https://apps.fcc.gov/edocs_public/attachmatch/DOC-324810A1.pdf.

Remarks before the Communications and Technology Task Force of the American Legislative Exchange Council, "Promoting Investment and Competition in the Several States," Washington, D.C. (December 6, 2013), available at https://apps.fcc.gov/edocs_public/attachmatch/DOC-324573A1.pdf.

Remarks to the Board of Directors of the National Religious Broadcasters, National Harbor, MD (October 21, 2013), available at https://apps.fcc.gov/edocs_public/attachmatch/DOC-323598A1.pdf.

Remarks before the National Association of Broadcasters' Radio Show Luncheon, Orlando, FL [speech delivered via remote video] (September 20, 2013), available at https://apps.fcc.gov/edocs_public/attachmatch/DOC-323398A1.pdf.

Keynote Address at the LGBT Technology Partnership's Inaugural Policy Forum, Washington, D.C. (September 12, 2013), available at https://apps.fcc.gov/edocs_public/attachmatch/DOC-323255A1.pdf.

Remarks at Smith Micro Software/Pittsburgh Technology Council, "Looking Back and Looking Ahead: The FCC and the Path to the Digital Economy," Pittsburgh, PA (July 25, 2013), available at https://apps.fcc.gov/edocs_public/attachmatch/DOC-322384A1.pdf.

Remarks before the Pittsburgh Radio Broadcasters' Roundtable, Pittsburgh, PA (July 24, 2013), available at https://apps.fcc.gov/edocs_public/attachmatch/DOC-322371A1.pdf.

Remarks at American Enterprise Institute, "On Connecting the American Classroom: A Student-Centered E-Rate Program," Washington, D.C. (July 16, 2013), available at https://apps.fcc.gov/edocs_public/attachmatch/DOC-322201A1.pdf.

Remarks at the Cellphone Unlocking Forum, Hosted by TechFreedom and the Competitive Enterprise Institute, Washington, D.C. (June 17, 2013), available at https://apps.fcc.gov/edocs_public/attachmatch/DOC-321641A1.pdf.

Opening Remarks at CTIA 2013's Panel on the Spectrum Incentive Auction, "Step Right Up!", Las Vegas, NV (May 23, 2013), available at https://apps.fcc.gov/edocs_public/attachmatch/DOC-321172A1.pdf.

Remarks at the NTCA 2013 Legislative and Policy Conference, Arlington, VA (April 22, 2013), available at https://apps.fcc.gov/edocs_public/attachmatch/DOC-32033SA1.pdf.

Opening Remarks at the NAB Show's AM Band Revitalization Panel, Las Vegas, NV (April 8, 2013), available at https://apps.fcc.gov/edocs_public/attachmatch/DOC-320038A1.pdf.

Opening Remarks at First Technology Transitions Policy Task Force Workshop, Washington, D.C. (March 18, 2013), available at https://apps.fcc.gov/edocs_public/attachmatch/DOC-319565A1.pdf.

Remarks at the Hudson Institute, "Two Paths to the Internet Protocol Transition," Washington, D.C. (March 7, 2013), available at https://apps.fcc.gov/edocs_public/attachmatch/DOC-319334A1.pdf.

Remarks before the Federal Communications Bar Association, Washington, D.C. (February 21, 2013), available at https://apps.fcc.gov/edocs_public/attachmatch/DOC-319045A1.pdf.

Remarks at the Media Institute Luncheon, "The Video Marketplace and the Internet Transformation," Washington, D.C. (February 7, 2013), available at https://apps.fcc.gov/edocs_public/attachmatch/DOC-318814A1.pdf.

Opening Remarks before the Phoenix Center for Advanced Legal & Economic Public Policy Studies. 2012 Annual U.S. Telecoms Symposium, Washington, D.C. (December 6, 2012), available at https://apps.fcc.gov/edocs_public/attachmatch/DOC-317766A1.pdf.

Opening Remarks before the Internet Transformation Panel of the Communications Liberty and Innovation Project, Washington, D.C. (October 16, 2012), available at https://apps.fcc.gov/edocs_public/attachmatch/DOC-316824A1.pdf.

Remarks at CTIA's MobileCon, San Diego, CA (October 10, 2012), available at https://apps.fcc.gov/edocs_public/attachmatch/DOC-316746A1.pdf.

Remarks before the National Association of Broadcasters' Radio Show, Dallas, TX (September 19, 2012), available at https://apps.fcc.gov/edocs_public/attachmatch/DOC-316374A1.pdf.

Opening Remarks at the Telecommunications & E-Commerce Committee Roundtable of the U.S. Chamber of Commerce, Washington, D.C. (September 14, 2012), available at https://apps.fcc.gov/edocs_public/attachmatch/DOC-316277A1.pdf.

Remarks at Carnegie Mellon University, "Unlocking Investment and Innovation in the Digital Age: The Path to a 21st-Century FCC," Pittsburgh, PA (July 18, 2012), available at https://apps.fcc.gov/edocs_public/attachmatch/DOC-315268A1.pdf.

17. Please identify each instance in which you have testified orally or in writing before Congress in a governmental or non-governmental capacity and specify the date and subject matter of each testimony.

Testimony before the Subcommittee on Financial Services and General Government of the United States Senate Committee on Appropriations (June 20, 2017), available at http://transition.fcc.gov/Daily_Releases/Daily_Business/2017/db0620/DOC-345438A1.pdf. Subject matter: the Federal Communications Commission's FY 2018 Budget.

Testimony before the United States Senate Committee on Commerce, Science, and Transportation (March 8, 2017), available at http://transition.fcc.gov/Daily_Releases/Daily_Business/2017/db0308/DOC-343814A1.pdf. Subject matter: oversight of the Federal Communications Commission.

Testimony before the Subcommittee on Communications and Technology of the United States House of Representatives Committee on Energy and Commerce (July 12, 2016), available at https://apps.fcc.gov/edocs_public/attachmatch/DOC-340304A1.pdf. Subject matter: oversight of the Federal Communications Commission.

Testimony before the Subcommittee on Privacy, Technology and the Law of the United States Senate Committee on the Judiciary (May 11, 2016), available at https://apps.fcc.gov/edocs_public/attachmatch/DOC-339331A1.pdf. Subject matter: privacy.

Testimony before the Subcommittee on Financial Services and General Government of the United States Senate Committee on Appropriations (April 5, 2016),

available at http://transition.fcc.gov/Daily_Releases/Daily_Business/2016/db0415/DOC-338886A1.pdf. Subject matter: the Federal Communications Commission's FY 2017 Budget.

Testimony before the Subcommittee on Communications and Technology of the United States House of Representatives Committee on Energy and Commerce (March 22, 2016), available at https://apps.fcc.gov/edocs_public/attachmatch/DOC-338511A1.pdf. Subject matter: oversight of the Federal Communications Commission.

Testimony before the Subcommittee on Financial Services and General Government of the United States House of Representatives Committee on Appropriations (March 15, 2016), available at https://apps.fcc.gov/edocs_public/attachmatch/DOC-338312A1.pdf. Subject matter: the Federal Communications Commission's FY 2017 Budget.

Testimony before the United States Senate Committee on Commerce, Science, and Transportation (March 2, 2016), available at https://apps.fcc.gov/edocs_public/attachmatch/DOC-338045A1.pdf. Subject matter: oversight of the Federal Communications Commission.

Testimony before the Subcommittee on Communications and Technology of the United States House of Representatives Committee on Energy and Commerce (November 17, 2015), available at https://apps.fcc.gov/edocs_public/attachmatch/DOC-336418A1.pdf. Subject matter: oversight of the Federal Communications Commission.

Testimony before the Subcommittee on Communications and Technology of the United States House of Representatives Committee on Energy and Commerce (July 28, 2015), available at https://apps.fcc.gov/edocs_public/attachmatch/DOC-334607A1.pdf. Subject matter: oversight of the Federal Communications Commission.

Testimony before the Subcommittee on Financial Services and General Government of the United States Senate Committee on Appropriations (May 12, 2015), available at https://apps.fcc.gov/edocs_public/attachmatch/DOC-333437A1.pdf. Subject matter: the Federal Communications Commission's FY 2016 budget.

Testimony before the United States House of Representatives Committee on the Judiciary (March 25, 2015), available at https://apps.fcc.gov/edocs_public/attachmatch/DOC-332696A1.pdf. Subject matter: Internet regulation, antitrust, and the respective roles of the Federal Communications Commission and Federal Trade Commission.

Testimony before the Subcommittee on Financial Services and General Government of the United States House of Representatives Committee on Appropriations (March 24, 2015), available at https://apps.fcc.gov/edocs_public/attachmatch/DOC-332675A1.pdf. Subject matter: the Federal Communications Commission's FY 2016 budget.

Testimony before the Subcommittee on Communications and Technology of the United States House of Representatives Committee on Energy and Commerce (March 19, 2015), available at https://apps.fcc.gov/edocs_public/attachmatch/DOC-332638A1.pdf. Subject matter: oversight of the Federal Communications Commission.

Testimony before the United States Senate Committee on Commerce, Science, and Transportation (March 18, 2015), available at https://apps.fcc.gov/edocs_public/attachmatch/DOC-332637A1.pdf. Subject matter: oversight of the Federal Communications Commission.

Testimony before the Subcommittee on Financial Services and General Government of the United States Senate Committee on Appropriations (March 27, 2014), available at https://apps.fcc.gov/edocs_public/attachmatch/DOC-326288A1.pdf. Subject matter: the Federal Communications Commission's FY 2015 budget.

Testimony before the Subcommittee on Financial Services and General Government of the United States House of Representatives Committee on Appropriations (March 25, 2014), available at https://apps.fcc.gov/edocs_public/attachmatch/DOC-326249A1.pdf. Subject matter: the Federal Communications Commission's FY 2015 budget.

Testimony before the Subcommittee on Financial Services and General Government of the United States Senate Committee on Appropriations (September 11, 2013), available at https://apps.fcc.gov/edocs_public/attachmatch/DOC-323237A1.pdf. Subject matter: oversight of the Federal Communications Commission.

Testimony before the Subcommittee on Communications and Technology of the United States House of Representatives Committee on Energy and Commerce (March 12, 2013), available at https://apps.fcc.gov/edocs_public/attachmatch/DOC-324640A1.pdf. Subject matter: oversight of the Federal Communications Commission.

Testimony before the United States Senate Committee on Commerce, Science, and Transportation (March 12, 2013), available at https://apps.fcc.gov/edocs_public/attachmatch/DOC-319469A1.pdf. Subject matter: oversight of the Federal Communications Commission.

Testimony before the Subcommittee on Communications and Technology of the United States House of Representatives Committee on Energy and Commerce (December 12, 2012), available at https://apps.fcc.gov/edocs_public/attachmatch/DOC-317900A1.pdf. Subject matter: oversight of the Federal Communications Commission's implementation of the Spectrum Act of 2012.

Testimony before the Subcommittee on Communications and Technology of the United States House of Representatives Committee on Energy and Commerce (July 10, 2012), available at https://apps.fcc.gov/edocs_public/attachmatch/DOC-315058A1.pdf. Subject matter: oversight of the Federal Communications Commission.

Testimony before the United States Senate Committee on Commerce, Science, and Transportation (May 16, 2012), available at https://apps.fcc.gov/edocs_public/attachmatch/DOC-314115A1.pdf. Subject matter: oversight of the Federal Communications Commission.

18. Given the current mission, major programs, and major operational objectives of the department/agency to which you have been nominated, what in your background or employment experience do you believe affirmatively qualifies you for appointment to the position for which you have been nominated, and why do you wish to serve in that position?

I have had the privilege of serving as the Chairman and, prior to that, a Commissioner at the Federal Communications Commission for over five years. During that time, I have had the opportunity to study and vote on numerous FCC decisions in a wide variety of areas, such as broadcast, cable, public safety, satellite, wireless, and wireline. In addition, I have traveled to many parts of the United States, from south Florida to above the Arctic Circle, in order to learn how Americans benefit from, or could benefit from, communications services. I believe that experiences such as these serve as my principal qualifications for continuing to serve at the Commission going forward.

19. What do you believe are your responsibilities, if continued, to ensure that the department/agency has proper management and accounting controls, and what experience do you have in managing a large organization?

The Chairman of the FCC is the agency's chief executive officer. I believe that the Chairman has a responsibility to ensure the proper management of the agency. This includes working with the highly capable FCC staff on management and accounting issues; testifying before Congress on the FCC's budget request for any given fiscal year; and otherwise promoting the proper stewardship of the agency, consistent with all applicable laws and regulations governing the agency's operations.

Other than my service as Chairman and Commissioner at the agency, my management experience lies primarily in helping to lead the offices I served in as Deputy General Counsel in the FCC's Office of General Counsel between 2007 and 2010 and as Chief Counsel on the Senate Judiciary Committee's Subcommittee on the Constitution, Civil Rights, and Property Rights between 2005 and 2007. In these roles, I was responsible for substantive decision-making as well as internal matters like personnel.

20. What do you believe to be the top three challenges facing the department/agency, and why I believe the top three challenges facing the Federal Communications Commission are as follows:

- (1) Promoting broadband deployment. The Internet is increasingly critical in the daily lives of Americans from all walks of life. The Commission has an important role to play in ensuring that consumers who want high-speed access to the Internet can get it, wherever or whoever they are. I have outlined a proactive agenda along these lines to enable all Americans to be participants in, rather than spectators of, the digital economy.
- (2) Defending the public interest. Across all sectors under the FCC's jurisdiction, I believe the agency should focus on promoting the interests of consumer welfare, competition, and innovation. There is much the Commission can and should do to promote these interests, such as making sure that public safety

communications systems are robust, helping advance technology accessibility to those with disabilities, and maximizing the incentives for private sector companies to invest and innovate for the benefit of American consumers.

- (3) Increasing openness and transparency. Even though the Commission plays a significant role in a major sector of the economy, many—from members of Congress to the American public—can find it difficult to learn about the agency’s operations and decision-making. The Commission should strive to promote openness and transparency. This would be in keeping with the spirit of the digital age and would give Americans greater confidence in the agency’s operations and decisions. This is why, for instance, I introduced an initiative during my second week in office as Chairman to disclose the text of certain items that would be voted at an upcoming meeting. This simple but significant measure has allowed anyone, anywhere to see what the Commission is considering doing before the agency formally votes.

B. POTENTIAL CONFLICTS OF INTEREST

1. Describe all financial arrangements, deferred compensation agreements, and other continuing dealings with business associates, clients, or customers. Please include information related to retirement accounts.

During my employment at Verizon Communications Inc., I contributed to a 401(k) plan (with a proportionate matching amount contributed by the company). That plan, over which I still have control, is managed by Fidelity Investments, and all funds are invested in diversified index funds. Neither the company nor I continue to make contributions to this plan.

During my employment at Jenner & Block LLP, I participated in the Firm’s Profit Sharing Plan (401(k)), which was and is managed by Fidelity Investments. All funds are invested in a diversified index fund. I do not have any other financial arrangements with the Firm. Neither the firm nor I continue to make contributions to this plan.

2. Do you have any commitments or agreements, formal or informal, to maintain employment, affiliation, or practice with any business, association or other organization during your appointment? If so, please explain. No.

3. Indicate any investments, obligations, liabilities, or other relationships which could involve potential conflicts of interest in the position to which you have been nominated. None.

4. Describe any business relationship, dealing, or financial transaction which you have had during the last ten years, whether for yourself, on behalf of a client, or acting as an agent, that could in any way constitute or result in a possible conflict of interest in the position to which you have been nominated.

During my time at Jenner & Block LLP between April 25, 2011 and May 6, 2012, I did a limited amount of work for a few clients. Out of an abundance of caution, the complete list of those clients is as follows: AOL, Inc.; Cablevision Systems Corp.; Cerberus Capital Management, L.P.; Charter Communications, Inc.; General Dynamics Corp., C4 Systems; Guggenheim Partners, LLC; The Nielsen Company; and Securus Technologies, Inc. During that time: (1) I did not appear before the Federal Communications Commission, Executive Branch agencies, Congress, or any court in connection with my work for these clients; (2) my name did not appear on any comments, briefs, or any other written work submitted on their behalf; and (3) to preclude conflicts, my firm established a screen as appropriate to prevent my colleagues from discussing specific matters with me.

5. Describe any activity during the past ten years in which you have been engaged for the purpose of directly or indirectly influencing the passage, defeat, or modification of any legislation or affecting the administration and execution of law or public policy.

- During my time at the Federal Communications Commission, I and/or my staff have been asked on occasion to review legislative proposals. I also have issued a number of official statements supportive of the passage of particular bills. *See, for example*, Chairman Pai Statement on Bipartisan Support for the Gigabit Opportunity Act, available at http://transition.fcc.gov/Daily_Releases/Daily_Business/2017/db0621/DOC-345457A1.pdf; Statement of FCC Commissioner Ajit Pai on House Passage of the FCC Process Reform Act of 2013, available at https://apps.fcc.gov/edocs_public/attachmatch/DOC-326018A1.pdf. Recently, I co-authored an op-ed with a Congressman urging passage of a public safety measure. *See* “Passing the Kelsey Smith Act Will Help Law Enforcement Save Lives,” *The Hill* (May 25, 2016), available at <http://thehill.com/blogs/congress-blog/technology/280741-passing-the-kelsey-smith-act-will-help-law-enforcement-save#.V0WfhNlfug0> (co-authored with Representative Kevin Yoder”). Finally, I

have testified many times before Congress; often, I have noted favorable consideration of bills and/or supported enactment of those bills. *See, for example*, Testimony before the U.S. Senate Committee on Commerce, Science, and Transportation at 1–2 (March 2, 2016), available at https://apps.fcc.gov/edocs_public/attachmatch/DOC-338045A1.pdf (Kari’s Law Act of 2016).

- During my initial service at the Federal Communications Commission, in the Office of General Counsel (between 2007 and 2011), I was asked very occasionally to review proposed legislation. I was not asked to recommend the passage, defeat, or modification of such proposals so much as to explain their likely effects.
 - My employment at the U.S. Senate Judiciary Committee during 2003 and 2004 and again between 2005 and 2007 required frequent involvement in the legislative process on issues as varied as compensation for asbestos-related injuries and immigration reform. I also staffed the Senators for whom I worked at oversight hearings of Executive Branch agencies, such as the U.S. Department of Justice and the Federal Bureau of Investigation.
6. Explain how you will resolve any potential conflict of interest, including any that may be disclosed by your responses to the above items.

Should I be fortunate enough to be confirmed to another term at the Federal Communications Commission, I would continue to resolve potential conflicts of interest by (1) identifying the proceeding(s) to which the potential conflicts pertain and gathering all relevant facts; (2) discussing the nature of the potential conflicts with and seeking guidance from the Designated Agency Ethics Official and other attorneys responsible for ethics issues in the Office of General Counsel; and (3) taking the appropriate action to ensure compliance with applicable ethics laws and regulations, as set forth by Congress, the agency, and the bar, respectively.

C. LEGAL MATTERS

1. Have you ever been disciplined or cited for a breach of ethics, professional misconduct, or retaliation by, or been the subject of a complaint to, any court, administrative agency, the Office of Special Counsel, professional association, disciplinary committee, or other professional group? If yes:

- a. Provide the name of agency, association, committee, or group;
- b. Provide the date the citation, disciplinary action, complaint, or personnel action was issued or initiated;
- c. Describe the citation, disciplinary action, complaint, or personnel action;
- d. Provide the results of the citation, disciplinary action, complaint, or personnel action.

No.

2. Have you ever been investigated, arrested, charged, or held by any Federal, State, or other law enforcement authority of any Federal, State, county, or municipal entity, other than for a minor traffic offense? If so, please explain. No.

3. Have you or any business or nonprofit of which you are or were an officer ever been involved as a party in an administrative agency proceeding, criminal proceeding, or civil litigation? If so, please explain. No.

4. Have you ever been convicted (including pleas of guilty or *nolo contendere*) of any criminal violation other than a minor traffic offense? If so, please explain. No.

5. Have you ever been accused, formally or informally, of sexual harassment or discrimination on the basis of sex, race, religion, or any other basis? If so, please explain. No.

6. Please advise the Committee of any additional information, favorable or unfavorable, which you feel should be disclosed in connection with your nomination.

I am a member of the Kansas and District of Columbia bars, admitted on October 13, 1998 and December 3, 2001, respectively. In the late summer of 2003, after I became a staffer for Senator Jeff Sessions on the Senate Judiciary Committee, I received a notice (possibly a second notice) from the Kansas Bar informing me that my bar dues had not been paid. Thereafter, I sent the Kansas Bar a check for the requisite amount. Unfortunately, the check arrived several days after the deadline for payment had passed (per a notation made by the Kansas Bar on the letter that I had sent and that was returned), and on October 6, 2003, my Kansas license was suspended. Similarly, my District of Columbia license was suspended for nonpayment of dues, effective September 30, 2003. After this time, I recall having a conversation with Senate Ethics staff in which I described these circumstances and was told that Senate staffers doing policy work exclusively were not required

to maintain an active bar license. I also was informed by Senator Sessions' office that the office did not require that lawyers on staff maintain an active bar license.

Nonetheless, I sought to reinstate both licenses in late 2003. According to the Kansas Bar's instructions for reinstatement, one requirement was that I submit an application for reinstatement. Similarly, in order to get my District of Columbia bar license reinstated, I had to take and certify completion of the Course on the District of Columbia Rules of Professional Conduct and District of Columbia Practice, and I also had to submit a statement that I was not suspended by any disciplinary authority. See D.C. Bar Bylaws, Art. III, §3(a), available at www.dcbbar.org/inside_the_bar/structure/bylaws/article03.cfm#sec3. I took the required District of Columbia Bar course; submitted all necessary forms; paid all applicable fees and charges; and finished the remaining steps needed in order for the respective bars to accept my applications for reinstatement. On June 10, 2004, my Kansas license was reinstated to active status, as was my District of Columbia license on June 18, 2004. I was a member in good standing of each bar before September 30, 2003, and without exception, I have been a member in good standing of each bar since June 18, 2004. However, I greatly regret the oversight that resulted in the administrative suspensions between those dates and will not allow such an oversight to happen again.

D. RELATIONSHIP WITH COMMITTEE

1. Will you ensure that your department/agency complies with deadlines for information set by congressional committees? Yes.

2. Will you ensure that your department/agency does whatever it can to protect congressional witnesses and whistle blowers from reprisal for their testimony and disclosures? Yes.

3. Will you cooperate in providing the Committee with requested witnesses, including technical experts and career employees, with firsthand knowledge of matters of interest to the Committee? Yes.

4. Are you willing to appear and testify before any duly constituted committee of the Congress on such occasions as you may be reasonably requested to do so? Yes.

RESUMÉ OF AJIT V. PAI

Experience

Federal Communications Commission. *Chairman* (2017–present); *Commissioner* (2012–17).

Jennet & Block, LLP. *Partner* (2011–12) in firm's communications practice.

Federal Communications Commission. *Special Advisor* (2010–11); *Deputy General Counsel* (2007–10); and *Associate General Counsel* (2007), Office of General Counsel.

U.S. Senate Judiciary Committee, Subcommittee on the Constitution, Civil Rights, and Property Rights. *Chief Counsel* (2005–07).

U.S. Department of Justice, Office of Legal Policy. *Senior Counsel* (2004–05).

U.S. Senate Judiciary Committee, Subcommittee on Administrative Oversight and the Courts. *Deputy Chief Counsel* (2003–04).

Verizon Communications Inc. *Associate General Counsel* (2001–03).

U.S. Department of Justice, Antitrust Division, Telecommunications Task Force, *Trial Attorney*, Attorney General's Honors Program (1998–2001).

Hon. Martin L.C. Feldman. U.S. District Court, Eastern District of Louisiana. *Law Clerk* (1997–98).

Education

University of Chicago Law School. J.D., 1997.

- University of Chicago Law Review. *Editor* (1996–97); *Staff Member* (1995–96).
- Hinton Moot Court Competition. *Semifinalist*; winner of Thomas R. Mulroy Prize (1997).

Harvard University. B.A. with honors in Social Studies, 1994.

- Harvard Speech and Parliamentary Debate Society. *Member* (1990–94).

Selected Publications

Op-Ed, *Des Moines Register*, "Bringing Better, Faster Internet Access to Iowa" (Oct. 10, 2016).

Op-Ed (with Senator Shelley Moore Capito), *Beckley (WV) Register Herald* "Bridge is a physical reminder of the digital divide in West Virginia" (Aug. 2, 2016).

Op-Ed (with Representative Anna Eshoo), *WIRED*, "The Feds Have to Act to Get America Faster Wi-Fi" (Fed. 7, 2016).

Article, "Congress and the Constitution: The Legal Tender Act of 1862," *77 Oregon Law Review* 535 (1998).

Comment, "Should a Grand Jury Subpoena Override a District Court's Protective Order?," *64 University of Chicago Law Review* 317 (1997). *Proposal adopted, In re Grand Jury Subpoena*, 138 F.3d 442, 445 (1st Cir. 1998); *In re Grand Jury*, 286 F.3d 153, 162-63 (3rd Cir. 2002).

The CHAIRMAN. Thank you, Chairman Pai.
Ms. Rosenworcel, welcome back to the Committee.

**STATEMENT OF HON. JESSICA ROSENWORCEL,
NOMINEE TO BE A MEMBER.
FEDERAL COMMUNICATIONS COMMISSION (REAPPOINTMENT)**

Ms. ROSENWORCEL. Thank you. Good morning, Chairman Thune, Ranking Member Nelson, and members of the Committee. Thank you for the opportunity to appear here before you today. I am honored to have been renominated by the President to serve as Commissioner at the Federal Communications Commission.

And I would like to begin by introducing my family. Sitting behind me is my husband of 17 years, Mark Bailen. And sitting next to him is our son, Emmett Joseph, who is 7 years old. His 10-year-old sister, Caroline Frances, could not be here today. She sends her regrets because she's away at summer camp.

[Laughter.]

Ms. ROSENWORCEL. As you may know, I previously had the honor of serving as Commissioner, but I stepped down from this position at the start of this year, and I headed home. Since that time, I have had the sweet privilege of attending every school performance and little league game, and I've had the opportunity to reacquaint myself with the world through my children's eyes and experiences as digital natives.

And it's trite but true, but a little distance provides some perspective, and in my time away, one thing has become abundantly clear: the future belongs to the connected. No matter who you are or where you live in this country, you need access to modern communications to have a fair shot at 21st century success. The choices we make today about communications technology, infrastructure, and access are an inheritance for the next generation. How we grapple now with the disrupting and democratizing effects of digitization will play no small role in determining American success in the future.

The stakes are high, so, of course, a little humility helps, and that is why I believe that the work of the agency must emphasize what is time-tested and enduring. To this end, I believe the work of the Commission must be guided by four essential values that have informed communications policies for decades.

First, public safety. We need policies that ensure that our networks are available when the unthinkable occurs and we need them most.

Second, universal access. We need policies that foster the deployment of modern communications, not just in urban areas, but also in rural areas.

And, third, competition, because competition, of course, is the best way to increase innovation and lower prices.

And fourth, and finally, consumer protection. Communications services are multiplying in our economy and in their importance in our daily lives. So we should always be on guard for opportunities to help consumers make good choices. These values derive from the law and informed my work at the Commission in the past, and that includes my efforts to strengthen 911 service, which were based on input from visits with first responders all across the country. It also includes my efforts to increase access to broadband in our schools and increase opportunities for digital age education.

Furthermore, I am proud to have worked on spectrum policies for both licensed and unlicensed airwaves that have made this country's wireless markets competitive, innovative, and strong.

However, there is more work to be done to bring communications policy into the future, and that includes work following the world's first spectrum incentive auctions, managing the impact of those auctions on our nation's local broadcasters, and building on our wireless success with the next generation of mobile service, known as 5G. That's going to require new ideas to spur innovation, spark entrepreneurship, incentivize the deployment of new networks, and help bring the benefits of modern communications to everyone everywhere across the country.

If reconfirmed, I look forward to working with the individuals at this table and all others at the Commission. And if reconfirmed, I will be guided by the fundamental values in the law that I discuss with you here today. And if reconfirmed, I will continue to respect the priorities of this Committee.

In closing, thank you, Chairman Thune, Ranking Member Nelson, and members of the Committee. I appreciate the opportunity to appear before you today. And I look forward to answering any questions you might have.

[The prepared statement and biographical information of Ms. Rosenworcel follow:]

PREPARED STATEMENT OF HON. JESSICA ROSENWORCEL, NOMINEE TO BE A MEMBER,
FEDERAL COMMUNICATIONS COMMISSION (REAPPOINTMENT)

Good morning, Chairman Thune, Ranking Member Nelson, and Members of the Committee. Thank you for the opportunity to appear before you today. I am honored to have been re-nominated by the President to serve as Commissioner at the Federal Communications Commission.

I would like to begin by introducing my family. Sitting behind me is my husband of seventeen years, Mark Bailen. Sitting beside him is our son, Emmett Joseph, who is seven years old. His ten-year-old sister, Caroline Frances, could not be here today and sends her regrets because she is away at camp.

As you may know, I previously had the honor of serving as Commissioner. But I stepped down from this position at the start of the year—and I headed home. Since that time I have had the sweet privilege of attending every school performance and every little league game. I have had the opportunity to reacquaint myself with the world through my children's eyes and experience as digital natives.

It's trite, but true, that a little distance provides perspective. In my time away, one thing has become abundantly clear: The future belongs to the connected. No matter who you are or where you live in this country, you need access to modern communications for a fair shot at 21st century success. The choices we make today about communications technology, infrastructure, and access are an inheritance for the next generation. How we grapple now with the disrupting and democratizing effects of digitization will play no small role in determining American success in the future.

The stakes are high, so a little humility helps. That is why I believe that the work of the Commission must emphasize what is most time-tested and enduring. To this end, I believe the work of the Commission must be guided by four essential values that have informed communications law in this country for decades.

First, public safety. Our networks must be available when the unthinkable occurs and we need them most.

Second, universal access. We need policies that foster deployment in urban areas, rural areas, and everything in between.

Third, competition. Competition is the best way to increase innovation and lower prices.

Fourth, consumer protection. Communications services are multiplying in our economy and in their importance in our daily lives. But the marketplace can be bewildering to navigate. So we should always be on the lookout for ways to help consumers make good choices.

These values derive from the law and informed my work at the Commission in the past. This includes my efforts to strengthen 911 service, based on input from visits with first responders across the country. It also includes my efforts to increase access to broadband in our schools and enhance opportunities for digital age education. Furthermore, I am proud to have worked on spectrum policies—for licensed and unlicensed airwaves—that have made this country's wireless markets competitive, innovative, and strong.

However, there is more work to be done—to bring communications policy into the future. That includes work following the world's first spectrum incentive auctions, managing the impact of this transition on local broadcasters, and building on our wireless success with the next generation of mobile service—known as 5G. It requires new ideas to spur competition, spark entrepreneurship, incentivize the deployment of new networks, and help bring the benefits of modern communications to everyone, everywhere across the country.

If re-confirmed, I look forward to working on what lies ahead with the individuals here with me today and all others at the Commission.

If re-confirmed, I will continue to be guided by the fundamental values in the law. If re-confirmed, I will continue to respect the priorities of this Committee. I also pledge to listen to you, those with business before the Commission—and above all the American people.

In closing, Chairman Thune, Ranking Member Nelson, and Members of the Committee, thank you for the opportunity to appear before you today. I look forward to answering your questions.

A. BIOGRAPHICAL INFORMATION

1. Name (Include any former names or nicknames used): Jessica Rosenworcel.
2. Position to which nominated: Commissioner, Federal Communications Commission.
3. Date of Nomination: June 15, 2017.
4. Address (List current place of residence and office addresses):
Residence: Information not released to the public.
5. Date and Place of Birth: 7/12/71; Boston, Massachusetts.
6. Provide the name, position, and place of employment for your spouse (if married) and the names and ages of your children (including stepchildren and children by a previous marriage).
Spouse: Mark Bailen, Partner at Baker Hostetler.
7. List all college and graduate degrees. Provide year and school attended.
Wesleyan University, BA, 1993
New York University School of Law, JD, 1997
8. List all post-undergraduate employment, and highlight all management-level jobs held and any non-managerial jobs that relate to the position for which you are nominated.

Commissioner, Federal Communications Commission
Senior Communications Counsel, U.S. Senate Committee on Commerce, Science, and Transportation
Senior Legal Advisor, Office of Commissioner Michael J. Copps, Federal Communications Commission
Legal Advisor to the Bureau Chief, Wireline Competition Bureau, Federal Communications Commission
Attorney, Drinker Biddle & Reath

9. Attach a copy of your resumé.

A copy is attached.

10. List any advisory, consultative, honorary, or other part-time service or positions with Federal, State, or local governments, other than those listed above, within the last ten years. None.

11. List all positions held as an officer, director, trustee, partner, proprietor, agent, representative, or consultant of any corporation, company, firm, partnership, or other business, enterprise, educational, or other institution within the last ten years. None.

12. Please list each membership you have had during the past ten years or currently hold with any civic, social, charitable, educational, political, professional, fraternal, benevolent or religious organization, private club, or other membership organization. Include dates of membership and any positions you have held with any organization. Please note whether any such club or organization restricts membership on the basis of sex, race, color, religion, national origin, age, or handicap.

Federal Communications Bar Association
Chair, Cable Practice Committee (2007–2008)
Chair, Legislative Practice Committee (2009)

13. Have you ever been a candidate for and/or held a public office (elected, non-elected, or appointed)? If so, indicate whether any campaign has any outstanding debt, the amount, and whether you are personally liable for that debt.

Not applicable.

14. Itemize all political contributions to any individual, campaign organization, political party, political action committee, or similar entity of \$500 or more for the past ten years. Also list all offices you have held with, and services rendered to, a state or national political party or election committee during the same period.

\$1,000—Obama for America, 2008
\$2,700—Hillary Victory Fund, 2016

15. List all scholarships, fellowships, honorary degrees, honorary society memberships, military medals, and any other special recognition for outstanding service or achievements.

White Prize for Excellence in Economics, Wesleyan University (1993)
Special Act Award for Contributions to Common Carrier Bureau, Federal Communications Commission (1999)
Women Who Represent Award, Alliance for Women in Media (2013)
Leadership in Advancing Communications Policy Award, Association of Public Safety Communications Officials International (2013)
Impact Award for Public Service, National Hispanic Media Coalition (2013)
Federal Policymaker Award, State Education Technology Directors Association (2013)
Award for Excellence in Public Service, Consortium for School Networking (2014)
Special Recognition Award, CEF Gala (2015)
Award for Outstanding Achievement, Family Online Safety Institute (2014)
Broadband Hero of the Year, National Association of Telecommunications Officers and Advisors (2016)
Community Builder Award, National Coalition for Technology in Education (2017)
Advocacy Award, CUE (2017)

16. Please list each book, article, column, or publication you have authored, individually or with others. Also list any speeches that you have given on topics relevant to the position for which you have been nominated. Do not attach copies of these publications unless otherwise instructed.

Articles

As a Commissioner I authored and/or co-authored the following:

“Transforming Education Digitally,” co-authored with Rep. Anna Eshoo, *Politico* (June 3, 2013);
“High-Speed Internet Access a Classroom Necessity,” co-authored with San Antonio Mayor Julian Castro, *San Antonio Express* (June 25, 2013);

“A Federal Wireless Policy Built on Carrots, Not Sticks,” *The Hill* (June 27, 2013);

“Giving Our Kids a Chance to Compete in the Global Economy Means High-Speed Broadband Capacity,” co-authored with Mooresville, North Carolina School Superintendent Dr. Mark Edwards, *Huffington Post* (July 24, 2013);

“Bring Wireless 911 Up to Date,” *The Hill* (January 14, 2014); “Growing Unlicensed Spectrum, Growing the Economy,” *Re/code* (February 21, 2014);

“Let’s Upgrade Our Schools for the Digital Age,” co-authored with Rep. Doris Matsui and Sacramento Mayor Kevin Johnson, *Sacramento Bee* (April 25, 2014);

“Here’s How to Expand Wireless Spectrum,” co-authored with Marty Cooper, *San Jose Mercury News* (September 26, 2014);

“Sandbox Thinking,” *Democracy Journal* (Fall 2014);

“The Spectrum Pipeline,” *Silicon Valley Leadership Group Gamechangers 2015* (Fall 2014);

“The Race to 5G is On,” *Re/code* (October 27, 2014);

“A New Year, a Bolder and Better E-Rate,” *Huffington Post* (December 3, 2014);

“How to Close the Homework Gap,” *Miami Herald* (December 5, 2014);

“Let’s Give Our Students a Chance to Compete in the Digital Age,” co-authored with Sen. Angus King, *Roll Call* (December 10, 2014);

“Limited Internet Access a Challenge for Detroit Kids,” *Detroit Free Press* (March 16, 2015);

“Falling through the Homework Gap,” *Providence Journal* (April 25, 2015);

“Filling in the Homework Gap,” *Virginia Daily Press* (May 30, 2015); “Bridging the Homework Gap,” *Huffington Post* (June 15, 2015);

“Boost the Homework Connection,” *Albany Times Union* (March 29, 2016);

“Connecting Students at School and at Home,” *Principal Leadership* (April 2016);

“The Cleveland Homework Gap When There’s No Internet at Home,” *Cleveland Plain Dealer* (April 22, 2016);

“We Need More Wi-Fi,” *Morning Consult* (June 20, 2016);

“Millions of Children Can’t Do Their Homework Because They Don’t Have Access to Broadband Internet,” *Aspen Ideas Festival Blog* (June 29, 2016);

“Action Needed to Advance the Next Generation 911,” co-authored with Betty Wafer, Manager, Dallas Police Department, *The Hill* (June 30, 2016);

“Moving Next Generation 911 Forward,” co-authored with Lance Terry, Communications Manager of Norman, Oklahoma, *The Oklahoman* (September 24, 2016); and

“Homework Gap Hurts Poor, Rural Students,” co-authored with Sen. Tom Udall, *Las Cruces Sun News* (October 22, 2016).

As Legal Counsel to the Wireline Competition Bureau I co-authored the following:

“Assessing the Effectiveness of Section 271 Five Years After the Telecommunications Act of 1996,” co-authored with Daniel Shiman, Chapter 7, Communications Policy and Information Technology: Promises, Problems, Prospects, MIT Press (2002).

Speeches

As a Commissioner, I spoke at a variety of events, including, but not limited to the following:

August 21, 2012—Speech at Association for Public Safety Communications Officials International 78th Annual Conference, held in Minneapolis, MN;

November 13, 2012—Speech on The Next Ten Years of Spectrum Policy, Silicon Flatirons Conference sponsored by the University of Colorado, held in Washington, D.C.;

November 15, 2012—Speech at The Media Institute Awards, held in Washington, D.C.;

December 13, 2012—Speech at Practising Law Institute, 30th Annual Telecommunications Policy and Regulation Institute, held in Washington, D.C.;

February 4, 2013—Speech at Rural Telecom Industry Meeting & Expo, held in Orlando, FL;

April 11, 2013—Speech at Washington Education Technology Policy Summit, held in Washington, D.C.;

May 14, 2013—Speech at Association for Public Safety Communications Officials International Policy Awards Dinner, held in Washington, D.C.;

May 22, 2013—Speech at CTIA—The Mobile Marketplace, held in Las Vegas, NV;

July 1, 2013—Speech at American Telemedicine Association Policy Summit, held in Washington, D.C.;

September 19, 2013—Speech at It Can Wait Campaign’s Drive 4 Pledges Day to Prevent Texting While Driving, held in Washington, D.C.;

October 25, 2013—Speech at Women in Science Awards Ceremony, held in New York, NY;

October 29, 2013—Speech at Future of Music Summit, held in Washington, D.C.;

November 4, 2013—Speech at West Virginia Broadband Summit, held in Morgantown, WV;

November 4, 2013—Speech at State Education Technology Directors Association Federal Policymaker Award Ceremony, held in Washington, D.C.;

November 14, 2013—Speech at Women Who Represent Awards, held in Washington, D.C.;

November 21, 2013—Speech at White House Champions of Change Event, held in Washington, D.C.;

December 4, 2013—Speech at Association of Public Safety Communications Officials International Emerging Tech Conference held in Boston, MA;

December 12, 2013—Speech at Institute of Electrical and Electronics Engineers Globecom Conference, held in Atlanta, GA;

January 24, 2014—Speech on Families Educational Media Use in America at The Joan Ganz Cooney Center at Sesame Workshop, held in New York, NY;

March 17, 2014—Speech at Satellite Industry Association Leadership Dinner, held in Washington, D.C.;

March 7, 2014—Speech on Wi-Fi in the 5 GHz Fast Lane at the National Press Club in Washington, D.C.;

March 7, 2014—Speech at South by Southwest Education Conference, held in Austin, TX;

March 20, 2014—Speech at Consortium for School Networking Award for Excellence in Public Service, held in Washington, D.C.;

May 6, 2014—Speech on Moving Wi-Fi Forward at The Newseum, held in Washington, D.C.;

May 7, 2014—Speech at Chief Officers of State Library Agencies Meeting, held in Washington, D.C.;

June 19, 2014—Speech at Workshop on Prevention of Mobile Device Theft, held in Washington, D.C.;

August 6, 2014—Speech at Association of Public Safety Communications Officials International Conference, held in New Orleans, LA;

September 11, 2014—Speech on The Future of Unlicensed Spectrum at the Computer History Museum, held in Mountain View, CA;

September 16, 2014—Speech on Latino 2.0: Latinos in Tech Innovation & Social Media, held in New York, NY;

September 22, 2014—Speech at GSMA Mobile 360, held in Atlanta, GA;

September 30, 2014—Speech on Sandbox Thinking at the Democracy Symposium, held in Washington, D.C.;

October 2, 2014—Speech at the Marconi Society Symposium, the National Academy of Sciences, held in Washington, D.C.;

October 14, 2014—Speech at 4G Americas Technology Briefing, held in Washington, D.C.;

October 29, 2014—Speech at W3C 20th Anniversary Symposium: The Future of the Web, held in Santa Clara, CA;

November 13, 2014—Speech at Family Online Safety Institute Award for Outstanding Achievement, held in Washington, D.C.;

January 27, 2015—Speech at State of the Net Conference, held in Washington, D.C.;

February 4, 2015—Speech at Texas Computer Education Association, held in Austin, TX;

March 16, 2015—Speech on Supersizing Wi-Fi at South by Southwest Interactive, held in Austin, TX;

April 29, 2014—Speech on Taking the Pulse of the High School Student Experience in America at Hispanic Heritage Foundation, held in Washington, D.C.;

June 29, 2015—Speech on Women in Consumer Electronics, held in New York, NY;

September 3, 2015—Speech on Montana Veterans, Tele-Acute & Rural Health Financing, held in Kalispell, MT;

October 7, 2015—Speech at Committee for Education Funding Gala, held in Washington, D.C.;

January 12, 2016—Speech on The Road to Gigabit Wi-Fi at New America, held in Washington, D.C.;

February 2, 2016—Speech on Spectrum Policy at Forum Global Americas Spectrum Management Conference, held in Washington, D.C.;

February 9, 2016—Speech on Five Ideas for the Road to 5G at Leadership Forum on 5G: The Next Generation of Wireless, held in Washington, D.C.;

February 22, 2016—Speech on Spectrum Policy at Mobile World Congress, held in Barcelona, Spain;

March 17, 2016—Speech on Closing the Homework Gap at CUE16, held in Palm Springs, CA;

May 16, 2016—Speech on 911 at APCO Broadband Summit, held in Washington, D.C.;

June 8, 2016—Speech on the Wireless Network of the Future, held in Dallas, TX;

September 8, 2016—Speech on the Broadband Imperative and the Homework Gap at State Education Technology Directors Association, held in Washington, D.C.; and

October 26, 2016—Speech on Robocall Strike Force, held in Washington, D.C.

As Senior Communications Counsel at the U.S. Senate Committee on Commerce, Science and Transportation, I spoke at a variety of events, including, but not limited to the following:

June 8, 2007—Panel on communications issues at Pike and Fisher's Broadband Policy Summit, held in Arlington, VA;

September 17, 2007—Panel on congressional issues at Future of Music Policy Summit, held in Washington, D.C.;

January 28, 2008—Panel on congressional issues at Alaska Telephone Association Winter Convention, held in Lihue, HI;

March 5, 2008—Panel on emergency communications at policy conference sponsored by the E-911 Institute, held in Arlington, VA;

March 13, 2008—Panel on communications issues at policy conference sponsored by Association for Maximum Service Television, held in Washington, D.C.;

January 5, 2009—Panel on Implementing the Broadband Stimulus: Maximizing Benefits and Monitoring Performance sponsored by Columbia Institute for Tele-Information and Georgetown University McDonough Business School, held in Washington, D.C.;

April 2, 2009—Panel on congressional issues at The Cable Show, held in Washington, D.C.;

March 31, 2009—Panel on legislative issues at the National Association of Broadcasters State Leadership Conference, held in Washington, D.C.;

May 14, 2009—Panel on Changing Media: Thinking Across the Issues, Part 2, James L. Knight Foundation, held in Washington, D.C.; and

March 2, 2010—Panel on the FCC's Authority, sponsored by the Berkman Center for Internet & Society and the Wharton School, held in Washington, D.C.

17. Please identify each instance in which you have testified orally or in writing before Congress in a governmental or non-governmental capacity and specify the date and subject matter of each testimony.

November 30, 2011—Nomination Hearing, U.S. Senate Committee on Commerce, Science, and Transportation (with Ajit Pai);
 May 16, 2012—Federal Communications Commission Oversight Hearing, U.S. Senate Committee on Commerce, Science, and Transportation;
 July 10, 2012—Federal Communications Commission Oversight Hearing, U.S. House of Representatives Committee on Energy and Commerce;
 December 12, 2012—Hearing on keeping the New Broadband Spectrum Law on Track, U.S. House of Representatives Committee on Energy and Commerce;
 March 12, 2013—Federal Communications Commission Oversight Hearing, U.S. Senate Committee on Commerce, Science, and Transportation;
 August 19, 2013—Field Hearing on the State of Rural Communications, U.S. Senate Committee on Commerce, Science, and Transportation;
 December 12, 2013—Federal Communications Commission Oversight Hearing, U.S. House of Representatives Committee on Energy and Commerce;
 March 18, 2015—Federal Communications Commission Oversight Hearing, U.S. Senate Committee on Commerce, Science, and Transportation;
 March 19, 2015—Federal Communications Commission Oversight Hearing, U.S. House of Representatives Energy & Commerce Committee;
 July 29, 2015—Hearing on Wireless Broadband and the Future of Spectrum Policy, U.S. Senate Committee on Commerce, Science, and Transportation;
 October 28, 2015—Nomination Hearing, U.S. Senate Committee on Commerce, Science, and Transportation;
 November 17, 2015—Federal Communications Commission Oversight Hearing, U.S. House of Representatives Energy and Commerce Committee;
 March 2, 2016—Federal Communications Commission Oversight Hearing, U.S. Senate Committee on Commerce, Science, and Transportation;
 March 22, 2016—Federal Communications Commission Oversight Hearing, U.S. House of Representatives Energy and Commerce Committee;
 July 12, 2016—Federal Communications Commission Oversight Hearing, U.S. House of Representatives Energy and Commerce Committee; and
 September 15, 2016—Federal Communications Commission Oversight Hearing, U.S. Senate Committee on Commerce, Science, and Transportation.

18. Given the current mission, major programs, and major operational objectives of the department/agency to which you have been nominated, what in your background or employment experience do you believe affirmatively qualifies you for appointment to the position for which you have been nominated, and why do you wish to serve in that position?

I have two decades of experience in communications policy. I have worked on communications and technology matters from a wide variety of positions—both in the private and public sector. This includes positions in a law firm, as a Commissioner at the Federal Communications Commission, and as Senior Communications Counsel at the Senate Committee on Commerce, Science, and Transportation.

I believe that I have used this background to make a positive contribution to communications policy—and hope to be able to continue to do so by protecting consumers, promoting access to new services, and fostering investment and innovation.

19. What do you believe are your responsibilities, if confirmed, to ensure that the department/agency has proper management and accounting controls, and what experience do you have in managing a large organization?

All government officials operate in positions of trust and have a duty to ensure that the organization where they work has proper management and accounting controls.

I have experience managing an office at the agency; managing policies involving communications at the Senate Committee on Commerce, Science and Transportation; and managing client matters at a private law firm.

20. What do you believe to be the top three challenges facing the department/agency, and why?

Protecting consumers. As technologies evolve, one thing is paramount—consumers should be the ultimate beneficiaries of policy choices by the Federal Communications Commission.

Securing access. As technologies evolve, it is imperative that all people in this country, no matter who they are or where they live, have access to the communications services that are necessary for 21st century opportunity, safety, and economic security.

Growing economy. Digital services are now a vital feature of our economy, providing certainty to companies is an essential part of promoting investment, fostering innovation, and creating jobs.

B. POTENTIAL CONFLICTS OF INTEREST

1. Describe all financial arrangements, deferred compensation agreements, and other continuing dealings with business associates, clients, or customers. Please include information related to retirement accounts.

None. My financial interests are disclosed on my SF-278.

2. Do you have any commitments or agreements, formal or informal, to maintain employment, affiliation, or practice with any business, association or other organization during your appointment? If so, please explain. None.

3. Indicate any investments, obligations, liabilities, or other relationships which could involve potential conflicts of interest in the position to which you have been nominated.

None. My husband is a partner at Baker Hostetler. His practice involves commercial litigation and does not include advocacy before the Federal Communications Commission.

4. Describe any business relationship, dealing, or financial transaction which you have had during the last ten years, whether for yourself, on behalf of a client, or acting as an agent, that could in any way constitute or result in a possible conflict of interest in the position to which you have been nominated. None.

5. Describe any activity during the past ten years in which you have been engaged for the purpose of directly or indirectly influencing the passage, defeat, or modification of any legislation or affecting the administration and execution of law or public policy.

I previously served as a Commissioner at the Federal Communications Commission. In this position, from time to time, I am asked my thoughts on legislative matters pending before the Congress.

I also previously served as Senior Communications Counsel at the Senate Committee on Commerce, Science and Transportation. In this capacity I regularly advised Senate offices on communications policy and legislation.

6. Explain how you will resolve any potential conflict of interest, including any that may be disclosed by your responses to the above items.

Not applicable.

C. LEGAL MATTERS

1. Have you ever been disciplined or cited for a breach of ethics, professional misconduct, or retaliation by, or been the subject of a complaint to, any court, administrative agency, the Office of Special Counsel, professional association, disciplinary committee, or other professional group? If yes:

- a. Provide the name of agency, association, committee, or group;
- b. Provide the date the citation, disciplinary action, complaint, or personnel action was issued or initiated;
- c. Describe the citation, disciplinary action, complaint, or personnel action;
- d. Provide the results of the citation, disciplinary action, complaint, or personnel action.

No.

2. Have you ever been investigated, arrested, charged, or held by any Federal, State, or other law enforcement authority of any Federal, State, county, or municipal entity, other than for a minor traffic offense? If so, please explain. No.

3. Have you or any business or nonprofit of which you are or were an officer ever been involved as a party in an administrative agency proceeding, criminal proceeding, or civil litigation? If so, please explain. No.

4. Have you ever been convicted (including pleas of guilty or *nolo contendere*) of any criminal violation other than a minor traffic offense? If so, please explain. No.

5. Have you ever been accused, formally or informally, of sexual harassment or discrimination on the basis of sex, race, religion, or any other basis? If so, please explain. No.

6. Please advise the Committee of any additional information, favorable or unfavorable, which you feel should be disclosed in connection with your nomination. None.

D. RELATIONSHIP WITH COMMITTEE

1. Will you ensure that your department/agency complies with deadlines for information set by congressional committees? Yes.
2. Will you ensure that your department/agency does whatever it can to protect congressional witnesses and whistle blowers from reprisal for their testimony and disclosures? Yes.
3. Will you cooperate in providing the Committee with requested witnesses, including technical experts and career employees, with firsthand knowledge of matters of interest to the Committee? Yes.
4. Are you willing to appear and testify before any duly constituted committee of the Congress on such occasions as you may be reasonably requested to do so? Yes.

RESUMÉ OF JESSICA ROSENWORCEL

Legal and Policy Experience**Federal Communications Commission**, Washington, DC 2012–2017*Commissioner*

Developed and implemented communications policy involving radio, television, wire, satellite and cable services as a member of the United States' primary authority for communications law, regulation and technological innovation.

United States Senate**Committee on Commerce, Science, and Transportation**, Washington, DC*Senior Communications Counsel* 2009–2012

Developed and implemented communications policy agenda for the Democratic members of the Committee on Commerce, Science, and Transportation, under the leadership of Senator Jay Rockefeller (D-West Virginia). Organize hearings regarding the National Broadband Plan, universal service and rural communications, Children's Television Act, future of journalism, wireless service, communications accessibility for the disabled, retransmission consent for video programming, satellite television, public safety spectrum and oversight of the Federal Communications Commission and National Telecommunications and Information Administration. Develop and work to secure passage of legislation, including the Broadband Technology Opportunities Program in the American Recovery and Reinvestment Act, DTV Delay Act, Satellite Television Extension and Localism Act, 21st Century Communications and Video Accessibility Act and Public Safety Spectrum and Wireless Innovation Act.

Senior Communications Counsel 2007–2008

Developed and implemented communications policy agenda for the Democratic members of the Committee on Commerce, Science, and Transportation, under the leadership of Senator Daniel K. Inouye (D-Hawaii). Organized hearings regarding the digital television transition, broadband deployment and adoption, universal service, media ownership, media violence and indecency, network neutrality, online privacy and oversight of the Federal Communications Commission and National Telecommunications and Information Administration. Developed and worked to secure passage of legislation, including the Broadband Data Improvement Act, DTV Transition Assistance Act, Child Safe Viewing Act, and New and Emerging Technologies 911 Improvement Act.

Federal Communications Commission, Washington, DC*Senior Legal Advisor to Commissioner Michael J. Copps* 2006–2007

Advised Senior Democratic Commissioner on television, radio and cable policy issues arising under the Communications Act and Cable Television and Consumer Protection Act. Developed office positions and strategy for advancing telecommunications, Internet, wireless and media policy priorities. Managed office staff. Provided legal analysis and voting recommendations for Commission decisions. Drafted speeches, editorials and press statements. Coordinated policy decisions with Congressional offices, state and local officials and industry representatives.

Legal Advisor to Commissioner Michael J. Copps 2003–2006

Advised Senior Democratic Commissioner on competition policy and universal service issues arising under the Telecommunications Act. Developed policy positions on broadband deployment, Internet access, rural communications, public safety networks, E-Rate and VoIP. Provided legal analysis and voting recommendations for Commission decisions. Drafted Senate testimony, speeches and press statements. Coordinated policy decisions with Congressional offices and state regulatory authorities.

Legal Counsel to Bureau Chief, Wireline Competition Bureau 2002–2003

Advised Bureau Chief on universal service and broadband policy. Coordinated wireline policy with Wireless Telecommunications Bureau, Cable Services Bureau and International Bureau. Taught World Bank telecommunications workshops for the Economic Ministry of Latvia.

Attorney Advisor, Policy Division, Common Carrier Bureau 1999–2002

Managed teams drafting decisions concerning broadband deployment and competitive entry into local and long distance markets. Recipient of Special Act Award for policy contributions to the Common Carrier Bureau in 2000.

Drinker Biddle & Reath, Washington, DC

Communications Associate 1997–1999

Drafted merger documents for privatization of state-owned telephone company. Prepared Bureau of Export Administration license application for cable modem encryption technology.

Reboul, MacMurray, Hewitt, Maynard & Kristol, New York, NY

Summer Associate 1996

Drafted securities purchase agreements for venture capital and buyout firm transactions.

United States Attorney's Office, Brooklyn, NY

Summer Fellow, Criminal Division 1995

Researched and drafted motions on issues of evidence, criminal law and criminal procedure.

Skadden, Arps, Slate, Meagher & Flom, New York, NY

Legal Assistant 1993–1994

Managed litigation documents.

Education

New York University School of Law, New York, NY JD, 1997

Honors: *Annual Survey of American Law*, Editor

Wesleyan University, Middletown, CT BA, Economics and English, 1993

Honors: White Prize for Excellence in Economics

Publications

"Homework Gap Hurts Poor, Rural Students," co-authored with Senator Tom Udall, *Las Cruces Sun-News*, October 22, 2016.

"Moving Next Generation 911 Forward," co-authored with Lance Terry, *The Oklahoman*, September 24, 2016.

"Action Needed to Advance Next Generation 911," co-authored with Betty Wafer, *The Hill*, June 30, 2016.

"We Need More Wi-Fi," *Morning Consult*, June 20, 2016.

"The Cleveland Homework Gap When There's No Internet at Home," *Cleveland Plain Dealer*, April 22, 2016.

"Boost the Homework Connection," *Albany Times Union*, March 29, 2016.

"Limited Internet Access a Challenge for Detroit Kids," *Detroit Free Press*, March 16, 2015. "How to Close the Homework Gap," *Miami Herald*, December 5, 2014.

"A New Year, a Bolder and Better E-Rate," *Huffington Post*, December 3, 2014.

"The Race to 5G is On," *Re/code*, October 27, 2014.

"The Spectrum Pipeline," *Silicon Valley Leadership Group Gamechangers 2015*, Fall 2014.

"Sandbox Thinking," *Democracy Journal*, Fall 2014.

"Here's How to Expand Wireless Spectrum," co-authored with Marty Cooper, *San Jose Mercury News*, September 26, 2014.

"Let's Upgrade Our Schools for the Digital Age," co-authored with Rep. Doris Matsui and Sacramento Mayor Kevin Johnson, *Sacramento Bee*, April 25, 2014.

"Growing Unlicensed Spectrum, Growing the Economy," *Re/code*, February 21, 2014.

"Bring Wireless 911 Up to Date," *The Hill*, January 14, 2014.

"A Federal Wireless Policy Built on Carrots, Not Sticks," *The Hill*, July 27, 2013.

"Transforming Education Digitally," co-authored with Rep. Anna Eshoo, *Politico*, June 3, 2013.

"Assessing the Effectiveness of Section 271 Five Years After the Telecommunications Act of 1996," Jessica Rosenworcel & Daniel R. Shiman, Chapter 7, *Communications Policy and Information Technology: Promises, Problems, Prospects*, MIT Press, 2002.

The CHAIRMAN. Thank you, Ms. Rosenworcel.
Mr. Carr, welcome to the Committee.

**STATEMENT OF BRENDAN CARR, NOMINEE TO BE A MEMBER,
FEDERAL COMMUNICATIONS COMMISSION**

Mr. CARR. Chairman Thune, Ranking Member Nelson, distinguished members of the Committee, it's a privilege to appear before you today. I am humbled by President Trump's decision to nominate me to serve as a Commissioner at the FCC, and I'm honored to have this Committee consider that nomination.

I want to start by thanking you and your staffs for the courtesies you've shown me over the past few weeks. The chance to meet with you has given me the opportunity to learn more about the telecom and communications issues that are important to you and to your states.

These meetings have only underscored the important role the FCC plays in the lives of all Americans, whether it's promoting broadband deployment, protecting consumers, or advancing public safety.

And with the Committee's indulgence, I would like to take a moment to introduce my family. My wonderful wife, Machalagh, our two terrific boys, Quinn, who is three, and Emmet, who is six months. We're just blessed to be their parents. I also want to introduce my parents, Tom Carr and Barbara Carr. I know that for my dad this is a bit of a homecoming. His first job during college in D.C. was to work as a Mail Sorter in the Post Office here in Dirksen, so he's really glad to get the chance to come back.

I also want to congratulate Chairman Pai and Commissioner Rosenworcel on their renominations. I've worked with both of them, as well as Commissioners Clyburn and O'Rielly, at the FCC for a number of years now. I can say that they are all exceptionally thoughtful and dedicated public servants.

I currently have the privilege of serving as the general counsel of the FCC. It's not the first job I've had at the agency, however. I joined the Commission over five years ago now as a staffer during the Obama administration. I worked in the Office of General Counsel providing advice to the Wireless Bureau, Public Safety Bureau, and International Bureau. I then had the chance to work on some of the same issues for then Commissioner Pai.

My passion for technology, however, started well before I joined the agency. In fact, I went to law school over 15 years ago now specifically for the purpose of studying telecommunications law and policy. After graduating, I worked at a law firm where I gained broad experience in this area, and I later accepted a clerkship with a judge on the Fourth Circuit, which helped spark my interest in public service.

Looking back, I've learned a lot in the past dozen years working in communications. I've come to know and admire the FCC's terrific staff. They are passionate about delivering for the public interest. I've come to understand the importance of bipartisan consensus

and working toward common ground, and if confirmed, I will certainly work in that spirit as a Commissioner.

I want to talk briefly about the focus I bring to the Commission, if confirmed.

First, we have a tremendous opportunity in the telecom space to create jobs, to spur investment and to grow the economy for the benefit of all Americans, and I believe the FCC's policies should do just that.

Broadband is certainly going to play a key role, whether it's the app economy that runs over high-speed connections, the workers that manufacture network infrastructure and deploy it, or the businesses that use those connections to reach customers around the world. Broadband can harness the talents of all Americans, it can create good-paying jobs, and it can help drive our nation's economic growth.

Second, we must maintain the United States' leadership in wireless. As 5G and other advanced and competitive networks come online, spectrum and infrastructure are going to be two key pieces of that, whether that's in connecting every American or the expanding Internet of Things.

And, finally, the FCC must always promote public safety. This includes speeding the transition to Next-Generation 911 and ensuring that our first responders have the communications technologies they need to do their jobs.

So in closing, I want to thank the Committee again for taking the time to consider my nomination. I look forward to answering your questions.

[The prepared statement and biographical information of Mr. Carr follow:]

PREPARED STATEMENT OF BRENDAN CARR, NOMINEE TO BE A MEMBER,
FEDERAL COMMUNICATIONS COMMISSION

Chairman Thune, Ranking Member Nelson, and distinguished Members of the Committee, it is a privilege to appear before you today. I am humbled by President Trump's decision to nominate me to serve as a Commissioner of the Federal Communications Commission, and I am honored to have this Committee consider that nomination.

I want to start by thanking you and your staffs for the courtesies you have shown me over the past few weeks and for giving me the opportunity to learn more about the technology and communications issues that are important to you and your states. These meetings have only underscored the important role the FCC plays in the lives of all Americans—whether it is promoting broadband deployment, protecting consumers, or advancing public safety. If I am fortunate enough to be confirmed, I would welcome the opportunity to work with all of you on ways the FCC can continue to advance the public interest.

With the Committee's indulgence, I would like to take a moment to introduce my family—my wonderful wife Machalagh and our two terrific boys: Quinn, who is three years old, and Emmet, who is six months. We are just blessed to be their parents. I also want to introduce my parents, Thomas Carr and Barbara Carr, as well as my sister Courtney Carr, and thank them for the support they have always shown me.

I also want to extend my congratulations to Chairman Pai and Commissioner Rosenworcel on their renominations. I have had the chance to work with both of them, as well as Commissioner Clyburn and Commissioner O'Rielly, for a number of years at the FCC, and I know they are all exceptionally thoughtful and dedicated public servants.

I currently have the privilege of serving as the FCC's General Counsel. It is an honor and a tremendously rewarding experience to lead the talented lawyers and other professionals that work in the Office of General Counsel.

But this is not the first job I have had at the FCC. I joined the Commission as a staffer over five years ago. I worked initially as an attorney in the Administrative Law Division of the Office of General Counsel. My job was to provide advice to the policymakers in the agency's Wireless Telecommunications Bureau, Public Safety and Homeland Security Bureau, and International Bureau. Later, I had the chance to work on those same issues as an advisor to then Commissioner Pai.

My passion for technology and communications started well before I joined the agency, however. In fact, I went to law school over fifteen years ago for the purpose of studying telecommunications law and policy. I obtained a certificate in communications law studies in addition to my J.D.

During law school, I took the opportunity to intern twice at the FCC and once with the U.S. House of Representatives, Committee on Energy and Commerce, Subcommittee on Communications, Technology, and the Internet. Those experiences only confirmed that I made the right decision to study communications law, and they solidified my interest in spending my career working as a lawyer on communications issues.

After graduating, I accepted a job at a law firm where I could gain broad experience working on various telecommunications issues. Later, I accepted a clerkship with a judge on the U.S. Court of Appeals for the Fourth Circuit, which helped spark my interest in public service and instilled in me the importance of considering all sides of any debate.

I have learned a lot over the past dozen years working on communications law and policy. I have come to know and admire the FCC's terrific staff. They are passionate about delivering for the public interest, and they truly are the agency's best asset.

My time at the Commission has also instilled in me an appreciation for the importance of bipartisan consensus and working towards common ground. I believe that focusing on our shared goals produces the best and lasting results for the public. I hope that my work at the FCC and my interactions with all stakeholders over the years have reflected my commitment to that approach. I can assure you that, if confirmed, I would work in that spirit as a Commissioner.

I can also assure this Committee that, if confirmed, I would approach the job with an appreciation for the challenges we face and a determination to help solve them. In terms of my regulatory philosophy, I believe that the public interest is best served by vigorous competition in the marketplace. But when there are marketplace failures that harm consumers, the agency must take action consistent with the scope of our authority and the direction provided by Congress.

We must always be willing to take a fresh look at any barriers to entry or competition that we can remove, and we must ensure that our regulatory framework supports innovation and entrepreneurship, reflects the realities of today's dynamic marketplace, and always promotes the public interest.

With that in mind, I want to talk briefly about the focus I would bring to the Commission, if confirmed.

We have a tremendous opportunity in the technology and communications space to create jobs, spur investment, and grow the economy for the benefit all Americans. If confirmed, I would work to ensure that the FCC's policies do just that.

Broadband is certainly going to play a key role. Whether it is the app economy that runs over high-speed networks, the workers who deploy and make network infrastructure, or the businesses that use these connections to reach customers around the world, broadband can harness the talents of all Americans, create good-paying jobs, and help drive our nation's economic growth. So it is critical that we have policies in place that promote the construction and expansion of broadband networks in all parts of our country.

I also believe it is important to maintain the United States' leadership in wireless. The wireless market in the United States has been a tremendous success story. The policies the FCC put in place a decade ago resulted in this country leading the world in the deployment of 4G wireless technologies. The current challenge is to ensure that we maintain that leadership as 5G and other advanced and competitive wireless networks (terrestrial and satellite alike) come online.

Spectrum and infrastructure are going to play key roles in determining whether we meet that challenge. On the spectrum front, the FCC must continue to pursue an all-of-the-above approach. We need a spectrum pipeline that can deliver a mix of low-, mid-, and high-band spectrum into the commercial marketplace. And we need to ensure that providers can choose from a mix of licensed, unlicensed, and shared spectrum bands to meet consumer demand, whether to connect people or the burgeoning Internet of Things. On the infrastructure side, the FCC must make certain that its policies are tailored to facilitating next-generation deployments.

Finally, while technology continues to evolve, one constant is the FCC's obligation to promote public safety. This includes taking steps to facilitate the transition to Next-Generation 911 (or NG911), which can bring life-saving advances to those in need of emergency services and innovative solutions to our public safety community. It also means that the FCC must play its part in ensuring that public safety officials and first responders have access to the advanced communications technologies that will allow them to do their jobs safely and effectively. I believe that all stakeholders must work together to ensure that the agency is fulfilling its public safety obligations.

Chairman Thune, Ranking Member Nelson, and Members of the Committee, I want to thank you again for considering my nomination. I look forward to answering your questions.

A. BIOGRAPHICAL INFORMATION

1. Name (Include any former names or nicknames used): Brendan Thomas Carr.
 2. Position to which nominated: Commissioner, Federal Communications Commission.

3. Date of Nomination: June 29, 2017.

4. Address (List current place of residence and office addresses):

Residence: Information not released to the public.

Office: Federal Communications Commission, 445 12th Street SW, Washington, D.C. 20554.

5. Date and Place of Birth: January 5, 1979; Washington, D.C.

6. Provide the name, position, and place of employment for your spouse (if married) and the names and ages of your children (including stepchildren and children by a previous marriage).

Spouse: Machalagh Carr, Oversight Staff Director, Committee on Ways and Means, U.S. House of Representatives.

7. List all college and graduate degrees. Provide year and school attended.

B.A., Georgetown University, Georgetown College (2001)

J.D., and Certificate, Institute for Communications Law Studies, Catholic University of America, Columbus School of Law (2005)

8. List all post-undergraduate employment, and highlight all management-level jobs held and any non-managerial jobs that relate to the position for which you are nominated.

- Federal Communications Commission
 - General Counsel (4/2017–Present)*
 - Acting General Counsel (1/2017–4/2017)*
 - Legal Advisor for Wireless, International, and Public Safety, Office of Commissioner Ajit Pai (2/2014–1/2017)†
 - Attorney-Advisor, Wireless, International, and Public Safety Team, Administrative Law Division, Office of General Counsel (6/2012–2/2014)†
 - Legal Intern, Office of Commissioner Kathleen Abernathy (9/2003–12/2003)†
 - Law Clerk, Spectrum Enforcement Division, Enforcement Bureau (6/2003–8/2003)†
- Wiley Rein LLP
 - Associate (9/2005–8/2008 and 8/2009–5/2012)†
- Judge Dennis W. Shedd, U.S. Court of Appeals for the Fourth Circuit
 - Law Clerk (8/2008–7/2009)†
- U.S. House of Representatives, Committee on Energy and Commerce, Subcommittee on Communications, Technology, and the Internet
 - Legal Intern (2/2004–4/2004)†
- Venable, Baetjer, Howard & Civiletti LLP
 - Paralegal (9/2001–8/2002)
- Credit Debt Solutions
 - Sales (6/2001–8/2001)

*Denotes management-level job that is relevant to the position for which I have been nominated.

†Denotes non-managerial job that is relevant to the position for which I have been nominated.

9. Attach a copy of your resumé.

A copy is attached.

10. List any advisory, consultative, honorary, or other part-time service or positions with Federal, State, or local governments, other than those listed above, within the last ten years. None.

11. List all positions held as an officer, director, trustee, partner, proprietor, agent, representative, or consultant of any corporation, company, firm, partnership, or other business, enterprise, educational, or other institution within the last ten years.

As indicated below, I am a member of the Federal Communications Bar Association (FCBA). While I served a three-year, uncompensated term as a Member of the FCBA's Executive Committee, I was not an officer of the FCBA. Moreover, my three-year term on the FCBA's Executive Committee expired at the end of June 2017.

12. Please list each membership you have had during the past ten years or currently hold with any civic, social, charitable, educational, political, professional, fraternal, benevolent or religious organization, private club, or other membership organization. Include dates of membership and any positions you have held with any organization. Please note whether any such club or organization restricts membership on the basis of sex, race, color, religion, national origin, age, or handicap.

- American Bar Association
 - I was a member of the ABA from August 2013 until February 2015. During my time as a member, I served as Vice-Chair (from August 2013 to approximately February 2014) and then as Co-Chair (from approximately February 2014 to February 2015) of the Communications Committee of the ABA's Administrative Law and Regulatory Practice Section.
- Cathedral of St. Matthew the Apostle
 - I have been a member of this Catholic church in Washington, D.C. from 2006 to the present.
- District of Columbia Bar
 - As a lawyer, I have been a member in active standing of the D.C. bar from 2006 to present.
- Federalist Society
 - I have been a member from 2007 to present.
- Federal Communications Bar Association
 - I have been a member of the FCBA from approximately 2005 to present. In that time, I have held several positions with the FCBA—specifically: (1) Member, FCBA Charity Auction Committee (2011); (2) Co-Chair, FCBA Young Lawyers Committee (2011–13); (3) Chair, FCBA Charity Auction Committee (2012); (4) Member, FCBA Nominations Committee (2013); (5) Young Lawyers Representative to the FCBA Executive Committee (2013, and (6) Member, FCBA Executive Committee (2014–2017).
- Maryland Bar
 - As a lawyer, I have been a member in active standing of the Maryland Bar from 2005 to present.
- Maryland State Bar Association
 - I was an active member of this voluntary bar association from 2005 to around 2010.
- University Club of Washington D.C.
 - I have been a member of this social/athletic club since 2006.

13. Have you ever been a candidate for and/or held a public office (elected, non-elected, or appointed)? If so, indicate whether any campaign has any outstanding debt, the amount, and whether you are personally liable for that debt. No.

14. Itemize all political contributions to any individual, campaign organization, political party, political action committee, or similar entity of \$500 or more for the past ten years. Also list all offices you have held with, and services rendered to, a state or national political party or election committee during the same period.

In 2011, I donated \$500 to Marco Rubio's 2010 campaign for Senate in connection with the retirement of debt. However, the FEC website identifies this as a donation to "Rubio, Marco via Marco Rubio for President."

15. List all scholarships, fellowships, honorary degrees, honorary society memberships, military medals, and any other special recognition for outstanding service or achievements.

- Dean's Award in Appreciation for Dedicated Service to the Communications Law Student Association, Catholic University of America, Columbus School of Law (2005)
- Bishop Scholarship, Catholic University of America, Columbus School of Law (2002–2005)
- Note and Comment Editor, *Catholic University Law Review* (2004–2005)
- Member, *Catholic University Law Review* (2003–2004)
- Second Honors, Georgetown University (Fall 1999)
- Dean's List, Georgetown University (Spring 2000)

16. Please list each book, article, column, or publication you have authored, individually or with others. Also list any speeches that you have given on topics relevant to the position for which you have been nominated. Do not attach copies of these publications unless otherwise instructed.

Based on my recollection and research, I have identified the following:

- Panel Discussion, Modernizing Europe's Digital Rules, European Internet Forum and GSMA Mobile World Congress 2017, Barcelona, Spain (February 26, 2017)
- Panel Discussion, Meet the 8th Floor International Legal Advisors, Federal Communications Bar Association, Washington, D.C. (October 24, 2016)
- Panel Discussion, Hot Policy Topics, Competitive Carrier Association 2016 Annual Convention, Seattle, Washington (September 21, 2016)
- Panel Discussion, Emerging Issues in Wireless: The FCC and NTIA Perspective, CTIA Super Mobility 2016, Las Vegas, Nevada (September 7, 2016)
- Remarks at New Direction's Digital Single Market Summit, Brussels, Belgium (October 14, 2015)
- Panel Discussion, Washington Goes Mobile—FCC & NTIA Experts on the Issues, CTIA Super Mobility 2015, Las Vegas, Nevada (September 9, 2015)
- Panel Discussion, The Regulatory Landscape: Updates and Hot Issues in Washington, Competitive Carrier Association 2014 Annual Convention, Las Vegas, Nevada (September 9, 2014)
- Panel Discussion, A View from Washington, PCIA's 2014 Wireless Infrastructure Show, Orlando, Florida (May 20, 2014)
- Panel Discussion, Meet the Wireless Advisors, Federal Communications Bar Association, Washington, D.C. (March 20, 2014)
- Co-Author, Developments in Administrative Law and Regulatory Practice 2013 (Communications), ABA Section of Administrative Law and Regulatory Practice (2013)
- Co-Author, "Fifth Circuit Upholds FCC's Shot Clock/Tower Siting Ruling," Wiley Rein LLP (Winter 2012)
- Co-Author, "FCC Provides Guidance on Net Neutrality Rules," Wiley Rein LLP (Summer 2011)
- Co-Author, "FCC Adopts Net Neutrality Rules," Wiley Rein LLP (Winter 2010)
- Speaker, "Regulatory Year In Review," 37th Annual ACUTA Conference, Las Vegas (Summer 2008)
- Speaker, "Regulatory Update From Washington," 36th Annual ACUTA Conference, Miami (Summer 2007)
- Speaker, "E-Discovery: What Your Lawyer Wants From You," Voice Report Podcast (Spring 2007)
- Speaker, "2006 Legislative & Regulatory Wrap-up," ACUTA Seminar, Washington (Winter 2007)
- Co-Author, "How Federal Preemption Helps Tower Owners," Above Ground Level Magazine (Fall 2006)

17. Please identify each instance in which you have testified orally or in writing before Congress in a governmental or non-governmental capacity and specify the date and subject matter of each testimony. None.

18. Given the current mission, major programs, and major operational objectives of the department/agency to which you have been nominated, what in your back-

ground or employment experience do you believe affirmatively qualifies you for appointment to the position for which you have been nominated, and why do you wish to serve in that position?

I believe my background and experience qualifies me to serve as a Commissioner at the FCC. I went to law school fifteen years ago to study communications law and policy, and I ultimately obtained a certificate in communications law studies in addition to my J.D.

During law school, I interned twice at the FCC and once with the U.S. House of Representatives, Committee on Energy and Commerce, Subcommittee on Communications, Technology, and the Internet. Those experiences provided me with valuable insights, and many of the professionals I met during those internships continue to be my mentors and friends. Those experiences also confirmed that I made the right decision to study communications law, and they solidified my interest in spending my career working as a lawyer on telecom issues.

After graduating law school, I accepted a job at a law firm where I could gain broad experience working on various telecom issues.

The law firm experience also helped sharpen my legal research and writing skills. I later accepted an appellate clerkship, which gave me the chance to learn how judges make decisions. It also provided me with exposure to many different areas of law and improved my analytical skills.

Given my interest in telecom, I applied over five years ago for a GS position with the FCC's Office of General Counsel. It was an honor to get the chance to work at the FCC. In that job, I focused on providing legal advice to FCC staff in the agency's wireless, public safety, and international bureaus, and I learned a lot about the agency's processes and procedures. Following that experience, I served for nearly three years as an advisor to FCC Commissioner Ajit Pai on wireless, public safety, and international issues. Since then, I have been serving as the FCC's General Counsel, where I provide legal advice to the Commission and FCC staff on all matters within the agency's jurisdiction.

I believe these experiences show that I am qualified to serve as a Commissioner.

Turning to the second part of the question, I wish to serve as a Commissioner because I believe in public service and in the FCC's mission. The American public has much to gain from telecom policies that promote their interests, that create good-paying jobs, that grow the economy, and that help unleash new innovations. I want to work on putting those policies in place. Whether it is promoting broadband infrastructure deployment, facilitating the roll out of 5G technologies, protecting consumers, or advancing public safety, the agency and its talented staff make a real difference in the lives of all Americans. It would be an honor and a privilege to work as an FCC Commissioner and, alongside the many skilled professionals at the agency, help put telecom policies in place that will advance the public interest.

19. What do you believe are your responsibilities, if confirmed, to ensure that the department/agency has proper management and accounting controls, and what experience do you have in managing a large organization?

The Commission has an obligation to ensure that there are proper management and accounting controls in place so that the American public knows that their government is operating in an effective and efficient manner. If confirmed, I would work to ensure that the agency follows strong internal controls, and I would want to take as active a role as possible in ensuring that the agency is properly managed.

With respect to my own management experience, I have served as the FCC's General Counsel, which includes overseeing a staff of about 80 people. The Office of General Counsel reviews nearly every major action the FCC takes and is responsible for advising all Commissioners, the heads of the agency's bureaus and offices, and all FCC staff on matters before the agency. The Office of General Counsel consists primarily of an Administrative Law Division, which provides FCC leadership and staff with legal advice on a broad range of communications and general administrative law issues, and a Litigation Division, which represents the Commission in Federal court when parties challenge an agency action. As the General Counsel, my job is to supervise and support this team. I have done my best to accomplish this by being proactive, meeting formally and informally with the professionals in the group, timely reviewing, drafting, and providing feedback on matters, and actively helping the team to identify and implement practical solutions to the many questions that are presented to the Office of General Counsel for review.

20. What do you believe to be the top three challenges facing the department/agency, and why?

1. *Promoting Broadband Deployment.* One of the key challenges the FCC faces is ensuring that every American has access to broadband. In the five years that

I have worked at the FCC, I have had the chance to meet consumers, innovators, and entrepreneurs from across the Nation that depend on broadband access for jobs and opportunity. So the FCC must continue to promote policies that will spur broadband deployment and competition throughout the country. Getting this right is important because the connectivity and opportunity broadband deployment enables can harness the talents of all Americans, create good-paying jobs, and help promote our Nation's economic recovery. If confirmed, I would work to ensure that the FCC pursues policies that will promote broadband deployment and competition.

2. *Maintaining U.S. Leadership in Wireless.* The wireless market in the United States has been the envy of the world. The policies the FCC put in place a decade ago resulted in this country becoming the leader in the deployment of 4G wireless technologies. The challenge is to ensure that we maintain that leadership as 5G and other advanced and competitive wireless networks (terrestrial and satellite alike) come online. Spectrum and infrastructure are going to play key roles in determining whether we meet that challenge. On the spectrum front, the FCC must continue to pursue an all-of-the-above approach. We need a spectrum pipeline that can deliver a mix of low-, mid-, and high-band spectrum into the market. And we need to ensure that providers can choose from a mix of licensed, unlicensed, and shared spectrum bands to meet consumer demand. On the infrastructure side, the FCC must take a fresh look at its approach and ensure that its policies are tailored to promoting next-generation deployments. If confirmed, I would work to ensure that the U.S. maintains its leadership in wireless.
3. *Promoting Public Safety:* While technology continues to evolve, one constant is the FCC's obligation to promote public safety. This includes taking steps to facilitate the transition to Next-Generation 911 (or NG911), which can bring innovative solutions to our public safety community and life-saving advances to those in need of emergency services. It also means that the FCC must play its part in ensuring that public safety officials and first responders have access to the advanced communications technologies that will allow them to do their jobs safely and effectively. If confirmed, I would work with all stakeholders to ensure that the agency is fulfilling its public safety obligations.

B. POTENTIAL CONFLICTS OF INTEREST

1. Describe all financial arrangements, deferred compensation agreements, and other continuing dealings with business associates, clients, or customers. Please include information related to retirement accounts.

During my time working at Wiley Rein LLP, I contributed to and participated in the firm's 401(k) plan, which included a matching contribution from the firm. That plan is with Fidelity Investments. Neither I nor my former employer have made any further contributions to the defined contribution plan, which is a diversified holding, after I left my former employer in 2012.

2. Do you have any commitments or agreements, formal or informal, to maintain employment, affiliation, or practice with any business, association or other organization during your appointment? If so, please explain. No.

3. Indicate any investments, obligations, liabilities, or other relationships which could involve potential conflicts of interest in the position to which you have been nominated.

In connection with the nomination process, I have consulted with the Office of Government Ethics and the FCC's Alternate Designated Agency Ethics Official to identify any potential conflicts of interest. Any potential conflicts of interest that might arise will be resolved in accordance with the terms of my ethics agreement with FCC's Alternate Designated Agency Ethics Official. I understand that my ethics agreement has been provided to the Committee. I am not aware of any potential conflicts of interest other than any that are the subject of my ethics agreement.

4. Describe any business relationship, dealing, or financial transaction which you have had during the last ten years, whether for yourself, on behalf of a client, or acting as an agent, that could in any way constitute or result in a possible conflict of interest in the position to which you have been nominated.

In connection with the nomination process, I have consulted with the Office of Government Ethics and the FCC's Alternate Designated Agency Ethics Official to identify any potential conflicts of interest. Any potential conflicts of interest that might arise will be resolved in accordance with the terms of my ethics agreement with FCC's Alternate Designated Agency Ethics Official. I understand that my ethics agreement has been provided to the Committee. I am not aware of any potential conflicts of interest other than any that are the subject of my ethics agreement.

5. Describe any activity during the past ten years in which you have been engaged for the purpose of directly or indirectly influencing the passage, defeat, or modification of any legislation or affecting the administration and execution of law or public policy.

For the past five years, I have worked at the FCC and been involved in various public policy debates on a wide-range of communications law issues. In my time at the agency, I have also been asked on occasion to review or discuss legislative proposals. Prior to joining the FCC, I was an associate at a law firm where I worked on a broad spectrum of communications and other issues. At no time in my career, however, have I been a registered lobbyist.

6. Explain how you will resolve any potential conflict of interest, including any that may be disclosed by your responses to the above items.

Any potential conflicts of interest will be resolved in accordance with the terms of my ethics agreement with the FCC's Alternate Designated Agency Ethics Official, which I understand has been provided to the Committee.

C. LEGAL MATTERS

1. Have you ever been disciplined or cited for a breach of ethics, professional misconduct, or retaliation by, or been the subject of a complaint to, any court, administrative agency, the Office of Special Counsel, professional association, disciplinary committee, or other professional group? If yes:

- Provide the name of agency, association, committee, or group;
- Provide the date the citation, disciplinary action, complaint, or personnel action was issued or initiated;
- Describe the citation, disciplinary action, complaint, or personnel action;
- Provide the results of the citation, disciplinary action, complaint, or personnel action.

No.

2. Have you ever been investigated, arrested, charged, or held by any Federal, State, or other law enforcement authority of any Federal, State, county, or municipal entity, other than for a minor traffic offense? If so, please explain. No.

3. Have you or any business or nonprofit of which you are or were an officer ever been involved as a party in an administrative agency proceeding, criminal proceeding, or civil litigation? If so, please explain. No.

4. Have you ever been convicted (including pleas of guilty or *nolo contendere*) of any criminal violation other than a minor traffic offense? If so, please explain. No.

5. Have you ever been accused, formally or informally, of sexual harassment or discrimination on the basis of sex, race, religion, or any other basis? If so, please explain. No.

6. Please advise the Committee of any additional information, favorable or unfavorable, which you feel should be disclosed in connection with your nomination. None.

D. RELATIONSHIP WITH COMMITTEE

1. Will you ensure that your department/agency complies with deadlines for information set by congressional committees? Yes.

2. Will you ensure that your department/agency does whatever it can to protect congressional witnesses and whistle blowers from reprisal for their testimony and disclosures? Yes.

3. Will you cooperate in providing the Committee with requested witnesses, including technical experts and career employees, with firsthand knowledge of matters of interest to the Committee? Yes.

4. Are you willing to appear and testify before any duly constituted committee of the Congress on such occasions as you may be reasonably requested to do so? Yes.

RESUMÉ OF BRENDAN CARR

Experience

Federal Communications Commission, Washington, DC

General Counsel, Office of General Counsel (April 2017–Present)

Acting General Counsel, Office of General Counsel (Jan. 2017–April 2017)

- Chief legal advisor to the Commission and FCC staff on all matters within the agency's jurisdiction, including broadband, wireless, wireline, media, consumer protection, public safety, enforcement, and competition matters
- Manage staff of about 80 lawyers and other professionals

- Advise all FCC personnel on compliance with ethics laws and serve as the agency's head ethics official

Federal Communications Commission, Washington, DC

Legal Advisor, Office of Commissioner Ajit Pai (Feb. 2014–Jan. 2017)

- Served as legal advisor on wireless, public safety, and international issues
- Developed policies that promote broadband deployment
- Worked with FCC staff across the agency to implement key policy priorities

Federal Communications Commission, Washington, DC

Attorney, Office of General Counsel, Administrative Law Division (July 2012–Feb. 2014)

- Provided legal and strategic advice on a broad range of wireless, public safety, and international matters
- Advised the Commission on its legal authority to achieve various competition and spectrum policy goals

Wiley Rein LLP, Washington, DC

Associate, Communications, Litigation, and Appellate Groups (Sept. 2005–Aug. 2008 & Aug. 2009–June 2012)

- Researched and drafted appellate briefs in cases involving appeals of FCC orders and other matters
- Advised clients regarding compliance with the Communications Act and other Federal and state laws

U.S. Court of Appeals for the Fourth Circuit, Columbia, SC

Law Clerk, Judge Dennis W. Shedd (Aug. 2008–July 2009)

U.S. House of Representatives, Committee on Energy and Commerce, Washington, DC

Legal Intern, Subcommittee on Communications, Technology, and the Internet (Jan. 2004–May 2004)

Federal Communications Commission, Washington, DC

Legal Intern, Office of Commissioner Kathleen Abernathy (Sept. 2003–Dec. 2003)

Federal Communications Commission, Washington, DC

Law Clerk, Enforcement Bureau, Spectrum Enforcement Division (May 2003–Aug. 2003)

Education

Catholic University of America, Columbus School of Law, Washington, DC

J.D. Magna Cum Laude and Certificate, Institute for Communications Law Studies (May 2005)

Catholic University Law Review, Note and Comment Editor Vol. 54; Staff Member Vol. 53; President, Communications Law Student Association; Recipient, Dean's Award; Bishop Scholar

Georgetown University, Georgetown College, Washington, DC

B.A. in Government with minors in History and Anthropology (May 2001)

Second Honors; Dean's List; Presented research paper at the Inter-disciplinary Student Conference

The CHAIRMAN. Thank you, Mr. Carr.

I'm going to start off, and I'm going to ask, because we're going to have a vote coming here quickly, and then the Republicans are all invited to the White House for a noon meeting. So we're going to have to try and wrap this up by that time. So if everybody can be respectful of everybody else's time, we'll try and move this along.

Chairman Pai, Ms. Rosenworcel, and, Mr. Carr, I know each of you appreciates the importance of cooperation between the FCC and Congress. Nevertheless, these nomination hearings give us an opportunity to underscore that point. If confirmed, will you pledge to work collaboratively with this Committee and its members to provide solid, thorough, and timely responses to our requests for information?

Chairman PAI. Yes.

Ms. ROSENWORCEL. Yes.

Mr. CARR. Yes.

The CHAIRMAN. And to the panel, in every broadband report since the FCC adopted its USF reforms in 2011, the Commission has stated that broadband is not being deployed to all Americans in a reasonable and timely fashion while also noting the disparity of broadband between urban and rural areas. Nonetheless, many of the small providers deploying broadband in the hardest to serve parts of America have seen USF funding for their project cut repeatedly and in increasing amounts. The law requires the FCC to ensure broadband is made available in rural areas in a manner that's reasonably comparable to services in urban areas, but by its own account, the FCC has failed to do so.

To each of you I would ask, will you commit to conducting a thorough economic analysis of the impact of these cuts on broadband deployment in rural areas before allowing any further reduction in the percentage of recovery for high-cost areas?

Chairman PAI. Yes.

Ms. ROSENWORCEL. Yes.

Mr. CARR. Yes.

The CHAIRMAN. Thank you.

Chairman Pai, you have proposed an FCC inquiry to evaluate new uses for mid-band spectrum, something that I called for in a letter to you last month. How can Congress support the FCC's efforts to bring mid-band spectrum forward for commercial use in a timely fashion? And what key issues does the FCC think will need to be addressed to make this happen?

Chairman PAI. Thank you for the question, Chairman. I think you highlighted in your letter one of the key areas of action that has long been dormant to the FCC. We traditionally have focused on bands below 3.7 gigahertz and above 24 gigahertz. And pursuant to your letter, we took a look at the lay of the land and thought this is ripe for a Notice of Inquiry. And so recently I proposed to my colleagues, and we'll be voting on soon, a Notice of Inquiry that would tee up a variety of bands between 3.7 and 24 gigahertz, in particular, the 3.7 band, the 5.9 band, and the 6.4 gigahertz bands. We are hopeful that these bands in particular will generate substantial public comment and that we will be able to maintain U.S. leadership in spectrum policy by figuring out which areas are possible for licensed and unlicensed innovation going forward.

In terms of the Committee's efforts, we would certainly want to keep you informed every step of the way. And if you have particular views on bands that you think the FCC should be focusing on, we would certainly welcome that input.

The CHAIRMAN. Thank you.

Commissioner Rosenworcel, in a hearing earlier this year on broadband infrastructure, we looked at how a number of states have passed legislation aimed at reducing barriers to broadband deployment. Some states and municipalities have streamlined their processes to foster private investment in new commercial services while others have not. To help address existing barriers, we are also exploring potential legislative solutions.

So the question is, apart from direct investment, what do you think can be done at the Federal level to speed broadband infrastructure and deployment?

Ms. ROSENWORCEL. Thank you, Senator, for the question. I think there are a variety of things that can be done, some of which have been discussed before this Committee, including “dig once” policies and ensuring that all Federal actors use the same contracts to facilitate deployment on Federal property.

Furthermore, I think it would be useful for the FCC going forward to contact other Federal actors in this country, like the Department of Transportation, the Department of the Interior, the Bureau of Indian Affairs, that have facilities all across the country and see if through a Memorandum of Understanding we can’t reach a commitment that any efforts to deploy or collocate on those facilities could be accomplished in a short period of time.

With one-third of the Nation’s lands being Federal lands, I think we can set a good example and hopefully export that example to municipalities across the country.

The CHAIRMAN. Thank you.

Chairman Pai, the National Legal and Policy Center reports that 1.3 million comments filed in the net neutrality proceeding are from international filers, with more than 300,000 coming from the same address in Russia in support of the 2015 Title II rules. And there have been many other stories of fake or abusive comments being filed.

So the question is, how do you weigh these kinds of suspicious comments with those comments that are more substantive and based on sound policy arguments?

Chairman PAI. Thank you for the question, Chairman. This is a key issue. Obviously, the FCC, in undertaking this Notice of Proposed Rulemaking, wanted to establish an open process where anyone who had an interest in the issue could voice his or her views. And to my understanding, there have been concerns on all sides about the veracity of some of these comments.

At the end of the day, once the comment period closes and the FCC’s talented staff takes stock of the facts in the record, we are ultimately guided by the Substantial Evidence Test, which is outlined in Section 706 of the Administrative Procedure Act and was expounded by the Supreme Court in the Consolo case in 1966. Essentially the question is, has the agency collected evidence that a reasonable person would agree would be adequate to support whatever conclusions were ultimately made? That has long been our lodestar on this and any other issue that we contemplate. And so that’s eventually the standard that we will apply, and we will figure out what the appropriate judgment is based on those facts that are in the record.

The CHAIRMAN. Thank you.

Senator Nelson.

Senator NELSON. Mr. Chairman, isn’t it interesting that we have to be concerned about comments being filed from Russia? It’s a new day.

Mr. Carr, I want to follow up a policy question, that it’s hard to recall a similar situation where someone was nominated to serve at the FCC alongside rather than what has been typical, to follow

their current boss. And, of course, it raises a question of independence. And it's necessary that this Committee raise this question of independence.

How independent can you be of Chairman Pai? Can you name for the Committee a time at which you substantively disagreed with Chairman Pai on an FCC matter or proceeding?

Mr. CARR. Senator, thank you very much for the question. I think it's a good one. Independence is critically important for the agency and for the decisionmakers at the agency. I've been at the Commission for over 5 years in a variety of roles. I've had various clients in those jobs, and I hope that I've always served their interests.

When I had the chance to work for the Commissioner, I gave him my best candid advice. Sometimes he took it, sometimes he didn't take it. What I can commit to you going forward is I'll make my own decisions, I'll call it the way I see it based on the facts, the record, and what I think serves the public interest independent of where other people come out. At the same time, I would hope that, if confirmed, all five Commissioners can find common ground far more often than not.

Senator NELSON. OK. But that's not the question. The question is, can you name an instance, substantive disagreement, as we evaluate your independence?

Mr. CARR. Senator, thank you. As I noted, I gave him my best advice I could on a variety of issues. He didn't always agree with me on those, but given the importance of having sort of a candid and free exchange with staff, and I think I want to leave it at that for now, that I can commit to you going forward that I'm going to be independent in my decisionmaking.

Senator NELSON. Well, we appreciate that commitment, but we've got to evaluate your independence. So you simply will not name an incidence for the Committee's evaluation where you might have disagreed with him.

Mr. CARR. Having been sort of a lawyer at the time for then Commissioner Pai, I think I just want to leave those discussions.

Senator NELSON. Well, let me ask you this: do you see any instances in the future that you would disagree with him?

Mr. CARR. I certainly have no interest in agreeing with him when I don't believe that that's the right outcome. As I've noted, my hope is the agency works best when we work in a bipartisan basis. I think the vast majority of what we do should be consensus based. I would look to work with all Commissioners if confirmed, but there is no one individual that once I make my mind up is going to move me off that position. I think my record over the years shows that I'm not a shrinking violet and I'm confident standing on my own feet and making these decisions.

Senator NELSON. Mr. Carr, that is not confidence building of those of us who are wondering about your future independence from the boss that you have so ably served in the last number of years.

Well, let me ask you about the E-rate program. It's a great success story of the 1996 Telecom Act. As you know, students have access that they never had before. Just in my state alone, libraries have received over \$160 million in E-rate funds in 2015, and this

program, it's making a real difference in the lives of citizens in our state.

The Nation's students and the teachers and the libraries are going to hold us accountable for any changes if we roll back the E-rate program, a bipartisan program I might say, that has been bringing Internet connectivity and broadband to schools and libraries.

So I asked the Chairman on previous occasions, and I will ask you now, will you commit to wait—and I will remind you the FCC previously said it would wait until at least next year before attempting to make changes to this critical program. We need to see how the FCC's previous E-rate modernization efforts are working in order to guarantee that the Nation, and, in particular, our students, can realize the benefits from the reform efforts. Can you make that commitment?

Mr. CARR. Senator, thank you for the question and thank you for the work that you've done on E-rate. I agree with you that this is a critically important program that is serving important needs. What I can commit to you is that I approach this issue with an open mind as to timing, as to outcome, and I don't have sort of a preordained view of the approach here.

Senator NELSON. So you cannot commit to waiting before we get those reports on evaluating the E-rate program?

Mr. CARR. Senator, I think it's important that before making any changes to a program, we know that if it's working or if it's not working, if it needs a tweak or if it in fact does not need a tweak.

Senator NELSON. Can you commit to waiting to see the evaluation before you start making changes to the E-rate program?

Mr. CARR. Senator, I'm not familiar with the specifics in terms of what that evaluation would be or what timeframe it would be, but I can commit to you that I would not be making or casting a vote to change a program until we had information about whether it was working or not working.

The CHAIRMAN. Thank you, Senator Nelson.
Next up is Senator Lee.

**STATEMENT OF HON. MIKE LEE,
U.S. SENATOR FROM UTAH**

Senator LEE. Thank you very much, Mr. Chairman.

Thanks to all of you for being here.

This hearing gives us a really good opportunity to talk about how the American people can best take advantage of emerging technologies that give people access to more information.

We're currently facing a lot of problems in this area, challenges I guess one could say. Some of those challenges are physical and logistical. Other challenges relate to and are the product of government interference, legal and regulatory problems that the Federal Government itself has created.

The Federal Communications Commission's 2015 Open Internet Order is the perfect example of the intrusive, heavy-handed government regulation causing delay in industry, causing uncertainty in the industry, and, in effect, in the long run, I believe, limiting access by the American people to this technology that has the ability to benefit so many people.

A recent *New York Times* article claimed that total investment by publicly traded broadband companies increased by 5.3 percent as compared to the two-year period immediately before the issuance of the 2015 Order, that is, during the two-year period encompassing 2013 and 2014, to the end of the two-year period immediately following it, that is, 2015 and 2016.

But this claim highlights a couple of major problems that result from overregulation, and I'll address each of them in turn.

First, it fails to disclose what the actual investment in infrastructure is. This 5.3 percent figure that I cited from the *New York Times* study refers to total top-line investment, not to capital investment in the United States, not to expenditure in this type of infrastructure here at home.

More accurately, domestic investment in broadband actually plummeted, it fell, after the 2015 Order, with some analysts finding reductions as large as 5.6 percent. So they're saying, in fact, that the relevant number actually went down, went down to an even greater degree than the *New York Times* article was suggesting it went up.

So first dealing with this issue, Mr. Pai, while it may not be possible to prove causation here definitively, would you agree that the FCC's 2015 Open Internet Order has discouraged companies from investing in broadband infrastructure, especially in rural areas and among smaller ISPs in the United States?

Chairman PAI. Senator, that is one of the concerns that we have raised, and that's part of the reason why we're testing that proposition in the context of the current Notice of Proposed Rulemaking.

Senator LEE. Now, I want to follow up on that with my second point, the second concern I have, with the point raised by the *New York Times* article. The second one is a little more abstract. If the Internet Service Providers are not investing in broadband infrastructure, then where is their money going? You know, they might conserve cash or pay dividends, but in many cases, Internet service providers choose simply to invest elsewhere, either overseas or in other industries.

For example, AT&T announced shortly after the 2015 Order was issued that it would spend over \$3 billion in Mexico to expand access to 100 million potential subscribers by 2018. Just as in countless other industries, overwhelming regulation of the Internet in the United States promotes consolidation instead of competition and helps incumbents instead of disruptors, competitors. And one thing we know about competition is when we have more of it, prices go down and quality goes up, and the opposite happens when we have less of it.

So, Mr. Pai, if our goal is to encourage domestic investment by and promote competition between Internet Service Providers in the United States, shouldn't we return to the Clinton era light-touch approach to the Internet?

Chairman PAI. Senator, that is what the FCC has proposed. And our goals here, of course, are to preserve the free and open Internet that all of us cherish, and to promote the massive infrastructure investment that is necessary to connect rural and urban Americans alike with digital opportunity. And that's what we're exploring in the context of the current proceeding.

Senator LEE. Thank you very much.
 Mr. Chairman, I see my time is expired.
 The CHAIRMAN. Thank you, Senator Lee.
 Senator Markey.

**STATEMENT OF HON. EDWARD MARKEY,
 U.S. SENATOR FROM MASSACHUSETTS**

Senator MARKEY. Thank you, Mr. Chairman.

Chairman Pai, in 2016, almost half of all venture capital funds invested in this country went toward Internet-specific and software companies. That's \$25 billion worth of investment. At the same time, to meet Americans' insatiable demand for the Internet, U.S. broadband, and telecommunications industry invested more than \$87 billion in capital expenditures in 2015, and that's the highest rate of annual investment in the last 10 years.

We've hit a sweet spot. The investment in broadband and wireless technology is high. Job creation is high. The venture capital investment in online startups is high. So these net neutrality protections are a problem. It doesn't need any fixing. The system is working. Yet, Mr. Chairman, you're proposing to undo the Open Internet Order. What is the problem, Mr. Chairman, that you are trying to fix?

Chairman PAI. Thank you for the question, Senator. I think one of the concerns that we have raised is that these regulations might be dampening infrastructure investment—

Senator MARKEY. They might be, but there is no evidence of it.

Chairman PAI. Well, there has been evidence raised, and that's part of the reason why we are testing this proposition in the context of the Notice of Proposed Rulemaking. Some have suggested the FCC should simply issue a declaratory ruling saying that the facts in the law are so, and that's the way it's going to be, but we wanted to test this proposition in an open and public process.

Senator MARKEY. Well, you know, publicly traded companies are required by law to provide investors accurate financial information, including reporting any risks or financial burdens. However, I have found no publicly traded ISP that has reported to its investors by law that Title II has negatively impacted investment in their networks. Many, in fact, have increased deployment and investment.

So what is the evidence that you're relying upon that you proceed with toward a potential repeal of these net neutrality protections?

Chairman PAI. Senator, in the Notice of Proposed Rulemaking, we cited some evidence that among the top 12 Internet service providers in terms of size, that investment was down. Also, a number of smaller providers, including municipal broadband providers, fixed wireless providers, small cable companies, and other submitted evidence. But we want to hear that perspective as well, that you just outlined.

And so we want to make sure, what are the facts in this context? And, again, this is part of the reason why we have a notice-and-comment process as opposed to simply the administering of decree that we find that these rules are in fact harming them or going to get rid of them immediately.

Senator MARKEY. Yes. Well, since these net neutrality rules have been in place, the Internet has thrived. We've seen tremendous job

creation. It's the spot where younger people, newer companies, go. It's an entrepreneurial engine of growth, the greatest that we've had in generations in the country's history. And so from my perspective, as you look at this, I feel that the evidence right now is not there. And if it was, the companies, the broadband companies themselves, would have been in fact providing that evidence to their investors in their filings, and they have not done so.

So anecdotal evidence is not evidence. OK? There is no factual basis for that change, and I just think it's going to go right to the heart of the Internet's growth and job creation in the coming generations.

Now, if I could, just moving on to the E-rate, I was the House author of the E-rate when it passed in 1996 into law. Is there any question in your mind, Mr. Chairman, that this program is working and that the funding levels are at a level that meet the needs of our country?

Chairman PAI. Senator, for years I've said that E-rate is a program worth fighting for, and that is not an abstraction to me. I visited an Alaska Native school in Fort Yukon, Alaska. I visited libraries in Sioux Falls, South Dakota. I've seen how the program is working, and we want to extend that to every student and every library patron in the country.

Senator MARKEY. So you will commit to us that you will preserve the success of this bipartisan program and not decrease its funding level or the programmatic changes that undermine or weaken the E-rate?

Chairman PAI. Senator, we have not made any decisions on that score. We're trying at this point to make sure that the program works—

Senator MARKEY. So you won't make a commitment that you won't reduce the funding?

Chairman PAI. Well, Senator, we're studying obviously ways to improve the program, if there's any way to make it better—

Senator MARKEY. Ms. Rosenworcel, will you commit that you won't reduce the funding?

Ms. ROSENWORCEL. E-rate is our Nation's largest education technology program, and it is a successful one, and I believe that the changes that were put in place in 2015 have been successful. They have reached schools and students in every state across this country.

Senator MARKEY. Mr. Carr, will you commit that you won't reduce the funding?

Mr. CARR. Senator, thank you. I have an open mind as to what the budget and the numbers should be, and I'm happy to make a decision when the record is developed on it.

Senator MARKEY. Yes. Well, I haven't heard clear commitments, and I think that's very troubling, to be honest with you, because this is the democratizing force within our society. As each of you made clear, you believe that it's key for our future. Reducing the funding, of course, is not going to help to make sure that every child in our country has access to the technology they're going to need in order to compete not only in our own country, but globally in the 21st century. So I have not been satisfied with the answers which I've heard.

Again, Ms. Rosenworcel, are you saying that you will not reduce the funding?

Ms. ROSENWORCEL. I will not reduce the funding.

Senator MARKEY. Thank you.

So, Mr. Carr, Mr. Pai, I wish that I heard the same commitment from you as well.

Thank you, Mr. Chairman.

Senator MORAN [presiding]. Thank you, Senator Markey.

I arrived at the appropriate time in which it's my turn to talk and also hold the gavel.

[Laughter.]

Senator MORAN. Let me start with all three of our nominees. We're following the repack issue closely. Last week, the FCC announced that the total reported reimbursement costs received from broadcasters who are required to repack as a result of the spectrum auction was over \$2.1 billion. We know that the TV Broadcaster Relocation Fund, is only authorized to \$1.75 billion. If that \$2.1 billion is a correct number, then there is a significant funding shortfall.

Any requests or suggestions that the Commission and Congress need to act to provide additional resources to prevent broadcasters from going dark? And do you believe that the 39-month repack deadline is sufficient?

Chairman PAI. Senator, thank you for the question. As you pointed out, the estimates have come in a little bit above \$2.1 billion. Our fund administrator, as well as the FCC's career staff, will have to evaluate those cost estimates and determine whether they are appropriate or not. That number of 2.1 could go down, it could go up. But I am in a position to say at this point that we expect, our anticipation is, that the required expenses to reimburse these broadcasters will be above \$1.75 billion. And so I would expect that it would be necessary, if broadcasters are to be held harmless in this repack, that Congress would have to provide additional funding.

Senator MORAN. Either of the other nominees want to add anything? Let me follow up, if not, about the time deadline.

Chairman PAI. Oh, yes, Senator. So we are obviously—this is a very complex process. We have a number of different phases to which broadcasters have been assigned. We have also given broadcasters the opportunity to seek placement in a different phase, and some of them have taken advantage of that. So I'm not in a position at this point to say whether the 39-month period is not going to be sufficient, but if we get any semblance of the record that would suggest that it isn't going to be sufficient, then we will certainly notify the Committee promptly.

Senator MORAN. Thank you. Let me turn to 5G. We're the world leader in 4G. I'm worried that we're not taking the necessary steps to maintain that leadership as we attempt to deploy 5G. I'm told by carriers that the regulatory barriers to deploy small cell networks are outdated, hampering investment and economic growth. Would you agree that 5G deployment is critical for our economy? And what steps, if so, is the FCC taking to eliminate barriers and cost to deployment?

Chairman PAI. Senator, I do believe it is absolutely essential for 5G to develop quickly. And our goal is to make sure that the U.S. is at the forefront of innovation and 5G.

There are two basic building blocks in terms of a successful 5G economy in my view, one is spectrum and one is infrastructure. With respect to spectrum, I think the agency has spoken for several years now with a unified voice, that we want to be as inclusive as we can in terms of low-, mid-, and high-band spectrum. We want to tee up as much spectrum as we can for commercial use and for 5G innovators to experiment with, and that's part of the reason why, as I pointed out to Chairman Thune, that we have teed up this mid-band Notice of Inquiry that we'll be voting on, on August 3.

In terms of infrastructure, you pointed out one of the key problems is that there's a lot of infrastructure that's required for 5G networks. Instead of large cell towers, we're talking about thousands, tens of thousands, of small cells and other small infrastructure. But we need to make sure that our regulatory review is tailored to the nature of the deployment and to make sure that we work cooperatively with all stakeholders, including governments, in order to make sure that our 5G economy thrives consistent with the public interest.

Senator MORAN. Commissioner Rosenworcel or Mr. Carr?

Ms. ROSENWORCEL. Thank you for the question. On a going-forward basis, the network topology of 5G is going to be very different than what it was in 4G. We're going to have small cells dotting our landscape. And so we're going to need to make sure that not just FCC policies, but national environmental policy and national historic preservation policies are adjusted to reflect the realities of those facilities, which are very different than traditional large cell towers or macrocells.

Senator MORAN. Thank you.

Mr. CARR. I would echo those same points. You know, 5G deployment is going to look very different, and I tend to view it through not just innovations, but jobs and economy. If we get the framework right, it could be \$275 billion in investment over the next decade to deploy 5G. That could be 3 million new jobs, and when you combine it with IoT, you're looking at a trillion dollar boost to the economy. So we need to get this piece of it right.

Senator MORAN. Thank you all three. Let me ask Chairman Pai a final question. When do you expect to have the proceedings finalized and begin to make spectrum available? What is the status of the spectrum frontier proceedings?

Chairman PAI. Senator, we don't have a particular timeframe that I can report to the Committee at this point, but we are actively studying it and we are working with stakeholders to figure out those parts of the spectrum frontier bands that were teed up where we can take action, and if there are other areas where more deliberation is needed, we will obviously put those on hold. So I can't give you a specific timeframe, but I can tell you that it's the top priority in terms of spectrum policy at the Commission.

Senator MORAN. Thank you all three.

Senator Schatz.

**STATEMENT OF HON. BRIAN SCHATZ,
U.S. SENATOR FROM HAWAII**

Senator SCHATZ. Thank you, Mr. Chairman.

Thank you to all the nominees and their families. Congratulations. I wanted to follow up on a question.

Mr. Carr, I wanted to ask you the first question. Whether it's 7, 8, 9, 10 million comments, is it fair to say this is a record number of comments?

Mr. CARR. I believe that's right, Senator, yes.

Senator SCHATZ. So my question for you is, what weight does that get in the process? I understand you have a legal standard when considering this matter, but what weight does the fact that millions of people have expressed themselves with the FCC, a historic number, what weight does that get?

Mr. CARR. I think it's very important. I think it shows the level of interest and the passion in this issue, and that's something that we need to be taking into account.

Senator SCHATZ. Thank you.

Commissioner Pai, during your confirmation hearing, I asked if you agreed with the President's comments calling the media the enemy of the state? At the time, you didn't answer the question totally on point, and I understand. You're a Trump appointee, and you're trying to strike that right balance in terms of being an independent agency, but still understanding that you're a Trump appointee, and not wading into either Presidential politics or partisan politics, but since then, the President has made a number of additional comments about the media. He consistently refers to the media as "fake news media," "garbage media," and made unsubstantiated claims about various networks and newspapers. For example, on July 2, the President posted a video of himself wrestling CNN with the hashtag "FraudNewsCNN." On June 28, the President tweeted, "The AmazonWashingtonPost, sometimes referred to as the guardian of Amazon not paying Internet taxes, which they should, is fake news."

So the question I have for you, Chairman Pai, is since we last heard from you, and given that context, have there been any direct or indirect communications about the media between you, your office, and the White House that this Committee should be aware of?

Chairman PAI. Senator, thank you for the question. I have consistently stated that I believe, and I dare say my colleagues at the FCC believe, that First Amendment freedoms, including the freedom of the press are critical, that we value what broadcasters, newspapers, and others do to keep people informed, and I have consistently stood up for that value throughout my time at the Commission. And if I were ever asked by anyone in the administration to take retaliatory action, for instance, in a media regulatory proceeding, I would not do so.

Senator SCHATZ. OK. So have there been any communications about the media between you, your office, and the White House that the Committee should be aware of?

Chairman PAI. Senator, I have been aware of the comments that the President has made and—

Senator SCHATZ. Right, but has there been any communication that this Committee should be aware of in light of the exchange

that you've had with members of the Committee during the confirmation hearing? I understand your position, and I understand that you're saying were you to ever be asked to do anything inappropriate, you would decline to do anything inappropriate. My question is, have there been any overtures or communications, direct or indirect, that we ought to be aware of in light of the sort of unsatisfactory resolution of this issue in the first hearing?

Chairman PAI. Senator, I don't believe so, but if that ever changes, I commit to the Committee and to you that I will make sure that you are informed.

Senator SCHATZ. Thank you.

Mr. Carr, in 2014, when President Obama expressed his support for net neutrality rules, the Department of Commerce submitted an ex parte notice with the FCC officially putting the President's statement in the record. Did the White House, this White House, file an ex parte with the FCC yesterday when it announced its support for the current proceeding to unravel the Open Internet Order?

Mr. CARR. I personally am not aware of any filing at this time.

Senator SCHATZ. Is one required? As GC of the Commission, do you believe one is required?

Mr. CARR. There is sort of a reticulated standard under the ex parte rules—

Senator SCHATZ. A what standard?

Mr. CARR. A reticulated detailed standard in the ex parte rules. And I would have to refresh my recollection of how those rules work and whether that would be implicated—

Senator SCHATZ. Can you follow up with the Committee on this issue?

Mr. CARR. I'm happy to.

Senator SCHATZ. Commissioner Rosenworcel, I have no questions for you except to say thank you for your public service and your patience. Thank you to your family. What happened to you is unfair. We have to move expeditiously on your nomination.

And a quick question for each of the nominees. On E-rate, Hawaii is one of the Nation's leaders in school broadband thanks to E-rate modernization. Do you commit to keeping the current E-rate program intact to ensure that all of our country's students can get the connectivity that they need?

Chairman PAI. Senator, absolutely. I believe in a strong E-rate program, and that is my commitment going forward.

Senator SCHATZ. Thank you.

Ms. ROSENWORCEL. Yes, absolutely.

Mr. CARR. Yes, I agree.

Senator SCHATZ. Thank you.

Senator MORAN. Senator Blumenthal is recognized.

Senator BLUMENTHAL. Thanks, Senator Moran.

Chairman Pai, thank you for the conversation we had yesterday. I want to pursue just very quickly the questions that my colleague Senator Schatz asked regarding contacts with the White House. Are you aware of any contacts or intervention by the White House in any past or pending merger, including the AT&T/Time Warner merger?

Chairman PAI. Senator, I am not. No one at the White House has ever weighed in with me and indirectly with the staff, as far as I know, on any pending transaction.

Senator BLUMENTHAL. Those kinds of contacts would be absolutely improper and probably illegal, correct?

Chairman PAI. Well, Senator, I would defer to others as to legality, but I'll simply say that as a leader of an independent agency, it is our goal to be an independent actor reviewing the facts in the law as we see them and not as others might see them.

Senator BLUMENTHAL. I've been alarmed by reports, and I've written to the nominee by the Trump administration for Assistant Attorney General for Antitrust expressing my concern about those reports that indicated that the White House might try to use the merger as a way to impede or intimidate the exercise of First Amendment rights, and you would be troubled as well, I would assume.

Chairman PAI. Senator, absolutely. As I suggested to you yesterday, I'm an antitrust lawyer by training. I look at the facts in the law and I don't allow extraneous political considerations to intrude on that inquiry.

Senator BLUMENTHAL. Thank you. Are you familiar with the lawsuit brought by state attorneys general against broadband providers for advertising or offering speeds that they have failed to deliver?

Chairman PAI. I've seen press reports of one. I'm not aware if there's a class action of some sort that I should be aware of.

Senator BLUMENTHAL. As a former attorney general, the allegations in the complaint certainly seem to me like fraud. They're charging customers for Internet speeds they fail to provide, which seems a little bit like theft, stealing. Would you agree?

Chairman PAI. Well, Senator, I'm not aware of those particular allegations, but obviously I believe, as we made clear last week when we took action on slamming and cramming, that a consumer should get what they pay for, and they should not have to pay for what they did not ask for.

Senator BLUMENTHAL. As you know, Section 706 of the Telecommunications Act requires the FCC to report annually on whether broadband Internet is being deployed to, quote, "all Americans in a responsible and timely fashion," end quote, and to take immediate action if it is not. So I would assume that it would be important to you in fulfilling that obligation, conducting that review, that companies lying to you about what the speeds they're delivering to their customers would prompt some action by the FCC, correct?

Chairman PAI. Well, Senator, I am not familiar with that interpretation of Section 706. Traditionally, it has been focused more on deployment, but I'll be happy to take a look at that or any other legal authority that the FCC might have to vindicate consumer interests.

Senator BLUMENTHAL. Would you commit to reviewing the lawsuit that has been brought by 35 states and taking action, if appropriate?

Chairman PAI. Senator, absolutely. If you wouldn't mind, I will follow up with your staff and give you the answers that you need.

Senator BLUMENTHAL. I want to talk briefly about the cost of wired broadband. Are prices for broadband Internet going up or down?

Chairman PAI. Senator, it depends on the marketplace. I think that in some places it is prohibitively expensive, in some places where there is more competition, the prices are lower. And our goal is obviously both ubiquitous access and broad competition in all markets so that every consumer has a fair chance to enjoy the benefits of the digital revolution.

Senator BLUMENTHAL. I think that the FCC has a responsibility to know what's happening with broadband prices, does it not?

Chairman PAI. It does, but again it depends on the particular marketplace. Every marketplace is different. And so overall we want to make sure that we have rules in place that promote competition in every single jurisdiction.

Senator BLUMENTHAL. Do you have an overall assessment of whether broadband prices are going up or down?

Chairman PAI. I don't currently. That's part of the reason why we've initiated a Section 706 inquiry that I proposed to my colleagues back in June. And so that's one of the reasons why we teed that up, is to figure out, what are the facts in the marketplace as of 2017? The most recent one was done a couple of years ago.

Senator BLUMENTHAL. I would like to invite comments by any of the other nominees.

Ms. ROSENWORCEL. Thank you for the question, Senator Blumenthal. This is purely anecdotal. In my house, the cost is going up. I believe that the agency has a responsibility to assess the deployment of broadband pursuant to Section 706, as the Chairman mentioned. And I think on a going-forward basis, it would be useful if price was a consideration in that assessment. I think consumers would benefit from that.

Senator BLUMENTHAL. Mr. Carr?

Mr. CARR. Senator, thank you for the question. I agree. I think we need to be taking full stock of the market when we're deciding whether it is competitive or not.

Senator BLUMENTHAL. Thank you.

My time is expired. So there are a lot of other questions, including going into this one in greater depth, and I look forward to working with you on them.

Thank you.

Senator WICKER [presiding]. Senator Gardner.

Senator GARDNER. Thank you, Mr. Chairman. And thank you again to our nominees today.

Chairman Pai, always great to see you, and thank you for appearing today in this nomination hearing. As we've discussed many times before, we have an orphan county issue in Southwest Colorado preventing Coloradans from receiving Colorado TV, an issue that Commissioner Rosenworcel, I believe, saw firsthand during her last tenure at the Commission.

While the FCC approved La Plata County's decision in Southwestern Colorado, their initial market modification application, out-of-state broadcasters lodged opposition against it. And we've had back-and-forth comments now. It's my understanding that the

FCC record is complete, and the Commission may either reaffirm or reverse their original approval decision.

It's my hope that the Commission will act swiftly to make a decision on this issue, and I would just like to have your commitment that the Commission will review the La Plata County application and make a decision on review of the comments submitted.

Chairman PAI. Absolutely, Senator, I will.

Senator GARDNER. Thank you.

The rest of the Commissioners, if you would like to follow up on that.

Ms. ROSENWORCEL. If confirmed, yes.

Senator GARDNER. Thank you.

Mr. CARR. Yes.

Senator GARDNER. Thank you.

Mr. Carr, we're facing a spectrum crunch in the United States as more and more consumers opt to stream video and use other intensive applications over their mobile wireless and Wi-Fi devices. The economy benefits from billions of dollars annually being invested in expanding access to commercial spectrum and seeing platforms and devices develop over the airwaves. And I think we have to have a mix of low-band, mid-band, and high-band spectrum to continue this incredible economic progress.

And so, Mr. Carr, do you believe it's important for Congress to promote the benefits of establishing a spectrum pipeline to highlight the need for continuing to free up spectrum for commercial use through relocation and better coordination among incumbents?

Mr. CARR. Thank you, Senator. Yes, I do. And when you look at data traffic from 2010 to 2016, some estimates say it's grown 35 times over that period of time. So I think we need an all-of-the-above approach. And I think your efforts and those of Congress on the spectrum pipeline would be very welcome.

Senator GARDNER. If other nominees would like to comment on that.

Ms. ROSENWORCEL. The answer is yes.

Senator GARDNER. Thank you.

Chairman PAI. Yes, Senator.

Senator GARDNER. Very good. Thank you.

Chairman Pai, I want to commend the Commission for releasing a draft order on Mobility Fund Phase II that recognizes the existing Form 477 data is not adequate for determining accurate mobile coverage across the country. And I would hope to get your commitment at the Commission that the Commission will continue to work to ensure that mapping data used at the FCC represents an accurate on-the-ground account of mobile coverage.

Chairman PAI. Absolutely, Senator. We're going to be voting on August 3 on some steps that make sure that the data we take into the Commission is accurate so that our output is similarly worthy of the American people's trust.

Senator GARDNER. Thank you. Because obviously in the Western Slope of Colorado, where you have significant mountains, valleys, and peaks, and the Eastern Plains, we have vast expanses of land that appears to have cell phone coverage on the map, I can tell you the mile marker where the map is not true.

[Laughter.]

Senator GARDNER. Commissioner Rosenworcel, if confirmed, will you also work to ensure the Commission's mapping is accurate? Mr. Carr? Do both of you want to answer that?

Ms. ROSENWORCEL. Yes.

Mr. CARR. Yes.

Senator GARDNER. Thank you.

Chairman Pai, the United States obviously being an incredible leader in 5G technology, and I think you and Senator Moran had a discussion about that, but I would just reiterate the importance of 5G, the opportunities that it poses for this country, the challenges it poses, and how we can work together to address it. So I know you've already covered that, but thank you.

And I know a number of members wait to question, and I'll yield back my time.

Senator WICKER. Thank you. Thank you.

And Senator Fischer is next.

**STATEMENT OF HON. DEB FISCHER,
U.S. SENATOR FROM NEBRASKA**

Senator FISCHER. Thank you, Senator Wicker.

Thank you, Chairman Pai, for visiting Nebraska. A couple of years ago we had some good meetings with stakeholders, a couple different meetings. I understand you took a road trip recently, and you bypassed our state.

[Laughter.]

Senator FISCHER. So we hope to get you back there soon.

As you know, Senator Klobuchar and I, along with more than 50 of our Senate colleagues, sent you a letter in April, and we urged the FCC to take steps to ensure that rural consumers can purchase standalone broadband. And I want to thank you for your response and for your acknowledgement that this is a problem and it's not yet fixed.

Will you commit to continue working with your colleagues and with Congress to solve this problem so that our rural consumers can have that in a timely way?

Chairman PAI. I will, Senator, absolutely.

Senator FISCHER. And I would ask Commissioner Rosenworcel the same question.

Ms. ROSENWORCEL. If confirmed, yes.

Senator FISCHER. And, Mr. Carr.

Mr. CARR. Yes, Senator.

Senator FISCHER. Thank you.

Chairman Pai, in Nebraska, we have several counties that are considered orphan counties, and Senator Gardner just spoke about some of them, and that means they're in a designated market area for a state other than Nebraska, and I think it's 26 of our counties out of 93 that are affected by this.

In 2015, following the directions set by Congress in the Satellite Reauthorization bill, the FCC adopted rules to make it easier for people living in those orphan counties to access in-state programming. And while these modifications are a good step, I still am concerned that they really are too burdensome, and they're really complicated for small communities to be able to undertake those. What's your opinion of them?

Chairman PAI. Senator, we want to make the process easier, and that's part of the reason why we have adopted some reforms. If there are others that are worth considering, please let us know, and we will be happy to take that into account so long as the constituents you're referring to are not Denver Bronco fans.

[Laughter.]

Senator FISCHER. Mm-hmm. You know, just a minute.

[Laughter.]

Senator FISCHER. We have, you know, Western Nebraska, we don't have sports—a pro sports team. In Nebraska, we're all Husker fans, so I'll clarify that for you.

[Laughter.]

Senator FISCHER. The FCC, though. Are there any actions that you can take proactively that would be helpful?

Chairman PAI. I think part of it involves making sure that we process these applications efficiently. Part of it is also encouraging others who might be stakeholders, local government entities, for instance, or individual consumers, to be able to put into place any of the facts that they think are necessary for us to make an informed judgment, and for them to be able to tell us, "Look, we want to hear what the local weather is in Western Nebraska, but we're getting information from outside the state that's not relevant to us," that's very helpful to us because the core value of the entire broadcast business after all is localism. And that's one of the things that I think is important for constituents in Western Nebraska and around the country, to know that when they tune on TV, they will be able to get information that is relevant to them.

Senator FISCHER. I would be interested in visiting with you more about options that you believe the Commission would take, and with the other Commissioners as well, or if you believe there are actions that Congress should take in order to have that localism truly be effective.

And, Commissioner Rosenworcel, I am sure that you recall that as he was about to end his term, Chairman Wheeler asked the FCC's Wireless Bureau to initiate an eleventh hour investigation of whether certain carriers, zero-rating services, violated the net neutrality rules. And I was glad when Chairman Pai rescinded that report and stated that the FCC would not focus on denying Americans free data. And these plans are very popular, and they provide innovated benefits to consumers.

I also find it concerning that Chairman Wheeler issued a report on his way out the door, after Congress had already requested that he refrain from issuing controversial items after the 2016 election.

So, Commissioner, what is your view of zero-rating services? Do you believe that they provide a tangible consumer benefit, or do you believe or do you agree with Chairman Wheeler's report?

Ms. ROSENWORCEL. Thank you for the question, Senator. To be clear, I believe that that investigation and those reports were issued after my departure from the agency. I understand that with zero net rating, there is the possibility of free services, and I understand the allure of free services for some consumers, but I also think, at its extremes, some types of zero net rating can undermine network neutrality, and that leads me to be concerned. I think it's

an area that merits more study, but to be candid with you, I do have concerns.

Senator FISCHER. Thank you.

Mr. Carr, do you have any comments on that?

Mr. CARR. Thank you, Senator. I think, you know, as an agency, the FCC should be trying to promote competition, innovation, that includes across different types of service plans and pricing plans, so I think we need to promote those types of innovations.

Senator FISCHER. And thank you very much to all of you.

Thank you, Mr. Chairman.

The CHAIRMAN [presiding]. Thank you, Senator Fischer.

Senator Peters.

**STATEMENT OF HON. GARY PETERS,
U.S. SENATOR FROM MICHIGAN**

Senator PETERS. Thank you, Mr. Chairman.

And to our nominees, thank you for your willingness to serve the public in this very important position, and thank you for being here today.

Ms. Rosenworcel, I certainly appreciate your strong commitment as a Commissioner to maintaining a free, open, and fair Internet. If confirmed, I hope that you're going to continue with this commitment to broadband Internet as an essential tool for millions of Americans and also for small businesses and fast-growing startups in Michigan as well as all across the country.

Allowing established corporations to prioritize their services or slow down their competitors I believe would put the small businesses at a competitive disadvantage and could very well stifle innovation that's so important for our country.

Would you agree that net neutrality under FCC's 2015 Open Internet rules helps level the playing field for small businesses and startups, allowing them to compete fairly against large established players?

Ms. ROSENWORCEL. Yes, Senator, I agree.

Senator PETERS. Great. Thank you.

Chairman Pai, an issue that I've talked about many times, including with you yesterday in my office, I appreciate the opportunity to spend some time with you, is the 5.9 gigahertz band, which is vitally important to automotive safety systems, which will dramatically decrease highway deaths when fully deployed. Given the fact that we have nearly 40,000 people dying on our highways every year, this will be truly lifesaving technologies deployed by auto companies. And for the past 2 years, this Committee has engaged with the FCC, the Department of Transportation, NTIA, as agencies conduct joint testing of two proposals for the 5.9 spectrum sharing.

I certainly appreciate our meeting again and your commitment to keep the members of this Committee informed of any developments on the 5.9 docket I think is extremely important to ensure that any decision made for spectrum sharing are based on data that is both rigorous as well as fully transparent. So could you please provide this Committee a status update as to where the testing process is now and the timeline for making any decisions in that area, please?

Chairman PAI. Thank you for the question, Senator, and I appreciate your concern, and I'm grateful to the courtesies you extended to me yesterday as well.

As you know, this is an area where testing has been exceptionally important. In January, a new round of testing began, and it became clear that supplemental testing was appropriate. The agency targeted nine different devices that I believe are currently being evaluated at the FCC Lab in Columbia. We are studying the variety of data points that are coming out of those tests. And we haven't yet reached the point where we can draw any definitive conclusions, and, therefore, I can't give you a specific timeframe, but if and when that testing does conclude, we will keep the Committee apprised, and in particular you because I know you have a great interest in this issue.

Senator PETERS. Well, I appreciate that. And also just a follow-up question. How would you characterize the coordination that you're seeing between those three agencies? And have you run into any roadblocks in that coordination? And is there anything that these agencies or players can do that would allow for a more transparent and smooth process in your mind?

Chairman PAI. Thank you for the question. I think thus far we have worked very cooperatively with our sister agencies on this issue, as on many other issues. And so we're all trying to figure out the best answer here, and so, thus far at least, it has been a very fruitful and productive relationship.

Senator PETERS. Great. Also in follow-up again, Chairman, I understand that one of your biggest priorities at the FCC is expanding broadband coverage, closing the digital divide. We had a long discussion about that yesterday. And as you know, one of the most important aspects of this is accurate data collection. As we've heard from Senator Gardner, as well as I think Senator Fischer brought up the issue as well, so that we can understand which areas truly have Internet access and target our efforts to those that do not. And I know you've been working on this through the Mobility Fund Phase II and the Form 477 reform process.

I'm proud to be a cosponsor of the Rural Wireless Act of 2017 with both Senator Manchin and Senator Wicker—I appreciate Senator Wicker's leadership on this issue—which would require the FCC to maintain more up-to-date and accurate data on wireless coverage, particularly rural areas, but the legislation would also direct the FCC to establish methodology within 6 months to improve the validity and reliability of wireless coverage data and to ensure that coverage data is collected in a consistent, robust, and efficient way. I would like to hear more about your plan to reform Form 477 data, and particularly, would your plan contribute to the type of methodology that we have outlined in our bill?

Chairman PAI. I appreciate that perspective, Senator. So with respect to Mobility Fund Phase II, obviously we are not relying on the Form 477 data as such, given some of the concerns that have been expressed. We have a tailor-made significant data collection to ensure that we are able to proceed with the Mobility Fund auction in a timely way while we consider the broader issues relating to Form 477.

With respect to Form 477, we have undertaken a comprehensive review. And at a high level, essentially the goal here is to make sure that the agency has a very clear picture of where coverage is and where it is not because the substantial distorting effects that can result from us operating on the basis of bad data are tremendous. I mean, obviously we're diverting subsidies to areas that might not need the help, we are disincentivizing companies from building out in areas that are unserved. And if you're in the Upper Peninsula of Michigan or in Detroit, you need to be able to have coverage if the FCC says, according to its data, you have coverage.

And so I'll be happy to work with you on that effort, and I certainly commend you for your work on that legislation, which would help us establish some of these standards along the way.

Senator PETERS. All right. I appreciate it. I appreciate your efforts. Thank you.

Chairman PAI. Thank you.

The CHAIRMAN. Thank you, Senator Peters.

Next up is Senator Cortez Masto.

**STATEMENT OF HON. CATHERINE CORTEZ MASTO,
U.S. SENATOR FROM NEVADA**

Senator CORTEZ MASTO. Thank you, Mr. Chair.

Welcome and thank you for your willingness to serve. And thank you for the opportunity to meet with all of you. And welcome to your family, a very exciting day for all of you.

I will have to say I am a little partial to Mr. Carr because his wife is a native Nevadan I found out. Fantastic.

[Laughter.]

Senator CORTEZ MASTO. Mrs. Rosenworcel, let me start with you. In the conversation we had, as you well know, we talked a little bit about the intersection of innovation and transportation, which obviously is of interest, not just to me, but to the state of Nevada as well. Where do you see the constructive place for the FCC to work toward the safe and reliable advancement of autonomous connected vehicles, unmanned aircrafts, and smart communities?

Ms. ROSENWORCEL. Thank you for the question, Senator. Lots of interesting things are happening with drones and with autonomous vehicles. A lot of them involve tests, and those tests are going to require spectrum. I think the FCC should develop Part 5 experimental license practices that make those tests easier for industries, research institutions, and universities. We can do a lot more with these new facilities if we can test them and have the spectrum necessary to facilitate those tests, and then get those services in the marketplace.

Senator CORTEZ MASTO. Thank you. I appreciate that. And I also appreciate the comments with respect to E-rate. I hear this in Nevada as well. Not only did five of our school superintendents come to visit me here, but I've had the opportunity to sit down with our public libraries, and it is a benefit not just to our urban but our rural communities, and connecting many people that would not have access to education, to information that is necessary for workforce development, applications, so many things. So I'm a big supporter. So thank you for those comments.

Mr. Carr, when we were together, we talked a little bit about a concern about cybersecurity and what we need to do in this space. In the last FCC hearing, I had asked Commissioner O'Rielly about FCC's place in the challenging cybersecurity sphere, including the Commission's Cybersecurity and Communications Reliability Division, that works with the communications industries to develop and implement improvements that help ensure the reliability, redundancy, and security of the Nation's communications infrastructure.

What specifically can the FCC be doing to aid in the concern and challenge of cybersecurity?

Mr. CARR. Senator, thank you for the question. Cybersecurity is an important issue, whether it's IoT or just traditional networks. The FCC, as you note, has a group called CSRIC that works to develop best practices that the agency can help push into the marketplace.

The FCC also has network-based expertise, and in this space, DHS has considered the sector-specific agency in charge of sort of communications in this area. And so I think we should be taking our network-based expertise and experts working with the DHS and trying to sort of consolidate the efforts there so we don't have an alphabet soup of agencies potentially working at cross-purposes in the area of cyber.

Senator CORTEZ MASTO. Thank you. I appreciate those comments.

And then, Chairman Pai, a couple of questions for you, but let me follow up with one that Senator Blumenthal started with. And just for clarification, as you sit here today, you are not aware that USTelecom and NCTA have asked the FCC for a ruling confirming ISPs are following Federal transparency rules by posting online their average performance during times of peak usage, is that correct?

Chairman PAI. Oh, Senator, I'm sorry, I thought Senator Blumenthal was referring to a lawsuit brought by state attorneys general. I wasn't aware of that particular lawsuit that he was referring to.

Senator CORTEZ MASTO. OK. Are you aware that USTelecom and NCTA have asked the FCC for a ruling confirming the ISP's role there?

Chairman PAI. Yes, I am aware of that.

Senator CORTEZ MASTO. OK. So I am aware that the various AGs are concerned that that industry petition to the FCC on cost transparency represents nothing more than the industry's effort to shield itself from state law enforcement. What is the current status of the ruling? And can you speak to your perspective on whether this is a fair consumer protection issue to be concerned about?

Chairman PAI. Thank you, Senator. We are actively studying that issue. We haven't made any determinations yet. We've obviously been focused on a lot of things at the Commission, but I can assure you and assure the Committee that we'll keep you posted before any decision is made, and we'll make sure that we take the appropriate steps to keep you up to date.

Senator CORTEZ MASTO. Is there a timeline that you can give us?

Chairman PAI. We have no particular timeline on that petition.

Senator CORTEZ MASTO. OK. Thank you. And then I appreciate your response to my QFR from the last FCC hearing when we were talking a little bit about Federal siting for telecom services on public and tribal lands.

Chairman PAI. Yes.

Senator CORTEZ MASTO. And in the QFR, you mentioned that your Broadband Deployment Advisory Committee would be providing recommendations on how to reduce or eliminate barriers. You also noted your intention to invite Federal representatives from key agencies, such as the Department of Interior, to participate. When can we expect to see the recommendations? And will they be made public?

Chairman PAI. They will be made public, Senator. The working groups of the Broadband Deployment Advisory Committee have been very actively working. We don't have a specific time-frame on when they are going to report back to us, but the general ask I gave of them when I initiated the first meeting was to give us a sense of with respect to the model state code and the model local codes for deployment at least by the end of the year, sometime by the fall ideally, if they could give us some preliminary recommendations at least on where we could move productively there.

On the other recommendations, they haven't given us a time-frame. They're obviously working really hard, and we want to encourage that in a full and transparent way without pushing them before they're ready to make a decision.

Senator CORTEZ MASTO. Thank you.

And I notice my time is up. Thank you very much. I appreciate the conversation today.

The CHAIRMAN. Thank you, Senator Cortez Masto.

Senator Booker.

**STATEMENT OF HON. CORY BOOKER,
U.S. SENATOR FROM NEW JERSEY**

Senator BOOKER. Thank you very much, Mr. Chairman.

Mr. Carr, are you aware that in the United States of America, of all the human beings on the planet Earth, one-third of the incarcerated women are—of all the incarcerated women on the planet Earth, that one-third of them are in American prisons?

Mr. CARR. I was not previously aware of that statistic.

Senator BOOKER. OK. Are you aware that the majority of them are parents of children under 18?

Mr. CARR. I am now.

Senator BOOKER. OK. Are you aware that these women don't get adequate sanitary products and often have to scrape together dollars to buy tampons and pads? Are you aware of that, sir?

Mr. CARR. Senator, I am now, yes.

Senator BOOKER. So do you know that in social science data, that women who are able and in power to communicate with their children, that it benefits society in multiple ways, lowers recidivism rates, lowers the rates of those children themselves being disciplined at school, lowers the rates at which those children are expelled from school, lowers the rates in which those children are incarcerated themselves? Do you know that?

Mr. CARR. Yes, Senator.

Senator BOOKER. OK. So help me understand how in the United States of America, if—have you been to a female prison, sir?

Mr. CARR. I've been to a number of prisons.

Senator BOOKER. Have you been to a female prison, sir?

Mr. CARR. No, I don't believe I have.

Senator BOOKER. Have you sat with formerly incarcerated women?

Mr. CARR. I can't recall.

Senator BOOKER. You can't recall if you've sat down with women who have been incarcerated to listen to their experiences in prison?

Mr. CARR. I can certainly say I've never sat down where that has been the topic of discussion.

Senator BOOKER. OK. Well, I have, sir, and when you hear that women have to make incredibly difficult decisions whether they buy tampons or call their kids at home because of the usury rates with which these charges they face just trying to communicate with their children. So can you help me understand what the logic is behind the FCC abandoning its defense of capping the cost of these calls, which often are dollars for minutes? Help me understand that decision.

Mr. CARR. Senator, thank you for the question, and thank you for your advocacy on this issue. It's a critically important one, as you pointed out. There is a market failure when it comes to the rates and the services for inmate calling. I don't think there is any doubt about that. The question is, how do we go about solving that?

The FCC, through a number of good faith efforts, 2013, 2015, 2016, took steps to try to address it. Unfortunately, when those decisions were appealed to the courts, the D.C. Circuit on four separate occasions entered stays finding it was more likely than not that the FCC's decision was unlawful.

So to your question, when the administration turned over, and there was one piece of one of those appeals that was coming up quickly on oral argument, there was a majority at the FCC that did not support the FCC's position there. So the question was, do we abandon the appeal altogether, or do we try to work to see what portions of that decision we can cobble a majority together to defend and then go to the court and strenuously defend them? I'm glad that it was that latter choice that we did. And the court's decision ultimately did uphold the FCC's jurisdiction to cap interstate rates and some of the significant reforms it did with ancillary fees.

There is certainly more work to be done here, and I would commit to you to working with you and your staff to find lawful ways that we can address this issue.

Senator BOOKER. But we abandoned our defense of the authority of the FCC to cap intrastate prison calling rates.

Mr. CARR. That's correct.

Senator BOOKER. And your feelings on that abandonment?

Mr. CARR. I wish that we had the authority to do it. It's a problem. The Communications Act, as set up by Congress, did not, in my judgment, give the FCC authority to take that step. But I would welcome specific grants of authority that would give the FCC the jurisdiction to act here.

Senator BOOKER. Well, I patently disagree with you about the authority of the FCC, the urgency of the problem, and the harm that that failure to defend has caused.

I have other questions, Mr. Chairman, but unfortunately my time has expired, and out of respect for my fellow colleagues, I'll conclude.

The CHAIRMAN. Thank you, Senator Booker.
Senator Udall is up next.

**STATEMENT OF HON. TOM UDALL,
U.S. SENATOR FROM NEW MEXICO**

Senator UDALL. Thank you, Chairman Thune. Thank you very much.

Chairman Pai, the last time you were before this Committee, you were hesitant to answer direct questions about the President's attacks against FCC-regulated media companies that have reported stories critical of the administration. And I appreciate that you were more clear and direct in your written responses on March 17.

However, President Trump has continued his unprecedented and dangerous attacks on media organizations that report stories he does not like. On June 28, President Trump tweeted, and I quote here, "The AmazonWashingtonPost, sometimes referred to as the guardian of Amazon not paying Internet taxes (which they should) is fake news." Many people viewed this tweet as a threat by the President of the United States to pursue higher taxes against a company in retaliation for negative news coverage, and I believe that's outrageous.

On July 5, the *New York Times* reported this about the White House and CNN, and I quote here, "White House advisers have discussed a potential point of leverage over their adversary, a senior administration official said: a pending merger between CNN's parent company, Time Warner, and AT&T."

Consistent with this reporting, the President himself was clear on this topic in an October 2016 speech just before the election. I quote then Candidate Trump. "As an example—," this is a quote direct, "As an example of the power structure I'm fighting, AT&T is buying Time Warner, and thus CNN, a deal we will not approve in my administration because it's too much concentration of power in the hands of too few," end quote.

Speaking of concentration of power, there is another major media merger pending before the FCC, the proposed acquisition of the Tribune Company by Sinclair Broadcasting. There are real concerns that this merger would violate media ownership rules, but the FCC has already helped pave the way for this merger by reinstating the so-called UHF discount that enables TV companies to get bigger. Sinclair now requires all their local stations to air video commentary pieces by a former Trump administration staffer who generally supports the Trump administration. Sinclair's CEO has also been quite complimentary of you personally.

The contrasting approach here creates the very real perception that the Trump administration would act to reward friendly coverage and punish negative coverage. So in light of the developments since March, I would like to seek renewed answers from you on two questions I posed in March.

First, will you reassure us that you will exercise your authority as Chairman of the FCC to regulate the media in an impartial manner?

Chairman PAI. Yes, Senator.

Senator UDALL. Thank you. Have you had any communications with the White House directly or through an intermediary regarding any media regulatory issues since March?

Chairman PAI. Senator, I have not directly had any conversations with anyone in the administration with respect to media regulatory proceedings. To the best of my knowledge, no one on my staff or in the FCC has indirectly had any such conversations as well.

Senator UDALL. Thank you. Finally, do you believe it is appropriate for any Federal official with power over media organizations to attack or threaten them with legal or regulatory retaliation over negative news coverage, media coverage?

Chairman PAI. Senator, I certainly have never done so, and I commit to you that I will not do so, so long as I have the privilege of serving at the agency.

Senator UDALL. Thank you very much for that answer. I'm going to follow up with Mr. Carr and Ms. Rosenworcel.

Mr. Pai responded on March 17 to a letter from every Democratic member of this Committee that posed six questions along these lines. Will you both commit to answer these same six questions for the record prior to a Committee vote on your nominations?

Ms. ROSENWORCEL. Yes, Senator.

Senator UDALL. Mr. Carr?

Mr. CARR. Yes, Senator.

Senator UDALL. Mr. Chairman, I would like to take this opportunity to note that Senator Hassan and I have requested a hearing in this Committee on the current state of the U.S. media landscape. We have not had a hearing on that topic in over 8 years, and I think it's a very timely one, and I hope you could reconsider that.

One quick question here, and this should be quick, because I think it's a yes or no.

Recently, there has been a spike in violence and intimidation against individual journalists. A Republican Congressman famously body-slammed Ben Jacobs, a reporter for the *Guardian*, after being asked about his position on the House health care bill 1 day before his special election. A West Virginia reporter was arrested while asking HHS Secretary Price about the health care bill as well. Trump White House staff reportedly have threatened to keep files of dirt on White House reporters. FCC security also manhandled CQ reporter John Donnelly and pinned him against a wall after he sought to ask questions of Commissioner O'Rielly.

Will each of you commit to speak out against violence and intimidation against reporters and commit that you personally will set a good example for press access in your own public activities?

Chairman PAI. Yes.

Ms. ROSENWORCEL. Yes, absolutely.

Mr. CARR. Yes, Senator.

Senator UDALL. Thank you very much.
Thank you, Mr. Chairman.

The CHAIRMAN. Thank you, Senator Udall.
 What I'm going to do, I intend to stay at least through the entire first round for everybody. But Senator Wicker does have to go. I'm going to recognize him next, and then we'll continue to move down the list that we have here.
 So Senator Wicker.

**STATEMENT OF HON. ROGER F. WICKER,
 U.S. SENATOR FROM MISSISSIPPI**

Senator WICKER. Thank you, Mr. Chairman.

And, Chairman Pai, as you know, accelerating broadband development in rural areas is a priority for many members on both sides of the dais. I've worked closely with you and the Commission to ensure that the agency's data collection methods regarding mobile broadband coverage are standardized. Standardized data is necessary to ensure that funds used to expand broadband deployment are targeted to truly underserved and unserved communities in rural America and in my state of Mississippi.

Would you agree that standardizing data collection is important to target funds accurately to deploy the broadband in underserved and unserved areas? And will you commit to ensuring that the baseline coverage data collected from carriers for the Mobility Fund Phase II Challenge Process be standardized? And please discuss how the draft order circulated last week on the Mobility Fund Challenge Process achieves that objective.

Chairman PAI. Thank you, Senator. And this is one of the reasons why we broke with longstanding practice in my second week in office and instituted a policy of publishing every single proposal in order that the FCC was considering at least three weeks in advance.

Nowhere is the thicket more complicated than this one. We want to make sure that we get it right for America's wireless consumers, and that requires us getting the data right. And so last week, as you pointed out, we published the proposal that we're going to be voting on, on August 3 to ensure that this data is accurate.

And I understand that standardized data collection is one of the issues that has been flagged. We would love to work with you and your staff, any interested stakeholders frankly, to make sure that on August 3 we ensure that we have a process that makes the input accurate so that the output can be worthy.

Senator WICKER. Will this be a one-time data collection?

Chairman PAI. With respect to Mobility Fund Phase II, currently that is our expectation, but obviously we are always open to suggestions on ways to improve our overall data collection or to broaden—

Senator WICKER. Well, what I would like to mention to all three of you then, there is a serious question as to how the Mobility Fund Challenge Process will ensure that recipients of the funds are meeting build-out commitments over the 10-year period. Would you like to comment on that?

Chairman PAI. I'd be happy to, Senator. Every dollar that is spent by the FCC that is ultimately collected from the taxpayers has to be deployed, it cannot be simply poured down the drain, and that requires build-out. And so we have instituted aggressive re-

porting obligations and build-out obligations as well to ensure that that money actually goes to building out 4G LTE in unserved parts of the country. We do not want that money to be wasted. America's wireless consumers simply don't have time to wait.

Senator WICKER. Let's have a further discussion on that with members of the Commission.

While the draft order specifies that cell edge probability and the cell loading factor will be used by carriers when creating rural coverage maps, some people remain concerned that additional factors, such as the assumed signal strength, also need to be standardized or disclosed in order for the data you receive to be reliable. Will you commit to working with me and those stakeholders to address these concerns before the order is finalized?

Chairman PAI. I would be happy to, Senator.

Senator WICKER. Thank you. And I look forward to you briefing me and my staff about your efforts in this regard.

Chairman PAI. Thank you.

Senator WICKER. Now let's talk about the Federal permitting process. And I'll go back to you, Mr. Chairman. I understand the FCC is working on a proceeding to modernize the Commission's approach to the National Environmental Protection Act and the National Historic Protection Act to accelerate the deployment of wireless infrastructure. There are many onerous rules in place today that prevent or delay deployment, including the implementation of antenna sites that are critical to wireless network build-out.

Please discuss how an update to the Commission's approach toward environmental and historic reviews may accelerate the deployment of mobile broadband and the proliferation of 5G networks to both urban and rural areas, particularly in existing public right-of-ways that have already undergone environmental and historic reviews where broadband infrastructure has already been deployed. And do you think Congress needs to act on this issue?

Chairman PAI. All great points. Obviously, the regulatory review, including environmental and historic preservation review, that applied traditionally to 100-foot cell towers may not be as relevant when you're talking about a small cell that could be as small as a pizza box or that you could hold in your hand. And so we want to make sure for these less obtrusive, lower power deployments that we tailor the regulatory burden to the nature of the deployment, as Commissioner Rosenworcel has pointed out. And so that's one of the things we're looking to work with all interested stakeholders on, to figure out what is the appropriate calibration of those rules with respect to small cells, and distribute antenna systems, and the like.

In terms of additional authority, it may be helpful in some cases for Congress to give us that authority with respect to 5G, for example. The FCC's jurisdiction over pole attachments is somewhat circumscribed. And so we would be happy to work with you, any members of the Committee who are interested, to find creative solutions that would help us secure the benefits of the wireless revolution to come.

Senator WICKER. Mr. Carr, do you think Congress needs to act in this space, or do you have the authority you need?

Mr. CARR. Senator, thank you for the question. There are certainly some actions that the FCC can take in terms of streamlining. Congress's help here would certainly be welcome, whether it's "dig once" legislation or work with respect to Federal lands, where the FCC might have more limited authority.

Senator WICKER. Thank you.

Thank you, Mr. Chairman.

The CHAIRMAN. Thank you, Senator Wicker.

Senator Cantwell.

**STATEMENT OF HON. MARIA CANTWELL,
U.S. SENATOR FROM WASHINGTON**

Senator CANTWELL. Thank you, Mr. Chairman. And thank you for this hearing.

I wanted to ask Chairman Pai, we had a town hall on net neutrality, and I know the Chairman mentioned comments that may be, you know, artificial and coming into the FCC in regards to the possible change to net neutrality laws. I know that that's not—my constituents have very real stories, and we have a very big Internet economy and app economy and want to continue to grow that with a very high concentration of software engineers and great schools like the University of Washington.

So I hope that you will be pulling out of that kind of data entered into the FCC real examination of business models and challenges that any change—and obviously we're against any change to this rule at this point in time—that you are really going to look at the details that individual businesses and consumers in my state are filing with the FCC as it relates to this and not just push out saying, oh, it was just a bunch of bots or a bunch of Russians.

Chairman PAI. We definitely will, Senator. And when I say we will make a full and fair review of the record, it means exactly that: that we don't exclude points of view for any ideological or political reasons. We take an accurate assessment of what is in the record, and that includes the perspectives from startups and consumers of the types who made their voices heard at the town hall that you held.

Senator CANTWELL. Thank you. Well, we certainly hope you will do that because it's very, very important to us that we continue that economy.

Second, when I look at this issue in general about cybersecurity and the FCC, and I look at the numbers, Department of Homeland statistics, of 209 cyber attacks on critical infrastructure in 2016, you know, a big increase, don't you think that the FCC should be doing more to look at the communication risks of the communications sector specifically, not just advocating that to Homeland Security?

We're certainly pushing legislation here on the critical infrastructure side with the DOE to make sure like on pipelines and the electricity grid, but why not you take more responsibility at your post in looking at the potential hacking and cybersecurity risks of our communications systems?

Chairman PAI. Senator, this is a critical issue, and in this capacity as Chairman, I have had the ability to be briefed in a classified

setting in a secure facility at the FCC on these issues. I can assure you that I take a firsthand appreciation of how serious it is.

At the end of the day, we are guided by the rule of law, and Congress has, for better or worse, given us relatively circumscribed authority in this area. Within the limits of that authority, I have certainly tried to engage as best we can with our sister agencies to provide them information about some of the threats to the networks that we see and to keep myself apprised on some of the threats as they materialize. If Congress gives us additional authority, I can assure you that I would faithfully administer it to ensure that businesses and consumers everywhere are protected.

Senator CANTWELL. Ms. Rosenworcel, is there more that we could be doing at the FCC now in giving direction to the communication industry on security?

Ms. ROSENWORCEL. Yes, Senator. You know, the very first sentence of the Communications Act speaks about the use of communications for the safety and life and property. I think Congress was very clear that they intended the FCC to have a role. So I would disagree with my past colleague sitting here to my right.

Senator CANTWELL. Well, I'm just—you know, maybe this is something for the future, since we did have, Mr. Chairman, a good cybersecurity hearing earlier in the year. I just think that everyone's devices, now that everything is networked, now that everything is together, they are the entry point obviously, and I'm very concerned after the *Washington Post* issued this story about how the Russian government hacking of our energy infrastructure at a nuclear power plant, I'm just thinking it's time to take all of this serious, as so many devices are the most vulnerable entry point to a network that now is controlled by people in remote situations. So hopefully we could follow on, on our last cyber hearing and get more input.

But thank you.

Thank you, Mr. Chairman.

The CHAIRMAN. Thank you, Senator Cantwell. That is an issue that I think will be an ongoing concern for this Committee and for all the people across this country. Yes.

Next up is Senator Baldwin.

**STATEMENT OF HON. TAMMY BALDWIN,
U.S. SENATOR FROM WISCONSIN**

Senator BALDWIN. Thank you, Mr. Chair.

Recently, in Wisconsin, I held roundtables on rural broadband access in two communities, Eagle River, in Vilas County, which is near the northern border in our state with the Upper Peninsula of Michigan, and Monticello, which is in Green County near the Illinois border, southern border, of our state.

And they're very diverse communities, but there were certainly some very similar themes that I heard in both communities about their lack of broadband access and how it harms their economic development, how it affects their ability to attract new families to live there or vacation there, how it affects local health care providers to fully utilize the promise of health IT and electronic medical records, an example of which is in Green County, the southern county I visited. The local hospital does have a sophisticated health

IT system, but patients can't access their electronic medical records at home without access to broadband or do something simple like uploading a photo of a healing wound to avoid a travel to a clinic or a hospital if there's no need. And so these were themes I know you're well familiar with.

I also heard intense frustration of those people on the ground who just want to fix this problem, who want to deploy the fiber or whatever means, the disconnect between the needs of these communities and the Federal programs that they know exist to help get broadband to places like theirs. And so I know, Mr. Carr, we talked a little bit about this in our earlier meeting. How would you respond to the folks of Eagle River or Monticello, Wisconsin, who ask, What is the FCC going to do to make sure that people like them have access to this critical resource?

Mr. CARR. Thank you, Senator, for the question and for your advocacy on these important issues. There is a lot that the FCC can and should be doing. One is we need to reduce the cost of getting services, networks, out to these parts of the country. The agency right now has some infrastructure proceedings that are teed up on that.

Spectrum is going to be a key resource as well. There is more we can be doing to push spectrum out into the marketplace. And obviously at the end of the day, universal service support is going to be critical to many parts of the country. We need to be making sure that we're targeting those funds to these areas that need it.

Senator BALDWIN. I want to continue to focus on rural broadband deployment and mention—and this is for the whole panel. I have a two-part question.

One is there has been some confusion or at least lack of clarity as to whether the President's infrastructure proposal would include broadband or not. His initial proposal that was unveiled did not mention broadband, but it was reported that last month in Iowa he told an audience there that broadband would absolutely be a part of his \$1 trillion package.

Because I'm concerned about the lack of clarity, I guess we'll start with you, Mr. Carr, and then Ms. Rosenworcel, and then Mr. Pai, I want to know where you stand with regard to whether broadband should be a part of this infrastructure program.

But the follow-up question is, if we indeed successfully advocate for these resources in an infrastructure package, would you advocate for those resources to be deployed through existing FCC programs, through new FCC programs, or programs outside of the FCC's orbit?

Mr. Carr, why don't we start with you and then Ms. Rosenworcel.

Mr. CARR. Senator, thank you for the question. Obviously, with the usual caveat that I defer to Congress and the administration working out how to put together an infrastructure package, I believe the Secretary of Transportation has recently also said that she believes that broadband should be part of it. I think that would be a good idea. The FCC does have an existing mechanism, USF, which could be one potential avenue for distributing those funds.

Ms. ROSENWORCEL. Thank you, Senator, for the question. This may come as no surprise, but the administration has not spoken to me about exactly what is going to be in that infrastructure pro-

posal with respect to rural broadband, so I have no special knowledge about it. But I do know this, that if we wind up having additional programs for broadband, whether it's at the FCC or somewhere else, we need to make sure that the right hand and the left hand are talking to one another. We have had many programs in the past at the Department of Commerce, the Department of Agriculture, in addition to the FCC, and the one thing I have been struck by is the lack of conversation about how those programs work together.

Chairman PAI. Senator, in March, in my first major speech as Chairman, I said that if there were to be an infrastructure plan, I would urge strongly that digital infrastructure, that broadband, be a part of it.

And I also urged, with respect to your second question, in that same speech, that those funds be channeled to the FCC's existing mechanisms, which are tried and true. We have measures for fiscal responsibility and accountability, and at the end of the day, if you approve that package, then you can go to your constituents and say the tax dollars that you have sent to the FCC were wisely spent.

I would also add with respect to coordination, there is a Rural Prosperity working group that I'm privileged to be a part of. It's convened by the Secretary of Agriculture. And so I've spoken to him, the Secretary of Energy, the Secretary of Housing and Urban Development, and others to figure out ways to synthesize our efforts so that it's not a bunch of cooks cooking a bunch of different meals, we're all focused on the one prize here, which is delivering rural broadband in a consistent and clear way.

The CHAIRMAN. Thank you, Senator Baldwin.
Senator Hassan.

**STATEMENT OF HON. MAGGIE HASSAN,
U.S. SENATOR FROM NEW HAMPSHIRE**

Senator HASSAN. Thank you, Mr. Chair and Ranking Member, especially for allowing this hearing to go on this long so we all get a chance to ask questions. I really appreciate it.

I also really appreciate the three of you. Congratulations on your nominations. And also congratulations to your family, and particularly an incredibly well-behaved group of children who are sitting through this hearing.

Mr. CARR. I don't see mine, so——

[Laughter.]

Senator HASSAN. You know, everybody has their tolerances, but I think they're all doing extremely well.

I wanted to touch for just a minute on a topic that Senator Udall raised, and I think others have, too. Obviously there is a link between the strength of our democracy and a free press. And the First Amendment in our Constitution enshrines this national value by guaranteeing freedoms for the press and guards against censorship. And I share many of my colleagues' concern that this administration has very little regard for this value.

To Senator Udall's point, he and I have asked for a hearing kind of on the state of the media and press since there hasn't been a hearing on this issue since I think it's about 2009, because of the hostility we're seeing directed at the free press and because of the

increase in consolidation and the prospect of even more. So I'll reiterate that request as well.

But my question for each of you is, if confirmed, will you commit to upholding the values of the United States Constitution throughout your duties, including those shrined in the First Amendment protecting the free press?

Mr. Pai.

Chairman PAI. Yes, Senator.

Ms. ROSENWORCEL. Yes, Senator.

Senator HASSAN. Thank you.

Mr. CARR. Yes.

Senator HASSAN. Thank you very much. I wanted to come back to the E-rate program. And, Ms. Rosenworcel, you have really worked diligently on these policies, and I really enjoyed our conversation about your work to help close the so-called homework gap. I am really grateful for your efforts because you're really working to ensure that all across the country our students have access to quality broadband so that they can complete their studies and ultimately compete in a global marketplace.

When I was Governor, I started the New Hampshire School of Connectivity Initiative, a cross-agency partnership to bring high-speed Internet access to all of our schools. Since that initiative began in 2015, more than 25,000 of our students have received broadband access at school. The program would not be possible without E-rate.

I am really pleased that the current Governor of New Hampshire has continued my administration's initiatives on broadband, including following through with setting aside state matching funds for the proposal for broadband.

In order to truly reap the educational benefits of a connected classroom, we are seeing more and more that simply having connection is not enough, right? We need greater broadband speeds and higher capacity to meet the needs of our students. Fiber certainly holds a promise for connecting in this regard. But we are still in a situation in my state, the Granite State, where nearly 16 percent of our schools lack service providers who will be able to build out fiber connections for them.

So what is your response to these communities? And how can we help them succeed in getting access to fiber? Will E-rate continue to be a top priority for you? I've heard from Chairman Pai it will be from him. But just how can we help these folks who still don't have the level of connectivity we need to really help those students succeed?

Ms. ROSENWORCEL. Thank you, Senator, for the question. E-rate is absolutely vital. It is the best tool we have to reach every school and every student in this country with the broadband they need for modern education. To the extent that the program hasn't reached some corners of New Hampshire, that is something that certainly I would be happy to talk to you about. I think it has that potential.

Reforms were put in place in 2015, and promises were made to every school and library in this country that E-rate dollars would be available to them, and I want to make sure that that promise is kept.

Senator HASSAN. Thank you very much.

To Chairman Pai and Ms. Rosenworcel, I applaud your efforts, truly a bipartisan initiative, to advance balanced spectrum policy, which is clearly hard to say fast, in the United States. With the rapid expansion of wireless-dependent services woven into our daily lives, which many of us have referenced, we need to make sure we're doing everything we can to avoid a spectrum crunch and provide greater access to this fundamental finite resource.

New Hampshire is a home to many innovators, entrepreneurs, creative businesses, as well as companies that provide manufacturing support for the Internet of Things. Identifying licensed and unlicensed spectrum for greater use will not only ensure that we have the reliable services we are accustomed to, but it will also spur innovation and create new market opportunities for our economy to thrive.

So I realize that my time is about to expire, but, Commissioner Rosenworcel, can you discuss the role of unlicensed spectrum in providing services to Americans as well as fostering wide-scale wireless innovation?

And, Chairman Pai, just briefly, with the emerging prevalence of the Internet of Things and driverless cars, et cetera, do you believe we're postured to meet the increasing demand given current policies for unlicensed spectrum?

So, Ms. Rosenworcel, and then the Chairman.

Ms. ROSENWORCEL. Yes. Thank you for the question. If you have ever used a television remote control or a garage door opener or gone on Wi-Fi, you have used unlicensed spectrum. It powers our lives. And as we connect more things, more people, more places, and more devices, we are going to need more of it because unlicensed spectrum has low barriers to entry, and that means it's where innovation can happen, and innovation without permission. And I think a good spectrum and wireless economy requires both licensed spectrum and unlicensed.

Senator HASSAN. Thank you.

The CHAIRMAN. Thank you.

Chairman PAI. Senator, I agree with Commissioner Rosenworcel, and I think one of the great things about our unlicensed economy is that our innovators exemplify the spirit that Winston Churchill brought to the table in 1941 when he said, urging for the U.S. to give them more material to fight the war, "Give us the tools and we will finish the job." If we give these unlicensed innovators wide swaths of spectrum, low-, mid-, and high-band, there's no telling what kinds of innovations they may be able to pioneer, and we want our American innovators to be at the forefront of that. And so that's one area where, as I mentioned earlier in response to a question of Senator Moran, I believe, that the FCC has spoken with a unified voice, and hopefully with Congress's support, we'll be able to continue to do that going forward.

Senator HASSAN. Thank you.

And thank you, Mr. Chair, for letting me go so far over time.

The CHAIRMAN. Thank you, Senator Hassan.

Senator Klobuchar.

**STATEMENT OF HON. AMY KLOBUCHAR,
U.S. SENATOR FROM MINNESOTA**

Senator KLOBUCHAR. Thank you very much, Mr. Chairman.

Thank you to all of you. I am thinking I'm the last person here to ask questions, and so Senator Thune can go off to the White House. One more. OK.

[Laughter.]

Senator KLOBUCHAR. All right. So I know that many of my colleagues have asked about net neutrality, so I will simply say that it's very important to our country and innovation and everything else.

The second thing that's very important is broadband deployment. And as you know, I have worked very hard on this "dig once" policy. And Senator Fischer and I and others have been pushing on Universal Service Fund funding and trying to figure out how we can get more funding into rural areas, and I know we did some standalone work here, and the FCC came up with a compromised position, but it still is an issue, as you know, in rural areas' deployment. And I just wondered if I could get each of your thoughts about what you think we could do on this end and what you could do on your end to really get this moving so that we don't have this digital divide, which is getting tougher and tougher for rural states.

Mr. Pai.

Chairman PAI. It's so important, Senator. Thank you for your interest in this issue. And I've seen these challenges for myself, as I mentioned in my opening remarks, when I helped lay some fiber in Minneapolis, and I held a roundtable in Madelia, where some rural broadband companies talked about some of these challenges.

I think there are a lot of tools in the toolbox that Congress could give the FCC. I have publicly endorsed Senator Capito and Senator Coons' Gigabit Opportunity Act, which would provide tax incentives to Internet service providers to provide some of those digital connections in hard-to-serve rural and urban locations alike.

I also think it would be helpful for "dig once" and other similar policies to be the law of the land. It would be helpful for the FCC to have additional authority over things like pole attachments, so some of those critical cost elements that go into building a broadband network.

In the meantime, I can assure you that, as my colleagues have pointed out during this hearing, that we are committed to using every tool in the toolbox that we currently have to make that deployment proposition an easy one. Whether it's making wireless infrastructure siting easier, promoting more competition in urban areas, this is the front and center for us, as I imagine it is for you.

Senator KLOBUCHAR. OK. Thank you.

Ms. Rosenworcel.

Ms. ROSENWORCEL. Sure. The agency working with local jurisdictions should try to come up with a model code, one that includes policies like "dig once" and has a series of shot clocks for response, and then hopefully with that model code, the agency can build into its policies incentives for communities to adopt it. And if it does that, I think that could help expedite deployment nationwide.

Senator KLOBUCHAR. Thank you. And, of course, getting some funding on our end with the infrastructure bill would be—

Ms. ROSENWORCEL. That would always—

Senator KLOBUCHAR.—also helpful.

Mr. Carr.

Mr. CARR. Thank you, Senator. I agree with many of the points that have been made. I think your “dig once” work will be very helpful. As you know, the cost of adding conduit on the front end is relatively small compared to the cost of trying to dig up the streets and deploy it down the road. I think that would be helpful.

There are other steps that the agency has teed up on the infrastructure side to help streamline that. And, of course, on the USF side, continue to target our subsidies to the right places.

Senator KLOBUCHAR. Very good. And you and I talked about rural call completion. What do you think we could do to get even more transparency to get the better completion rates?

Mr. CARR. Thank you, Senator. It’s an important issue. Rural call completion has been an issue for a number of years. The FCC has recently began a proceeding to see how they can potentially take more action to fix that. I know there is some legislation that’s been introduced as well that might get at intermediary providers that could also help make sure that those calls are always going through.

Senator KLOBUCHAR. OK. Thank you.

Ms. Rosenworcel, I worked with Senator Thune on the Rural Health Care Connectivity Act to make skilled nursing facilities eligible for funding through the Universal Service Fund’s Rural Health Care Program. The bill was signed into law last year. And the \$400 million cap on the program was exceeded for the 2016 funding year, and I’m concerned that the current funding shortfall could cutoff vital telemedicine services. How can the FCC address the funding needs of rural health care facilities providing vital telemedicine services?

Ms. ROSENWORCEL. Thank you for the question. The agency’s Rural Health Care Program has historically been undersubscribed, but a few years ago was adjusted and new opportunities were made available, including skilled nursing, and as a result of that success, demand has increased considerably. So now the agency going forward is going to have to wrestle with how to prioritize that demand. From my part, I don’t think it should be the first application in the door, but we should put some priority on truly rural areas because I think that’s what Congress intended when it laid down this law.

Senator KLOBUCHAR. All right. Thank you very much. I have a few other questions I’ll ask on the record. But thank you.

Thank you, Mr. Chairman.

The CHAIRMAN. Thank you, Senator Klobuchar. And a very good piece of legislation I might add.

[Laughter.]

The CHAIRMAN. Next up is Senator Duckworth.

**STATEMENT OF HON. TAMMY DUCKWORTH,
U.S. SENATOR FROM ILLINOIS**

Senator DUCKWORTH. Thank you. I want to thank the Chair and Ranking Member for convening today's hearing and I want to thank the nominees who are participating in this important conversation.

Chairman Pai, I want to thank you for offering to meet with me yesterday, but as you can tell, I had a really terrible cold, and yesterday I sounded like Chewbacca.

[Laughter.]

Senator DUCKWORTH. We would not have had a good conversation. I'm hoping I head into Kathleen Turner territory here soon, but I'm transitioning.

[Laughter.]

Senator DUCKWORTH. Chairman Pai, last month a Federal court struck down regulations that cap the soaring cost of phone calls made by prison inmates. And I know that my colleague Senator Booker has asked a question about this as well. In that 2-to-1 decision, the U.S. Court of Appeals for the D.C. Circuit stated that while rates charged for in-state prison calls could be extraordinarily high, the FCC exceeded its legal authority in 2015 when it created rate caps for such calls. The FCC initially prepared a legal defense of its decision, but abandoned it earlier this year after you became Chairman, and in a June 13 article in the *New York Times*, they attribute this decision to you.

Chairman Pai, am I correct that in opposing the Commission's efforts to protect families and inmates from outrageously high rates for calling services, you are not endorsing astronomically expensive prices, rather, you simply believe that Congress has not provided FCC with the authority to impose rate caps on intrastate prison calls?

Chairman PAI. Correct, Senator. That is a purely legal position that we took, and I would welcome additional authority should Congress see fit to provide it.

Senator DUCKWORTH. Thank you. So looking ahead, I plan to work with my colleagues to help address that issue. And, in fact, I plan to introduce a Video Visitation and Inmate Calling in Prisons Act to rein in the often ridiculous prices prisoners and their families are forced to pay to communicate. The bill would provide the FCC with clear authority to institute commonsense rules for video visitation and inmate calling services, including capping outrageously high rates, and would require the Bureau of Prisons to institute long overdue rules to make sure video visitation service contracts are effectively managed and overseen.

If enacted, this good government consumer-oriented legislation will help establish video visitation as a supplement to, and not a replacement of, in-person visitation, with the ultimate goal of reducing recidivism through increased family contact and regular communications.

I believe that this legislation would address your concerns about clarifying FCC authority when it comes to prison calling services. Will you commit to working with me to pass this legislation during the 115th Congress?

Chairman PAI. I will, Senator. I look forward to working with you on it.

Senator DUCKWORTH. Thank you.

And I believe, Mr. Carr, you had previously committed to this as well. And I would like to give Commissioner Rosenworcel, both of you, the opportunity as well.

Ms. ROSENWORCEL. Absolutely I would commit to working with you. I mean, the number that sticks with me here is there are 2.7 million children in this country who have a parent in prison, and we know that recidivism is affected by the ability to stay in close contact with family. So I think it is imperative that the FCC continue its work here, and I would work with you in any way to make sure that that legislation is successful.

Senator DUCKWORTH. Thank you.

Mr. Carr.

Mr. CARR. Yes, Senator, I agree. I would welcome the chance to work with you on this issue.

Senator DUCKWORTH. Thank you.

Ms. Rosenworcel, on June 22, President Trump announced that his infrastructure proposal will promote and foster and enhance broadband access for rural America. According to the FCC's 2016 Broadband Progress Report, 56 percent of rural Illinoisans lack adequate broadband service as opposed to only four percent of urban communities in Illinois. Ensuring that every Illinoisan has reliable Internet access to find a job, improve their businesses, or educate their children is a top priority. And, in fact, many of our kids can't do their homework because they don't have broadband.

While we still haven't seen any actual details on the administration's infrastructure package, several accounts suggest it will rely heavily on various forms of tax incentives to encourage providers to deploy and upgrade broadband in rural areas. And some have expressed support for using Connect America Fund as a mechanism for distributing potential infrastructure funding.

Is this an appropriate mechanism, the Connect America Fund? And how would you modify the program to accommodate this role to ensure that funding injected into the system supplements industry investments and does not actually take over?

Ms. ROSENWORCEL. Thank you, Senator, for the question. It's an important one, and also complicated, so let me try to give you a quick answer. I think what is most important to me here is something I mentioned to one of your colleagues earlier, that if there are additional programs as a result of an infrastructure package, it is absolutely imperative that we think about how they work in conjunction with the FCC's annual \$4.5 billion fund for universal service. I think it's imperative that the right hand talks to the left, and we don't duplicate efforts, or somehow wind up with policies that crowd out private investment that would have occurred without that spending.

Senator DUCKWORTH. Thank you.

Now, Chairman Pai, along with your fellow Commissioners, you've highlighted the importance of consensus-based decision-making at the FCC and expressed frustration about delegated authority. Is that a fair statement?

Chairman PAI. Yes, Senator.

Senator DUCKWORTH. Thank you. You issued a press release in December 2014 with Commissioner O’Rielly about these concerns, and similarly Commissioner Clyburn expressed frustration earlier this month about learning that the FCC approval of the Sinclair-Benton deal—about learning about that through a press release.

Mr. Chairman, I ask unanimous consent to enter into the record a 2014 press release from Chairman Pai and a July 2017 tweet from Commissioner Clyburn.

The CHAIRMAN. Without objection.
[The information referred to follows:]



NEWS

Federal Communications Commission
445 12th Street, S.W.
Washington, D. C. 20554

News Media Information: (202) 418-0500
Internet: <http://www.fcc.gov>
TTY: (888) 835-5322

This is an unofficial announcement of Commission action. Release of the full text of a Commission order constitutes official action.
See MCT v. FCC, 515 F.2d 385 (D.C. Cir. 1974).

FOR IMMEDIATE RELEASE:
December 18, 2014

NEWS MEDIA CONTACTS:
Office of Commissioner Pai:
Matthew Berry, (202) 418-2005
Email: Matthew.Berry@fcc.gov

Office of Commissioner O’Rielly:
Erin McGrath, (202) 418-2042
Email: Erin.McGrath@fcc.gov

JOINT STATEMENT OF COMMISSIONERS AJIT PAI AND MICHAEL O’RIELLY ON THE ABANDONMENT OF CONSENSUS-BASED DECISION-MAKING AT THE FCC

Commissioner Pai stated:

“It was once said that this agency ‘is a Commission, not a sole proprietorship.’¹ Not today.

The Chairman’s Office directed the Wireless Telecommunications Bureau to release today two major items. The first abdicates the annual responsibility Congress gave the Commission—not the Bureau—to make an assessment of the state of competition in the wireless industry. The second grants a T-Mobile petition that asked the Commission—not the Bureau—to regulate cellular data roaming rates by providing guidance on what the *Commission* meant in its 2011 data roaming order. FCC decisions issued on the Bureau level cut the Commissioners out of the decision-making process entirely.

This is not how democracy works. And it’s not how the FCC in particular has ever worked. Commissioner O’Rielly and I jointly requested that the items be brought before the Commission for a simple up or down vote, consistent with both the law and the long-standing practice of both Republican and Democratic FCC Chairmen. The Chairman’s Office refused. I am not aware of a situation in which similar requests from two Commissioners for a Commission-level vote has been rejected (the usual course is to accommodate even one request). Bad enough as the refusal to negotiate with other Commissioners (not just Republicans) is, it’s even worse not to allow other offices any input whatsoever.

Bad process makes for bad policy. And today’s antics simply underscore the need for Congress to maintain its focus on FCC process reform. I welcome and applaud the bipartisan congressional efforts to enact FCC process reform legislation. And I hope that the new year yields successful legislative efforts to ensure that we—plural—are an independent agency.”

¹ See Hearing on the Nomination of Thomas E. Wheeler to be Chairman of the Federal Communications Commission Before the U.S. Senate Committee on Commerce, Science, and Transportation (June 18, 2013) (Testimony of Thomas E. Wheeler), available at <http://www.c-span.org/video/?c4519926/confirmation-hearing-thomas-wheeler-chairman-fcc>.

Commissioner O’Rielly stated:

“In my time at the Commission so far, I have shown myself to be willing to vote quickly on items before me (although not everyone may always like how I cast my vote, especially if rushed). But on these and a number of other items, the full Commission has not been given any opportunity to consider and vote on – quickly or otherwise – the merits. I strongly object to the continued effort to delegate decisionmaking authority to the bureaus. I didn’t just go through the confirmation process in order to have bureaus and advisory committees make decisions that should be made by Commissioners. Both of these items should be brought before and debated by the Commission. These are not trivial items and, like all Commission decisions, would benefit from my colleagues’ input. I am especially concerned that today’s action will set precedent that will be used again and again.”

TWEET FROM COMMISSIONER CLYBURN

@MClyburnFCC: ICYMI, I did. @FCC approves Sinclair-Bonten deal without informing my office. Learned through news clips. Where’s the #transparency?

11:20 AM – 3 Jul 2017

Senator DUCKWORTH. Thank you.

In August of last year, the FCC voted 3-to-2 to adopt new disclosure requirements for shared service agreements. Is that correct?

Chairman PAI. I believe that data is correct, yes.

Senator DUCKWORTH. So subject to approval by OMB, each broadcasting station that is party to a shared service agreement, whether in the same or different television markets, would be required to file a copy of the SSA in its online public inspection file.

Chairman Pai, did FCC withdraw its request to OMB to approve the collection of SSA information on January 27, 2017? And if so, why? And does the FCC plan to resubmit its request to OMB?

Chairman PAI. Senator, I confess I am not familiar with that particular information collection at this point, but I’m happy to get back to you with a status report on where that information collection stands.

Senator DUCKWORTH. Thank you.

Commissioner Rosenworcel and Mr. Carr, were you aware of that development?

Ms. ROSENWORCEL. Because I no longer serve at the agency right now, I don’t have up-to-date details on that, but, you know, were I confirmed, I would be perfectly happy to follow up with you and provide you with more information.

Senator DUCKWORTH. Thank you.

Mr. CARR. I think, Senator, similarly, I don’t recall right now the specifics of that one.

Senator DUCKWORTH. OK. Well, thank you all for being very kind.

And again, Chairman Pai, I apologize for having to cancel our meeting yesterday.

You've been very generous, Mr. Chairman. I yield back.

The CHAIRMAN. Thank you, Senator Duckworth.

And I think that exhausts the questions for today. So again I want to thank all of our nominees for being here, for your testimony, for your responses to our questions. As was pointed out earlier, some of the most exciting things that are happening in the digital economy fall under this Committee's jurisdiction and under the regulatory authority of the FCC. And so we want to make sure that we're doing everything we can to advance the new technologies and make sure that people all across the country, no matter where they live, have access to high-speed Internet and all the advantages that come with that that are available to people in populated areas around the country as well.

So we're looking forward to moving this process along. And again thank you for your willingness to serve, for your families, for their dedication and commitment to the worthy cause of public service. And we'll look forward to hopefully being able to get the nomination process—confirmation process I should say, moving quickly.

I want to enter into the record on behalf of Senator Nelson four letters of support for Jessica Rosenworcel's nomination to the FCC. [The letters referred to follow:]

NATIONAL ASSOCIATION OF ELEMENTARY SCHOOL PRINCIPALS
Alexandria, VA, July 17, 2017

Hon. JOHN THUNE,
United States Senate,
Washington, DC.

Hon. BILL NELSON,
United States Senate,
Washington, DC.

Dear Chairman Thune and Ranking Member Nelson:

The National Association of Elementary School Principals (NAESP) strongly supports President Trump's nomination of Jessica Rosenworcel to serve on the Federal Communications Commission (FCC). We appreciate your decision to schedule her confirmation hearing this week and encourage the Committee and the full Senate to approve her nomination without delay.

Ms. Rosenworcel understands that the FCC's longstanding efforts to ensure all Americans have access to high capacity broadband is especially important to the Nation's students, teachers and principals. Broadband connectivity enables digital learning opportunities, expands access to resources, research and data, and promotes valuable collaboration and engagement among students, families, and educators. These advantages are often particularly important in the isolated rural and high cost communities that are most likely to depend on outside assistance to acquire broadband connectivity. Thanks to the E-rate, and other Federal communications initiatives, broadband connectivity is expanding, but the Nation needs continued strong and effective leadership at the FCC to help the families, schools, and communities that have not yet leaped across the digital divide.

Ms. Rosenworcel's prior service demonstrates that she will contribute to the agency's broadband leadership and work. Her understanding of schools' and students' broadband needs, technical expertise, and collaborative style, make her an excellent choice for this vitally important leadership position. If confirmed, we are confident she will help the agency address the Nation's most difficult broadband challenges and ensure more students and educators have access to the tools and resources they need to succeed academically and professionally.

Sincerely,

L. EARL FRANKS, ED.D., CAE,
Executive Director.

AASA
Alexandria, VA, July 17, 2017

Hon. JOHN THUNE,
United State Senate,
Washington, DC.

Hon. BILL NELSON,
United States Senate,
Washington, DC.

Dear Chairman Thune and Ranking Member Nelson,

On behalf of AASA, The School Superintendents Association, representing more than 10,000 school superintendents and system leaders across the country, I write to express our strong support for the nomination of Jessica Rosenworcel to serve on the Federal Communications Commission (FCC).

The work of the FCC is unique in that the connectivity demands and needs of the future are nearly impossible to predict. The FCC's track record of success depends on having commissioners with an unwavering commitment to addressing these unknown demands, including supports for communities facing geographic and/or economic obstacles.

Ms. Rosenworcel has a long history as a champion of connectivity and equity, ensuring all communities have access to the type of connectivity that is essential to opportunity and success in today's increasingly digital world. She is a disciplined and principled public servant, committed to the FCC's work to regulate interstate and international communications via radio, television, wire, satellite and cable across the Nation. Specific to the schools our members run and the 50 million students they serve, Ms. Rosenworcel has supported the E Rate program since its inception and was a driving force in the 2014 modernization that helped transform E Rate to better support all schools and communities with access to broadband. She is able to balance the connectivity needs of the Nation with policy and implementation opportunities and constraints, and to do so in a manner that brings communities together. We look forward to further opportunities to collaborate with the FCC and Ms. Rosenworcel as they work to better connect those communities that remain un(der)served.

AASA supports the nomination of Ms. Rosenworcel to the FCC and strongly urges the Committee and full Senate to approve her nomination. Thank you for considering our endorsement, and please do not hesitate to contact me with any questions about our support for the nomination, our support for E-Rate, or a broader conversation about the importance of education technology and broadband access for today's 24-hour learners.

Sincerely,

DANIEL A. DOMENECH,
Executive Director.

NATIONAL ASSOCIATION OF SCHOOL SUPERINTENDENTS
Burlingame, CA, July 18, 2017

Hon. JOHN THUNE,
United States Senate,
Washington, DC.

Hon. BILL NELSON,
United States Senate,
Washington, DC.

Dear Chairman Thune and Ranking Member Nelson:

The National Association of School Superintendents (NASS) encourages you and your colleagues to approve President Trump's nomination of Jessica Rosenworcel to serve on the Federal Communications Commission ("FCC"). During her prior FCC service, Ms. Rosenworcel distinguished herself as knowledgeable, creative and effective decision maker and our members welcome the president's decision to reappoint her.

Ensuring school and community access to high capacity broadband must be a steadfast national priority. Equipping students, educators, and families with cutting-edge broadband services creates innovative learning opportunities and rich forums for professional and family collaboration and engagement. Unfortunately, despite significant broadband expansion, these opportunities are not universal. Many rural, high-cost, and low-income communities lack access to affordable and robust broadband networks. This lack of critical telecommunications infrastructure compounds educational inequities in our poorest communities and hampers schools' efforts to prepare all students for success after graduation.

Ms. Rosenworcel recognizes broadband's potential to expand and improve educational opportunities and to fundamentally transform struggling communities. Our members deeply appreciated her efforts to strengthen the E-rate for schools and up-

date the Lifeline program to address the “homework gap.” As Congress and the new Administration pursues new infrastructure investments and takes other steps to build on this work, we believe Ms. Rosenworcel would provide an impactful and valuable perspective at the FCC.

Thank you for carefully considering our perspective. We appreciate your leadership on this important matter and would be pleased to tell you more our membership’s work to strengthen the Nation’s school districts and improve academic and life outcomes for kids.

Sincerely,

TOM ARMELINO,
Executive Director,
NASS.

CALIFORNIA SCHOOL BOARDS ASSOCIATION
ASSOCIATION OF CALIFORNIA SCHOOL ADMINISTRATORS

Hon. JOHN THUNE,
United States Senate,
Washington, DC.

Hon. BILL NELSON,
United States Senate,
Washington, DC.

Dear Chairman Thune and Ranking Member Nelson:

The Association of California School Administrators (ACSA) and California School Boards Association (CSBA) strongly support President Trump’s nomination of Jessica Rosenworcel to serve on the Federal Communications Commission (FCC). On behalf of ACSA’s more than 17,000 school leader members and CSBA’s over 5,000 locally elected school board members, we urge you to lend your support to her nomination and move it promptly through committee for the full Senate’s consideration before the August recess.

California’s students and teachers increasingly depend on high capacity broadband access—in and out of school—to support teaching and learning. Similar to other states, California’s digital transition has been uneven. Far too many rural, low-income, and other hard to serve communities lack access to the robust telecommunication networks that open doors to additional educational, workforce and other opportunities. Given this problem, our members strongly support federal initiatives, like the E-rate and Lifeline programs—that are designed to help states and localities address connectivity challenges.

Ms. Rosenworcel has demonstrated a clear understanding of broadband’s inherent educational, economic, and social value. She also developed a strong track record for problem solving and bipartisanship that will serve the FCC well as the agency works to build on the Nation’s progress toward universal, high capacity broadband access.

ERIKA K. HOFFMAN,
Legislative Advocate,
California School Boards Association.

ADONAI MACK,
Director of Political Affairs and Strategy,
Association of California School Administrators.

cc: California Delegation

The CHAIRMAN. And I would also say that we’re going to keep the hearing record open until Friday, July 21, and during that time, Senators are asked to submit any other questions that they might have for the record. Upon receipt, we would ask our witnesses to submit their written answers to the Committee by July 31 so that we can get you all scheduled for a markup real soon.

With that, this hearing is adjourned. Thank you.

[Whereupon, at 12:21 p.m., the hearing was adjourned.]

A P P E N D I X

THE CITY OF NEW YORK
New York, NY, July 21, 2017

Hon. JOHN THUNE,
Chairman,
Committee on Commerce, Science, and
Transportation,
United States Senate,
Washington, DC.

Hon. BILL NELSON,
Ranking Member,
Committee on Commerce, Science, and
Transportation,
United States Senate,
Washington, DC.

Dear Chairman John Thune, and Ranking Member Bill Nelson:

I write in support of the Honorable Jessica Rosenworcel's confirmation for a second term as commissioner at the Federal Communications Commission (FCC). As Chief Technology Officer for the City of New York, and having served in technology leadership roles for two other municipalities and in the private sector as a two-time technology startup founder, I have witnessed Commissioner Rosenworcel's leadership in shaping America's digital future, and empowering children, families, and businesses with new ideas. While serving on the Intergovernmental Advisory Committee (IAC) for the FCC gave me direct experience with the important role Commissioner Rosenworcel had in shaping the future and her tireless dedication to the work.

In New York City, home of the second largest tech sector in the country, we have relied on Commissioner Rosenworcel to help protect New Yorker's access to the Internet, and digital privacy. Since joining the Commission in 2012, Commissioner Rosenworcel helped it focus on policies to protect consumers, promote innovation, expand spectrum access, and support first responders. She has been a leading advocate for kids, focusing on the "homework gap" and access to the tools they need to succeed at school in the digital age. Commissioner Rosenworcel's leadership has inspired cities like New York City and others to take bold steps to address this issue, and in turn, inform the FCC's work.

Commissioner Rosenworcel's tenure as an FCC commissioner has not only helped children and families access the Internet, but has helped communities like ours to build stronger schools, improve city services, and unleash more entrepreneurial and creative potential. I know she will continue to fight for these policies, and be guided by the values of opportunity, equality, competition, and innovation. Therefore, New York City proudly and strongly supports Commissioner Rosenworcel's nomination, and I urge Congress to approve her confirmation.

Sincerely,

MIGUEL A. GAMIÑO JR.,
Chief Technology Officer,
City of New York.

NATIONAL SCHOOL BOARDS ASSOCIATION
Alexandria, VA, August 1, 2017

Hon. JOHN THUNE,
 Chairman,
 Committee on Commerce, Science, and
 Transportation,
 U.S. Senate,
 Washington, DC.

Hon. BILL NELSON,
 Ranking Member,
 Committee on Commerce, Science, and
 Transportation,
 U.S. Senate,
 Washington, DC.

Re: *Nomination of Jessica Rosenworcel, Esquire to Federal Communications Commission*

Dear Chairman Thune and Ranking Member Nelson:

On behalf of our state associations and the 90,000 school board members who govern our country's 14,000 local school districts, the National School Boards Association (NSBA) urges your support and confirmation of Jessica Rosenworcel, Esquire as a Commissioner of the Federal Communications Commission (FCC).

During Ms. Rosenworcel's first term at the FCC, she passionately advocated policy positions that help to ensure all our Nation's students have access to the high-quality education that they deserve.

Specifically, Ms. Rosenworcel worked to close the "homework gap" by highlighting the disparities in broadband service that often make it difficult for students in rural areas and underserved communities to complete their school work. NSBA also applauds Ms. Rosenworcel's commitment to ensuring the integrity and success of the Universal Service Fund and E-Rate program, a critical component to ensuring equity and access to schools and libraries for telecommunications services that support 21st Century skills and learning.

As our Nation's public schools need the leadership and advocacy efforts of Ms. Rosenworcel, NSBA strongly supports her reappointment to the FCC. Thank you for your consideration.

Sincerely,

THOMAS J. GENTZEL,
Executive Director and Chief Executive Officer.

HISPANIC LEADERSHIP FUND
Washington, DC, September 29, 2017

Hon. JOHN THUNE, Chairman,
 U.S. Senate Committee on Commerce,
 Science, and Transportation,
 Washington, DC.

Hon. BILL NELSON, Ranking Member,
 U.S. Senate Committee on Commerce,
 Science, and Transportation,
 Washington, DC.

Dear Chairman Thune and Ranking Member Nelson:

The Hispanic Leadership Fund supports the reconfirmation of Federal Communications Chairman Ajit Pai. Throughout his tenure at the FCC—both as a Commissioner and now as Chairman—he has repeatedly proven himself to be a public official who is rooted in equality and transparency. The Hispanic Leadership Fund (HLF) fully endorses his continued role as Chairman and urges the U.S. Senate to reconfirm him.

HLF is a non-partisan organization that has advocated since 2008 for public policy frameworks that ensure the American Dream is within reach for everyone. This includes the kind of common sense regulatory policies that Chairman Pai has advocated for since his first day at the FCC. From addressing robocalls to publishing proposals and orders before they're voted on, the Chairman has brought a sensible approach to the FCC that prioritizes consumer interests above all.

Challenging the status quo is not always easy, and Chairman Pai has faced pushback from special interest groups who fundraise off divisive issues, most notably 'net neutrality'. As we stated back in April when the Chairman announced his intention to "reverse the mistake of Title II" reclassification of the internet, HLF believes that a primary reason the internet has flourished is because it operated in a light-touch regulatory environment. This approach worked well under the presidencies of both Democrat Bill Clinton and Republican George W. Bush, and we believe it should be restored. In doing so, the flow of investment and innovation will pick up to the benefit of working families across the country.

Beyond his commitment to sensible regulatory policy, Chairman Pai is dedicated to diversity and inclusion. He is the first Indian-American to Chair the FCC and

is unequivocally committed to ensuring that all Americans—regardless of race, gender, religion, ethnicity, or sexual orientation—have the opportunity to participate and thrive in the digital era rather than finding themselves on the wrong side of the digital divide.

In less than a year as Chairman, he has already catapulted the issue of America's digital divide into the spotlight. Chairman Pai took initiative to reinstate the *Advisory Committee on Diversity and Digital Empowerment* (ACDDE) in which 31 appointees, including myself, provide counsel to the Commission regarding how best to empower disadvantaged communities and accelerate the entry of small businesses into the media, digital news and information, and audio and video programming industries. Additionally, the Committee will provide recommendations on how to ensure disadvantaged communities are not denied the wide range of opportunities made possible by next-generation networks. Unfortunately, in recent years, the activity of the ACDDE had been minimized at the FCC under previous chairmen.

Finally, we believe strongly that the reconfirmation of Chairman Pai should not fall victim to today's tumultuous political games and an environment that too often places blind partisanship above the public interest. The U.S. Senate should recognize that before them is a highly qualified, committed, and fair nominee whose reconfirmation will continue to put the interests of real, everyday Americans at the helm of the FCC. We respectfully urge all Senators to vote to reconfirm Ajit Pai as Chairman of the Federal Communications Commission.

Sincerely,

MARIO H. LOPEZ,
President.

RESPONSE TO WRITTEN QUESTION SUBMITTED BY HON. JOHN THUNE TO
HON. AJIT PAI

Question. Millions of rural Americans lack access to broadband, and bridging the digital divide is a priority for me and the Committee. As traditional fiber, cable, and 4G broadband is deployed throughout the country, policymakers must nevertheless be creative and open-minded when exploring all options to achieving universal service. What role do you see for unlicensed spectrum (Wi-Fi, TV White Spaces, millimeter wave, etc.) in connecting unserved rural households with broadband Internet access?

Answer. I strongly believe that unlicensed spectrum should play an important role in providing broadband service to rural areas, and I am committed to moving ahead expeditiously to achieve this goal. We can and should build on earlier successes in this area. For instance, Wireless Internet Service Providers (WISPs) already are providing broadband service in many rural areas using unlicensed spectrum, particularly in the 2.4 GHz and 5 GHz "Wi-Fi" bands.

Also, several years ago, the FCC developed rules for providing broadband service on an unlicensed basis in the TV white spaces. I supported the Commission's decision in 2015 to revise the TV white space rules to facilitate deployments in rural areas by allowing for higher power to serve longer distances. And last year, we provided additional spectrum for unlicensed in the millimeter wave bands, doubling the available spectrum to cover 57–71 GHz.

It is essential that we move ahead with a renewed sense of purpose to bring broadband to every American. That's why the Commission is actively considering different methods for expanding access to spectrum, including unlicensed spectrum. For instance, we teed up a Notice of Inquiry on mid-band spectrum for Commission consideration at our August open meeting that, among other things, explores how we can make more mid-band spectrum available for unlicensed use.

RESPONSE TO WRITTEN QUESTIONS SUBMITTED BY HON. ROGER F. WICKER TO
HON. AJIT PAI

Question 1. Chairman Pai, there has been a lot of discussion recently about using TV white spaces to help deliver rural broadband. Can you comment on the challenges and opportunities of potentially using TV white spaces to deliver broadband to rural areas?

Answer. The Commission's rules provide for unlicensed operation in TV white spaces, including in rural areas. In 2015, we revised the TV white space rules to facilitate deployments in rural areas, such as by allowing for higher power to serve longer distances. This spectrum offers excellent properties for delivering broadband

over the distances typically needed to serve rural areas. For example, the signals travel long distances and overcome obstacles such as trees and rolling terrain.

One challenge is that the Commission must balance wider deployment of white space broadband services and the availability of channels for low power TV stations and translators that are displaced by the TV incentive auction. Moreover, as is the case for many nascent services, the early equipment involving TV white spaces is costly.

Question 2. Within the USF Program, the annual budget for the high cost program is \$4.5 billion, the annual budget for the E-Rate program is \$3.99 billion, and the annual budget for the low-income program is \$2.25 billion, increasing to \$2.28 billion for 2018. In light of these funding levels, and the Nation's challenges in managing the cost and quality of health care, the FCC's rural health care annual budget of \$400 million, minus USAC administrative expenses, which has not been changed in nearly 20 years, appears woefully inadequate. Will you work to ensure that rural health care support is adequate to meet the needs of the nation?

Answer. The rural healthcare program provides important funding to eligible health care providers (HCPs) for telecommunications and broadband services necessary for the provision of health care. I deeply appreciate the importance of these HCPs serving rural communities and the need for universal service funding in making sure all Americans have access to state-of-the-art healthcare. As the son of a doctor in Kansas who often travelled many miles to see his patients, I am well aware of the difficulty so many in rural America have in getting adequate healthcare.

I have long made ensuring the viability of the RHC program for rural participants a priority. When the FCC created the Healthcare Connect Fund in 2012, I pushed the Commission to make sure that the majority of the funds were targeted at rural healthcare providers. And last December, I pushed the agency to crack down on waste, fraud, and abuse in the program to ensure sufficient funding for the many good actors that need it. I have asked Commission staff to look closely at the RHC program and to consider ways to strengthen it.

RESPONSE TO WRITTEN QUESTIONS SUBMITTED BY HON. ROY BLUNT TO
HON. AJIT PAI

Question 1. Are you considering major changes to the E-Rate program and, if so, can you elaborate how any changes may impact rural schools and libraries that depend on the program for connectivity?

Answer. I am deeply committed to doing everything within the FCC's power to close the digital divide. I believe an effective E-rate program—one that promotes better connectivity for students and library patrons alike—can be a powerful tool to help bridge that divide. That is why, four years ago, I said that “E-rate is a program worth fighting for.”

Unfortunately, there have been serious flaws in the administration of the E-rate program, specifically related to the process by which schools and libraries apply for E-rate funding, that are preventing many schools and libraries from receiving that funding. I have asked USAC, which administers the program on the FCC's behalf, to provide a detailed report on plans to fix existing problems so that the program is in full compliance with our rules and works for applicants and participants. And in general, I believe that we must focus on cutting unnecessary red tape and making the E-rate application process easier for schools and libraries.

Question 2. Will you commit to ensuring the E-Rate program remains strong in rural Missouri?

Answer. Yes.

Question 3. During the broadcast television incentive auction, the FCC paid 28 UHF television stations more than \$984 million to relocate to a VHF channel. Is the UHF discount is still necessary?

Answer. In April, the Commission voted to reinstate the UHF discount until it could review in a more holistic proceeding later this year both the discount and the FCC's national television multiple ownership rule. This action returned the marketplace to the status quo that existed before October 2016. As you know, last year, the previous Commission voted to eliminate the UHF discount. However, it did so without simultaneously considering whether the national ownership cap should be modified. As the UHF discount and national television cap are inextricably linked, this decision was made in error. The national cap establishes a national ownership limit, and the discount is used to calculate whether the limit has been reached. Because of this connection, eliminating the UHF discount substantially tightened the

national cap without any analysis of whether this tightening was in the public interest given current marketplace conditions.

Later this year, the Commission will launch a new proceeding that will broadly consider both whether the national ownership cap should be modified and whether the UHF discount should be retained. Any decision on whether the UHF discount remains necessary will be based on the facts compiled in that proceeding along with the relevant law.

RESPONSE TO WRITTEN QUESTIONS SUBMITTED BY HON. TED CRUZ TO
HON. AJIT PAI

Net Neutrality

So called “net neutrality” as implemented in former FCC Chairman Tom Wheeler’s Open Internet Order was a bureaucratic power grab that took the Internet which has long been a transformational tool that has allowed innovation and creativity and created new economic opportunities for all Americans and turned the Internet into a regulated public utility under Title II of the Communications Act. Title II gives the government new authority over the Internet which could be used to determine pricing and terms of service.

What’s concerning about the Title II debate is the influence that edge providers such as Google, Facebook and Netflix had with the Obama White House. For example, *The Intercept* has reported that between January 2009 and October 2015, Google staffers gathered at the White House on 427 separate occasions. *The Intercept* further notes that the frequency of the meetings increased from 32 in 2009 to 97 in 2014. This is concerning given that President Obama released a video on November 10, 2014 weighing into the net neutrality debate and advocated that the FCC regulate the Internet as a public utility. Not only did the Commission move forward and implement Title II but edge providers like Google were exempted from Title II.

Question 1. Were you concerned with the influence that the Obama White House had with the FCC in advocating for Title II?

Answer. Yes.

Question 2. Building off the previous question, as you know, the FCC is funded by fees paid by those it regulates. Google, Microsoft, Facebook, and Amazon collectively have a market capitalization in excess of two trillion dollars. Are you troubled by the fact that not only did these companies have a cozy relationship with the Obama White House but that they use the regulatory process to seek the regulation of their competition-broadband providers, yet they contribute very little if anything towards offsetting the cost of the FCC’s operations? Do you have thoughts on how we might remedy this inequity?

Answer. Unfortunately, it is a common practice for companies to lobby government officials to either seek regulatory largesse and/or impose burdensome regulations on their competitors so that they can gain a competitive advantage. I have seen this practice during my time at the Commission and am troubled by it. In my view, the best way to remedy this problem is for the Commission to embrace a philosophy of regulatory parity and not use the regulatory process to reward favored industries and punish disfavored industries.

5G Wireless Technology Deployment

We are on the cusp of the wireless industry introducing the next generation of technology—5G. That upgrade to our existing networks is expected to bring us higher data speeds, lower latency, and the ability to support breakthrough innovations in transportation, healthcare, energy and other sectors. And as recent studies have shown, 5G is expected to provide significant benefits to state and local governments, allowing them to become smart cities. However, those networks will also require many more antenna sites than we have today—they will increasingly rely on small cell technologies. To recognize these benefits, a study performed by Deloitte shows that several steps are necessary to remove impediments to antenna siting. Texas is leading the way, as evidenced by recent legislation (Texas Senate Bill 1004) signed into law just last month that streamlines the deployment of next-generation 5G networks. It’s also my understanding that the Commission has initiated a proceeding designed to evaluate whether some of those obstacles can be removed.

Question 3. Can you tell me what you hope to achieve in the ongoing proceeding and when it might be concluded?

Answer. The Wireless Infrastructure Notice of Proposed Rulemaking (NPRM) and Notice of Inquiry (NOI), adopted on April 20, 2017, was intended to take a com-

prehensive look at the federal, state, and local regulatory requirements that affect the speed with which, and cost at which, wireless networks can be deployed and modernized. The Commission also adopted the same day a Wireline Infrastructure NPRM seeking comment on barriers to the deployment of wireline infrastructure (including the fiber that is critical to carrying wireless traffic).

In the wireless item, the Commission sought comment on regulatory impediments to wireless network infrastructure investment and deployment and on how to remove or reduce such impediments, consistent with the law and the public interest. The NPRM/NOI seeks comment on measures to streamline state and local government review of proposed infrastructure deployments and asks, for instance, about the timelines for local zoning reviews, the remedies available to applicants for missed deadlines, and the reasonableness of fees. In addition, the proceeding is examining how we might revise the Commission's rules and procedures for complying with the National Historic Preservation Act and the National Environmental Policy Act in ways that might help reduce the costs and delays associated with those review processes, while still satisfying our legal obligations and protecting important resources. Our objective is to facilitate and accelerate the deployment of the infrastructure needed to meet the country's needs for advanced wireless service and to make next-generation technologies available to all Americans. The comment cycle in this proceeding closed on July 17, 2017, and we are in the process of reviewing the record that's been compiled.

FCC Priorities

Question 4. My top priority is regulatory reform. Please identify three meaningful regulations that you are interested in repealing during your tenure at the FCC.

Answer. (1) I am interested in repealing the copper retirement rules that the Commission adopted in 2015 so that carriers can spend less money maintaining the fading copper networks of yesterday and more money building and expanding the next-generation networks of tomorrow.

(2) I am interested in repealing the main studio rule, which appears to be an outdated regulation that imposes unnecessary costs on radio and television broadcasters.

(3) I am interested in repealing the outdated requirement that carriers completing payphone calls conduct annual audits of their payphone call tracking systems and file annual audit reports with the Commission, since these audits often cost more than the amount of the compensation being reviewed.

ICANN

Question 5. Last year the previous administration allowed the Federal Government's contract with ICANN to expire. Do you think that was a wise and prudent decision?

Answer. I spoke out against that decision at the time. For instance, over three years ago, I wrote about my "serious doubts" in *National Review*, arguing that "[t]he current model of Internet governance has seen a tremendous success. It's allowed the Internet to remain free and operate reliably. If America steps back, foreign governments will be all too eager to step forward. . . . [T]he United States should not apologize for its leadership in promoting a free Internet." See "Giving Up the Internet: Still Risky," *National Review* (Apr. 23, 2014), available at <http://www.nationalreview.com/article/376384/giving-internet-still-risky-ajit-pai>.

Question 6. Microsoft and Facebook and YouTube, which is owned by Google, all of whom supported President Obama's Internet transition, have signed a code of conduct with the European Union to remove so-called hate speech from European countries in less than 24 hours. Do you think these global technology companies have a good record of protecting free speech? And what can be done to protect the First Amendment rights of American citizens?

Answer. I am always concerned by the impulse to censor unpopular speech, whether at home or abroad. During my tenure at the Commission, I have consistently spoken out about the importance of protecting free speech. If I am fortunate enough to be confirmed, I will continue to do whatever I can to safeguard the First Amendment rights of the American people.

RESPONSE TO WRITTEN QUESTION SUBMITTED BY HON. JERRY MORAN TO
HON. AJIT PAI

Question. The Government Accountability Office (GAO) recently made a recommendation in a May 2017 report that the Universal Service Fund should be moved from a private bank into the U.S. Treasury. What are your thoughts on this

proposal? Do you foresee such action having an impact the long-term solvency of the fund as it relates to the Federal Government's future efforts to reduce the national deficit?

Answer. I agree with this recommendation, and the Universal Service Administrative Company is actively working in coordination with the FCC and the Treasury to transfer the USF funds as recommended by GAO. I have not seen any evidence that moving the funds to the U.S. Treasury would affect the long-term solvency of the USF, nor am I aware of potential, specific impacts on the national deficit. Indeed, moving these funds to the U.S. Treasury will give the Federal Government the greatest ability to protect these funds from improper use and safeguard their important role in ensuring that every American gets connected.

RESPONSE TO WRITTEN QUESTIONS SUBMITTED BY HON. DAN SULLIVAN TO
HON. AJIT PAI

I want to thank you and the current FCC Commissioners for working with my staff to help alleviate some of the burden that the reduction in reimbursement from the Rural Health Care program placed on Alaskan health care providers.

In my state, the price of telecommunications services is so expensive that many rural health care providers cannot afford them without support from the Rural Health Care program. Telemedicine services in Alaska are essential for many of our villages, and they are only possible if a health facility has connectivity.

In enacting the Telecommunications Act of 1996, Congress specifically directed the FCC to ensure that rural health care providers have access to telecommunications services at rates that are reasonably comparable to those for similar services in urban areas of the State. As you are aware, for the first time the demand for funding from the Rural Health Care program exceeded the \$400 million cap.

Question 1. Will you work to ensure the sustainability of the Rural Health Care Program as the FCC moves forward to review further reforms to universal service programs?

Answer. Yes.

Question 2. If confirmed, what steps would you take to address this funding issue?

Answer. The rural healthcare program provides important funding to eligible health care providers (HCPs) for telecommunications and broadband services necessary for the provision of health care. I deeply appreciate the importance of these HCPs serving rural communities and the need for universal service funding in making sure all Americans have access to state-of-the-art healthcare. As the son of a doctor in Kansas who often travelled many miles to see his patients, and as a regulator who has seen firsthand the healthcare challenges in Alaska, I am well aware of the difficulties so many Americans have in getting adequate healthcare.

I have long made ensuring the viability of the RHC program for rural participants a priority. When the FCC created the Healthcare Connect Fund in 2012, I pushed the Commission to make sure that the majority of the funds were targeted at rural healthcare providers. And last December, I pushed the agency to crack down on waste, fraud, and abuse in the program to ensure sufficient funding for the many good actors that need it. I have asked Commission staff to look closely at the RHC program and to consider ways to strengthen it.

Question 3. Will you consider beginning a rulemaking proceeding to evaluate the changes necessary to ensure that the program budget is sufficient to fulfill the purposes of the program?

Answer. Yes, as noted above, I have asked Commission staff to look closely at the RHC program and to consider ways to strengthen the program.

Question 4. What steps do you plan to take to increase the transparency and accountability of USAC?

Answer. I agree with you that USAC must be more transparent and accountable than it's been in the past. That's why in my first week on the job, my office directed the Office of the Managing Director and the Wireline Competition Bureau to more actively oversee how USAC conducts its duties.

And I myself have directly intervened when necessary. For example, serious flaws in the administration of the E-rate program have prevented many schools and libraries from getting that funding. I have asked USAC to provide a detailed report on plans to fix the existing problems so it can administer the E-rate program in a manner that is fully compliant with our rules and that works for applicants and participants.

Similarly, after the Government Accountability Office (GAO) recently released a report confirming that waste, fraud, and abuse are still all too prevalent in the Life-

line program, I directed USAC to take immediate action to stop this abuse of the program and establish procedures for ongoing vigilance to protect the Fund.

Last Congress, I questioned the previous Chairman, Chairman Wheeler, about a constituent of mine who had license renewal applications pending at the FCC for more than 13 years, which I find unacceptable. At my urging, the FCC acted on some of those pending applications, but requested more information which my constituent submitted and continues to wait for an answer.

Question 5. What type of action do you plan to take, or have you taken, to improve the timeliness of FCC action on items submitted for approval or for review?

Answer. I agree that it is important for the FCC to act on matters in a timely manner. That's why, for instance, I have made clear that section 7 of the Communications Act will be enforced during my tenure as Chairman. That provision states that the Commission will decide within one year whether any petition for a new technology or service is in the public interest. Unfortunately, the Commission has failed to abide by this deadline in the past. I have placed the Commission's Office of Engineering and Technology in charge of enforcing compliance with section 7.

I also believe that the Commission should consider establishing deadlines for resolving applications for review, petitions for reconsideration, and waiver requests.

Question 6. Will you commit to acting on the applications pending at the FCC for Peninsula Communications, Inc. as soon as possible?

Answer. Yes.

It is my understanding that environmental assessments (EAs), when required under the FCC's rules, are currently not subject to any processing timelines or dispute resolution procedures. As a result, environmental assessments for new facilities can languish for an extended period of time—sometimes years. This is an unfortunate barrier to feeding our Nation's hunger for expanded wireless broadband. Given my seat on this committee and on EPW, I have a particular interest in finding ways to streamline these procedures.

Question 7. Will you commit to finding ways to streamline the FCC's review of environmental assessments, including through the adoption of "shot clocks" to resolve environmental delays and disputes, in addition to working on additional infrastructure reforms?

Answer. Yes, I commit to seeking ways to streamline the Commission's environmental review process consistent with the public interest and our obligations under the National Environmental Policy Act and other environmental statutes. The Commission opened a rulemaking proceeding in April of this year seeking comment broadly on how we can improve and streamline our environmental review, in the context of a broader examination of regulatory impediments to wireless infrastructure deployment. The record in that proceeding closed in July, and staff are currently reviewing comments.

RESPONSE TO WRITTEN QUESTION SUBMITTED BY HON. DEAN HELLER TO
HON. AJIT PAI

Question. Chairman Pai, some incumbent spectrum users have made private capital investments—hundreds of billions of dollars over decades—because of the certainty of and their reliance on existing spectrum usage rules. Will you ensure that these incumbent users are treated fairly should you consider changing existing spectrum usage rules?

Answer. Yes. The Commission is committed to policies that promote investment, encourage innovation, and foster next generation networks. Our work toward such policies includes a commitment to fair treatment of incumbent licensees that have already built out their networks.

RESPONSE TO WRITTEN QUESTIONS SUBMITTED BY HON. MIKE LEE TO
HON. AJIT PAI

Question 1. I've heard from concerned constituents that some of the FCC's proposals in its AM radio proceeding could cause them to lose access to certain stations. I know FEMA has also raised concerns that these proposals could even impact the reception of Presidential alerts in times of crisis. As the Commission noted earlier in this proceeding, the issues surrounding AM radio interference protections are highly technical and necessitated additional study, yet in the Further Notice of Proposed Rulemaking, the Commission tentatively proposed rule changes to reduce interference protections for AM stations. *Could you tell me what studies the Commission has done during the proceeding to support the Commission's tentative conclu-*

sions to reduce interference protections, or are more studies required? We want to be sure that the proposals do not harm but rather revitalize AM radio.

Answer. The Commission's tentative conclusions were premised on the goal of improving AM facilities. The Commission did not undertake its own studies prior to seeking input on the proposals. As part of the record, commenters have provided studies, and other commenters have provided comments about those studies. The Commission will continue to analyze the docket, including these studies, as it considers whether to craft final rules regarding this proposal. We have not yet reached any determination as to whether additional studies are required.

Question 2. There is currently a 180-day "shot clock" that limits the length of time the FCC has to review a transaction. Unfortunately, the FCC's review in several high-profile transactions in recent years have taken longer than 180 days. The AT&T/DirecTV deal took 412 days; Comcast/Time Warner took 381 days; Sinclair/Allbritton took 361 days; and Charter/Time Warner Cable took 314 days. In each of those cases, the FCC was able to "pause" its shot clock—although in a few of those deals, the FCC *still* exceeded 180 days, even taking account of the paused shot clock. Those deals were ultimately approved. But if the FCC waits too long to complete its review, it may effectively kill a deal. *Do you agree it's concerning that a deal could die because FCC exceeds the 180-day limit on its review?*

Answer. Yes, I do.

Question 3. Would you support legislation that required the FCC to complete review within 180 days or else seek an extension in court, and do you commit to working with my staff as they develop this type of legislation?

Answer. I have supported codifying the 180-day shot clock in the Commission's rules, and I would be happy to work with you on legislation to enshrine it in a statute.

RESPONSE TO WRITTEN QUESTIONS SUBMITTED BY HON. RON JOHNSON TO
HON. AJIT PAI

Question 1. As the expert agency, rather than have 50 different standards for measuring broadband speeds, isn't the FCC in the best position to determine how broadband speeds should be measured in the United States?

Answer. Yes, I believe the FCC has the most technical expertise in that area.

Question 2. Doesn't the Commission already do this through its annual Measuring Broadband America Report?

Answer. Yes, although I should note that not all Internet service providers participate in that program.

RESPONSE TO WRITTEN QUESTIONS SUBMITTED BY HON. BILL NELSON TO
HON. AJIT PAI

Question 1. Past members of the FCC have sought out the guidance of state and local elected officials on matters pending before the agency. What role does consultation with state and local governments play in your decision making?

Answer. I believe that it is important for the Commission to consult with state and local governments. Indeed, during my time at the Commission, I have personally met or spoken by phone with the Governors (at the time) of Iowa, Kansas, Louisiana, Massachusetts, Nebraska, New Hampshire, New York, and South Carolina. I have also met with a wide range of local government officials, from mayors to school superintendents to sheriffs, to discuss issues of concern in their communities.

Question 2. I applaud the FCC's ongoing efforts in the incentive auction. However, applications of many rural service providers and small businesses have yet to be processed. Can you please commit to ensuring that the Commission will make processing of the remaining license applications a priority?

Answer. Yes.

RESPONSE TO WRITTEN QUESTIONS SUBMITTED BY HON. MARIA CANTWELL TO
HON. AJIT PAI

Question 1. The FCC's 2018 budget states that the mission of the FCC includes "promoting safety of life and property through the use of wire and radio communication."

Does ensuring that our communications networks are hardened against cyber-attacks, fall into the definition of "promoting safety of life and property through the use of wire and radio communication"?

If not why not?

Answer. Under the Communications Act of 1934, as amended, part of the FCC's mission is to promote "safety of life and property through the use of wire and radio communications." Communications Act § 1. And reliable, resilient, and secure commercial communications networks allow for access to critical network services like 911, emergency alerting, and National Security/Emergency Preparedness (NS/EP) communications. Such networks therefore promote the safety of life and property.

Question 2. Does ensuring that our communications networks are hardened against cyber-attacks fall into the public safety mission of the FCC?

Answer. Promoting reliable, resilient, and secure communications networks falls within the public safety mission of the FCC.

Question 3. Will you commit to using all of the tools available to you as the Chairman of the principal agency in the Federal Government with expertise and regulatory authority over our communications networks, to make sure those networks are resilient and hardened against cyber threats?

Answer. The FCC will do whatever we can, in consultation with other stakeholders and within the confines of our statutory authority, to promote network resiliency, reliability, and security.

Question 4. According to Department of Homeland Security statistics, of the 290 cyber-attacks on critical infrastructure in 2016, 62 or just over 20 percent were on communications networks.

For each of the 62 attacks on communications critical infrastructure in 2016, please detail what the FCC involvement was and what actions the FCC took to assist in recovery and remediation.

Please include:

- a. coordination is with other Federal agencies and the Administration; and
- b. oversight the FCC performed over carriers' that experienced cyber breaches including reporting requirements and enforcement actions; and
- c. outreach or notice required or facilitated to consumers impacted by any cyber breach.

Answer. We do not have sufficient information to confirm FCC involvement following the 2016 attacks cited by DHS, all of which took place before I became the Chairman. Providers submit cyber incident information directly to the Industrial Control System Cyber Emergency Response Team (ICS-CERT) within DHS. ICS-CERT maintains this information as confidential pursuant to the Protected Critical Infrastructure Information (PCII) Program. As such, this information is not shared with the FCC. Providers are obligated to report network outages to the Commission, but because the Commission lacks access to ICS-CERT's cyber incident information, we are unable to cross-reference any action we may have taken with respect to the above-referenced incidents.

Question 5. Please detail what provisions in the Communications Act or any other legal authority you believe limit the FCC responsibility and ability to act with regard to cybersecurity policy and cyber-attacks on communications networks. Please provide legal analysis to support your assertion.

Answer. It has long been the law that "an agency literally has no power to act . . . unless and until Congress confers power upon it." *Louisiana Public Service Commission v. FCC*, 476 U.S. 355, 374 (1986). With respect to cybersecurity, Congress has only given the Commission authority to engage in informal coordination with the Department of Homeland Security and other Federal agencies. *See, e.g.*, Cybersecurity Act of 2015, 6 U.S.C. § 1501 *et seq.*; Critical Infrastructure Information Act of 2002, 6 U.S.C. § 131 *et seq.* and 6 U.S.C. § 148(c)(1).

However, the FCC does not have an express statutory mandate to regulate cybersecurity as a general matter. To be sure, Section 1 of the Communications Act includes a policy statement that national defense and public safety are among the agency's purposes. Communications Act § 1. But the courts have explained that "policy statements alone cannot provide the basis for the Commission's exercise" of authority. *See, e.g., Comcast v. FCC*, 600 F.3d 642, 654 (D.C. Cir. 2010).

Question 6. Please detail what language would have to appear in the Communications Act and/or other legal authorizing texts that would create a statutory mandate for the FCC to have authority over cybersecurity in the context of the Nation's communications networks.

Answer. There are a variety of ways in which this could be done. For example, section 2(a) of the Cybersecurity Responsibility Act of 2017, which was introduced earlier this year by Congresswoman Yvette Clarke, would give the FCC the explicit authority to promulgate rules in this area.

Media Ownership

Question 7. In 2016, the Court of Appeals chastised the FCC for making changes to media ownership rules without the benefit of having completed statutorily mandated reviews of the media marketplace and media ownership rules that were required in 2010 and 2014. Basically the court was saying that the FCC's policy making needed to be based on data and analysis.

Given the court's guidance that any FCC changes to media ownership rules should be grounded in the type of up-to-date data and analysis required by the quadrennial review process, will you commit to completing the next quadrennial review before leading the FCC in any process that changes the existing media ownership rules?

Answer. Because there were petitions for reconsideration filed of the Commission's 2016 media ownership order, the current quadrennial review is not yet complete. And in my view, the Commission should complete the current quadrennial review before starting the next one. I believe that this is quite consistent with the Third Circuit's view on the importance of the Commission completing its statutorily mandated reviews of the media ownership rules.

Question 8. Has the Commission done data collection and analysis that would support changing or eliminating the duopoly rule, joint sales agreement rules or broadcast cross ownership rules?

If so please summarize the data and analysis here.

Will you commit to collecting data about the current media marketplace and conducting the analysis of the current media marketplace and making those findings available to the public in the context of the quadrennial review and/or report to Congress before you lead the Commission to make any changes to FCC rules that will impact the constellation of media ownership rules including: duopoly rules, joint sales agreement rules and broadcast cross ownership rules?

Answer. I commit that the draft text of any order that would change the Commission's media ownership rules in the context of the quadrennial review will be made public three weeks before any Commission vote. That draft text would include analysis and data on which the Commission would be relying to justify any changes to the rules. This step would bring unprecedented transparency to the Commission's quadrennial review process; it has never been done before in *any* quadrennial review. The record in the Commission's current quadrennial review proceeding contains substantial data and analysis submitted by commenters with a variety of views on whether the current rules should be changed. Should I determine that this data and analysis supports changing the current media ownership rules, the explanation for that determination will be made public three weeks before any Commission vote in the draft text of the order.

Question 9. Senator Shaheen and I sent a letter to the Commission in June 2016 asking that the FCC commit to providing an assessment of whether the \$1.75 billion budget and 39 month timeline for the incentive auction repack are sufficient for a successful repack of the broadcasters.

Then Chairman Wheeler wrote back to us later in the year committing to provide the information to us in a timely fashion after the completion of the forward auction.

In response to QFRs after the FCC oversight hearing earlier this year you agreed to send us the information at the close of the forward auction.

I understand that the forward portion of the incentive auction is now completed and that the FCC believes that there will be a shortfall for the repack.

When can we expect a written response to our inquiry?

Answer. Our fund administrator (EY, formerly Ernst & Young) and its team of engineers are currently reviewing each cost estimate submitted to the Commission by broadcasters and MVPDs and communicating with filers to gather more information and/or cost justification to determine whether the submitted costs are reasonable in accordance with the Spectrum Act. Once that review is complete in the fall, we will provide you with a full written response to your and Senator Shaheen's inquiries. Below, however, is a snapshot on where things currently stand.

The Commission has now received cost estimates from all but eight of the reimbursement-eligible broadcasters and some eligible MVPDs. On July 14, 2017, we publicly announced that the preliminary aggregate cost estimates received as of that date was approximately \$2.115 billion. Estimates continue to be submitted and, in the course of review, revised, and when I testified in the House of Representatives on July 19, the aggregate total was \$2.139 billion. While the estimates will continue to change as we proceed with the post-incentive auction transition process, we expect the final number to be above the \$1.75 billion that Congress has provided the Commission to reimburse impacted broadcast stations and MVPDs.

As a result, unless Congress acts to raise the \$1.75 billion cap, the substantial likelihood is that local broadcasters will be required to pay some portion of their repacking costs out of their own pockets. The Commission is prepared to work with Congress to address this issue.

At this time, we do not have reason to believe that the 39-month timeline will be insufficient. But there are a variety of tools at the Commission's disposal to assist stations should unforeseen circumstances prevent them from completing the repack on time.

- Six-month construction permit extensions for stations that for reasons beyond their control cannot complete the modifications to their facilities during their construction period;
- Special temporary authority (STA) to operate using a temporary facility or at lower power while they complete their tower modifications or other necessary construction; and
- An STA to operate on a channel in the TV band that is available because it was relinquished by a winning bidder in the auction.

Of course, should the facts as they develop lead us to the conclusion that the post-incentive auction transition process generally cannot be completed in 39 months, we reserve the right to extend that deadline.

RESPONSE TO WRITTEN QUESTION SUBMITTED BY HON. AMY KLOBUCHAR TO
HON. AJIT PAI

Question. A provision based on my Rural Spectrum Accessibility Act—that I introduced last Congress with Senator Fischer—was included in the MOBILE NOW Act that passed the Senate Commerce Committee in January. This provision would require the Federal Communications Commission to explore ways to provide incentives for wireless carriers to lease unused spectrum to rural or smaller carriers in order to expand wireless coverage in rural communities. Chairman Pai, what incentives could be useful to encourage large carriers to lease spectrum to smaller, rural carriers?

Answer. The Commission's spectrum licensing rules, including its rules for leasing spectrum, are intended to lower regulatory barriers to spectrum leasing for small and rural carriers. Our rules also provide parties with great flexibility in the partitioning and disaggregation of licensed spectrum. We will continue to explore ways to eliminate unnecessary rules and regulatory barriers and to provide incentives to expand wireless coverage in rural communities to deliver mobile broadband to all Americans.

In addition, because deployment by rural carriers on leased spectrum counts toward the primary licensee's construction benchmark, adopting and enforcing meaningful construction requirements that require licensees to build out in rural parts of their license area in order to keep their license at the end of the license term incentivizes carriers to lease spectrum to rural carriers in order to satisfy their build-out requirements.

Again, I think that we need to continue to think about further steps that we can take to encourage rural buildout. For instance, in my September 2016 speech outlining my Digital Empowerment Agenda, I proposed to substantially increase the buildout obligations associated with initial licenses and extend license terms from 10 to 15 years. This would both increase rural coverage and also make build out more economically feasible for carriers by providing an additional five years of certainty.

RESPONSE TO WRITTEN QUESTIONS SUBMITTED BY HON. RICHARD BLUMENTHAL TO
HON. AJIT PAI.

Question 1. It has been reported that the FCC may vote in September on an order on reconsideration that would roll back many media ownership regulations.

As you know, the FCC has an obligation to promote diversity and localism, and its duty to ensure that broadcasters are responsive to the needs and interests of the local community is enshrined in the Communications Act. In fact, local broadcasters tout their local news and other local services as their differentiating factor and value in the marketplace.

The Third Circuit's opinions in the *Prometheus v. FCC* line of cases have repeatedly admonished the Commission for failing to provide adequate notice of its media ownership decisions. Even more troubling, the court has repeatedly overturned the FCC when the agency has claimed that rule changes promote these important goals of localism and diversity, yet failed to consider adequately the impacts of any such rule changes. For example, in its 2011 decision the court ruled that the FCC had not yet "gathered the information required to address these challenges," and thus "failed to provide reasoned analysis to support" changes to the FCC's cross-ownership rules and other local ownership limits.

Accordingly, I am shocked you would consider going forward with such a vote affecting media ownership regulations without a full, up-to-date Quadrennial Review. And I am even more shocked that you appear to have abandoned your own views on this subject, espoused before you became Chairman and took control over such process decisions, when you seemed to have more regard for those processes designed to ensure full and fair consideration of such questions. In your dissent from the prior Commission's joint sales agreement attribution decision, for example, you said that "the Commission abdicates its legal obligation to review our media ownership regulations every four years" when "[i]t arbitrarily singles out one aspect of those regulations . . . and changes our policies in a way that ignores the realities of the modern media marketplace, [and] will harm localism and diversity[.]"

While you may contend that the record from the last Quadrennial Review would be sufficient for action on reconsideration, the reality is that with the incentive auction, proposed broadcast TV mergers, and other changes in the broadcasting landscape much has changed since that record was developed. Any revision of media ownership regulations should go through a fully transparent and robust notice and comment process, as you have long stated, and be based on an accurate, current picture of the broadcasting landscape.

Do you commit to conducting a new, full, and open Quadrennial Review of the Commission's broadcast ownership rules before proceeding with any action that would affect the FCC's current media ownership rules?

How would you make sure that any changes would not hurt localism, diversity, or competition in broadcast television?

Answer. Because there were petitions for reconsideration filed of the Commission's 2016 media ownership order, the current quadrennial review is not yet complete. And in my view, the Commission should complete the current quadrennial review before starting the next one.

I commit that the draft text of any order that would change the Commission's media ownership rules in the context of the quadrennial review will be made public three weeks before any Commission vote. That draft text would include analysis and data on which the Commission would be relying to justify any changes to the rules. This step would bring unprecedented transparency to the Commission's quadrennial review process; it has never been done before in *any* quadrennial review.

Before deciding to change any of its media ownership rules, the Commission will assess the impact of that change on the values that the rule in question is designed to advance, whether it be localism, diversity, and/or competition.

Question 2. Chairman Pai, during your recent visit with me, we had a good conversation about what localism means. As you know, the FCC's obligation to promote diversity, localism, and ensure that broadcasters are responsive to the needs and interests of the local community is enshrined in the Communications Act. What do you believe are the attributes of localism? How do you define localism?

Answer. A broadcast station advances localism when it airs programming that is responsive to the needs and interests of the community which it is licensed to serve.

Question 3. As I recall, in our recent conversation, you stressed the importance of broadcasters being able to determine news important to the local community.

If a company with broadcast properties required local affiliated stations to air content during its news programming unconnected to the local community, would you agree that such practices undermine localism?

Would you agree that any such content should be clearly identified as national “must-run” content? Would a company’s failure to do so implicate any FCC rules?

If such a company were to endeavor to acquire additional broadcast properties, would you consider such practices requiring certain “must-run” content relevant to the FCC’s review of that merger under your obligations to protect and promote localism?

Answer. The FCC’s rules do not require local affiliates to identify national “must-run” content, and I am not aware any proposal currently under consideration to mandate such identification.

Local television newscasts generally feature a mix of local and national news, so I do not believe that any news content focusing on national issues by definition undermines localism. I do agree, however, that there could come a point at which the amount of nationally-focused content in a local newscast could undermine localism.

Any broadcast licensee is required to air programming that is responsive to the needs and interests of the community to which it is licensed, and a licensee’s failure to comply with that requirement would be relevant to the Commission’s review of a transaction.

Question 4. During this nominations hearing, you said you were not familiar with an interpretation of Section 706 requiring the FCC to know Internet speeds being deployed by companies.

In fact, Section 706 of the Telecommunications Act of 1996 requires the FCC to report annually on whether “advanced telecommunication capability is being deployed . . .” and “advanced telecommunications capability” is defined as “*high-speed* [emphasis added], switched, broadband telecommunications capability . . .” Accordingly, to accurately conduct such a report, the FCC must know whether companies are indeed offering telecommunication capability that qualifies as “high-speed.”

How is the FCC able to fulfill its obligation to conduct its review pursuant to Section 706 if we cannot trust companies to tell the truth about the Internet speeds that they are being deployed?

Answer. The Commission’s Section 706 proceedings for many years have relied on data collected in our Form 477, as well as other data sources. Form 477 data provides a wealth of information on the types and speeds of broadband connections deployed by virtually all Internet service providers in the United States. This information is certified as accurate in accordance with our rules by officials in each company and anyone making willful false statements in a Form 477 can be punished by fine or imprisonment under the Communications Act. Going forward, I anticipate the Commission will continue to rely heavily on Form 477 data as part of our statutory duty under Section 706. And on August 3, the Commission will be voting on proposals to improve the accuracy of the Form 477 data we collect.

Question 5. Chairman Pai, in your April 2017 statement on the Business Data Services Market, you describe a new “competitive market test” that considers a particular county competitive if “50 percent of the locations with BDS demand in that county are within a half-mile of a location served by a competitive provider or 75 percent of the census blocks in that county have a cable provider present.”

Essentially, that means if a church in Hartford has only one choice, but there’s another provider a few miles away, there’s nothing for the Commission to do. Potential competition isn’t competition.

Can you explain your competition philosophy? Is it your position that the agency should not protect consumers even when there is a monopoly? Do you believe a duopoly is sufficient?

Answer. My competition philosophy is informed by a few simple principles. Consumers benefit most from competition, not preemptive regulation. Free markets have delivered more value to American consumers than highly regulated ones. No regulatory system should indulge arbitrage; regulators should be skeptical of pleas to regulate rivals, dispense favors, or otherwise afford special treatment. Particularly given how rapidly the communications sector is changing, the FCC should do everything it can to ensure that its rules reflect the realities of the current marketplace and basic principles of economics. Rules that reflect these principles will result in more innovation, more investment, better products and services, lower prices, more job creation, and faster economic growth.

Where a market lacks competition, I do believe the Commission should intervene in appropriate circumstances. The record in the Business Data Services Market showed many providers are willing to build out at least by a half-mile, with some going further. What’s more, there’s strong competition well within the half-mile threshold; about half of buildings with demand are within 88 feet of competitive fiber facilities, and 75 percent are within 456 feet. Those facts, in addition to millions of observations from one of the largest data collections the Commission has

ever conducted, are why the Commission concluded that sufficient facilities-based competition near a location serve to discipline prices. And to ensure that every consumer is protected, the Commission maintained a tried-and-true safety valve in markets deemed competitive. Sections 201 and 202, along with the section 208 complaint process, will continue to serve as safeguards against any attempts by incumbents to charge unjust or unreasonable rates for common-carriage DS1 and DS3 services.

RESPONSE TO WRITTEN QUESTIONS SUBMITTED BY HON. BRIAN SCHATZ TO
HON. AJIT PAI

Question 1. Last week the FCC announced that the estimated cost to repack the TV band would be approximately \$2.11 billion dollars, which is approximately \$365 million more than the \$1.75 billion Congress included in the Television Broadcaster Relocation Fund. Given this shortfall, is additional funding necessary to ensure that repacked television stations are not forced to go out of pocket or cover their costs?

Answer. We have begun our careful examination of the submissions received to date. The initial aggregate estimate is subject to change due to factors such as the agency's review, as well as the fund administrator's review, of estimates and revisions made by eligible entities, but the agency expects the final number to be above the \$1.75 billion that Congress has provided the Commission to reimburse impacted broadcast stations and MVPDs. As a result, unless Congress acts to raise the \$1.75 billion cap, the substantial likelihood is that local broadcasters will be required to pay some portion of their repacking costs out of their own pockets. I am prepared to work with Congress to address this issue.

Question 2. Could you explain what happens to a broadcaster if, through no fault of their own, it cannot complete channel relocation in the time allotted during the repacking process following the incentive auction?

Answer. I do not believe that any broadcaster should be forced off the airwaves through no fault of its own during the post-incentive auction transition process. And we have a number of tools at our disposal to prevent this from happening.

- Six-month construction permit extensions for stations that for reasons beyond their control cannot complete the modifications to their facilities during their construction period;
- Special temporary authority (STA) to operate using a temporary facility or at lower power while they complete their tower modifications or other necessary construction; and
- An STA to operate on a channel in the TV band that is available because it was relinquished by a winning bidder in the auction.

The STA process worked well during the DTV transition and should allow stations to continue to serve their communities if unforeseen circumstances arise.

Of course, should the facts as they develop lead us to the conclusion that the post-incentive auction transition process generally cannot be completed in 39 months, we reserve the right to extend that deadline. However, given current facts, we have reached no such conclusion.

Question 3. When do you expect to have the final analysis of the reimbursement request?

Answer. The review of initial cost estimates involves a multi-step process that balances the Commission's need to ensure responsible stewardship of public funds with ensuring the timely availability of funds for entities incurring relocation costs. We expect that the fund administrator's review of initial cost estimates will be completed in mid-September, after which time we will analyze the data to calculate an initial allocation. We expect to begin making reimbursement payments early in the fourth quarter of this calendar year. Additional cost estimates and changes to estimates will continue to be submitted throughout the transition period and we will conduct a similar review of such changes. We will also review invoices for actual costs incurred. It is therefore not possible to know the precise amount of the aggregate total costs until the last invoice is submitted and approved at the end of the transition.

RESPONSE TO WRITTEN QUESTION SUBMITTED BY HON. EDWARD MARKEY TO
HON. AJIT PAI

Question. Earlier this year, the majority of the Commission indicated that a market is competitive where only one provider has service, and potentially a second provider may enter the market. Do you take the position that the agency should not regulate when there is a monopoly? What is your view on duopoly and what actions should the agency take? What is your plan to evaluate, on an ongoing basis, conditions in business data services?

Answer. Where a market lacks competition, I do believe the Commission should intervene in appropriate circumstances. The record in the Business Data Services Market showed many providers are willing to build out at least by a half-mile, with some going further. What's more, there's strong competition well within the half-mile threshold; about half of buildings with demand are within 88 feet of competitive fiber facilities, and 75 percent are within 456 feet. Those facts, in addition to millions of observations from one of the largest data collections the Commission has ever conducted, are why the Commission concluded that sufficient facilities-based competition near a location serve to discipline prices. And to ensure that every consumer is protected, the Commission maintained a tried-and-true safety valve in markets deemed competitive. Sections 201 and 202, along with the section 208 complaint process, will continue to serve as safeguards against any attempts by incumbents to charge unjust or unreasonable rates for common-carriage DS1 and DS3 services.

Going forward, the Commission plans to evaluate conditions in the business data services market at least every three years.

RESPONSE TO WRITTEN QUESTIONS SUBMITTED BY HON. CORY BOOKER TO
HON. AJIT PAI

Question 1. WJLP, northern New Jersey's only VHF television broadcast station, has been ordered by the FCC to identify itself as channel 33 instead of its real channel, channel 3. Applications for review of numerous rulings related to this issue have been submitted with no action for up to three years. It is my understanding that contested cases can take up to seven years to reach a determination. What actions have you taken, and what actions will you take if re-confirmed, to reach a final determination on this case?

Answer. The two Applications for Review filed regarding the issues related to WJLP are restricted proceedings. However, I can say that Commission staff are actively reviewing the issues raised, and the Commission will reach a final determination in these cases as soon as feasible.

Question 2. E-Rate is an important Universal Service Fund program that helps underserved schools and libraries connect to high-speed Internet. I cannot overstate the value of broadband access for these learning centers. To remain competitive in the 21st century, our children must learn how to interact with the digital world.

In 2016, my home state of New Jersey received \$90 million for E-Rate, which it used to connect 181,652 students to high-speed Internet in underserved schools.¹ For these students, especially those who do not have access to broadband at home, this a potentially life-changing advance in educational opportunity. This program is critical to closing the digital divide.

Nationally, since the E-Rate Modernization Order in 2014, 30.9 million unserved students have been connected to the high-speed broadband that they need to build our Nation's future.

Will you commit to support the E-rate modernization order in its current form with need-based prioritized funding for underserved schools and libraries?

Answer. I am deeply committed to doing everything within the FCC's power to close the digital divide. I believe an effective E-rate program—one that promotes better connectivity for students and library patrons alike—can be a powerful tool to help bridge that divide. This is why, four years ago, I said that “E-rate is a program worth fighting for.”

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

¹Education Superhighway, July 2017.

At this point, I believe that our focus should be on cutting unnecessary red tape and making it easier for schools and libraries to participate in the E-rate program.

Question 3. The New Jersey Division of the Deaf and Hard of Hearing (DDHH) estimates that there are approximately 850,000 New Jersey residents who experience hearing loss. Many of these individuals rely on Video Relay Service (VRS) and Internet Protocol Captioned Telephone Service (IP CTS) to communicate with family, friends, emergency services, and other important people. How will you ensure that the FCC continues to administer these programs consistent with the requirements of the Americans with Disabilities Act?

Answer. Since day one of my Chairmanship, I've said the Commission has no higher calling than extending digital opportunity to all Americans. Every citizen who wants to participate in our digital economy and society should be able to do so—no matter who you are.

Communications technology has awe-inspiring power to open doors that have too-long been closed to Americans with disabilities. Last week marked the 27th anniversary of the ADA becoming the law of the land. This landmark legislation gave the FCC a mandate to ensure access to telecommunications by Americans with hearing and speech disabilities. It's critical that the Commission fulfill its legal obligation under Title IV of the ADA to ensure that nationwide telecommunications relay services are available to people who are deaf, hard of hearing, deaf-blind, or who have a speech disability.

That's why the FCC is seeking to improve video relay services (VRS), which can be critical to allowing people who are deaf, hard-of-hearing, or speech-disabled to make calls over broadband using American Sign Language and a videophone. For example, we have authorized a trial that will allow VRS users to request interpreters that are skilled in specialized vocabulary, such as legal, medical, and technical computer matters, to make communication on their relay calls more effective (something I had pushed for since 2013). In addition, we are in the process of establishing performance goals and metrics to ensure the high quality of the relay services we support. I'm committed to making sure that technological inclusion is the norm, rather than the exception. I look forward to working with my colleagues on further steps to ensure that deaf and hard-of-hearing individuals are provided with functionally equivalent communications services.

Question 4. Expanding access to broadband connectivity is an incredibly important part of investing in the future of our Nation and closing the digital divide. This is especially true in rural areas. How do you view the role of TV White Spaces in expanding connectivity to hard-to-reach rural areas?

Answer. The Commission's rules provide for unlicensed operation in the TV white space, including in rural areas. In 2015, we revised the TV white space rules to facilitate deployments in rural areas such as by allowing for higher power to serve longer distances. And earlier this month, I had the opportunity to visit South Boston, Virginia, to learn about how the TV white space is being used to provide connectivity to families in that community. This is an issue that I am following closely as we need to look at creative ways to provide connectivity in hard-to-reach rural areas.

RESPONSE TO WRITTEN QUESTIONS SUBMITTED BY HON. TOM UDALL TO
HON. AJIT PAI

Question 1. The FCC and this Committee have been talking about the need to build out rural broadband for many years. Progress is happening, but much too slowly. The free market did not deliver rural electricity—FDR, the New Deal, and the rural electric coops did it with major USDA support. The free market will not deliver rural broadband on its own either. We need the government to act. If there is going to be an infrastructure package, rural broadband must be in it in a very big way. Will you work with both parties in Congress, and the White House, to advance a consensus, bipartisan proposal to provide rural broadband to every part of America that is bold—and provides the necessary funding to achieve this goal?

Answer. Yes.

Question 2. Chairman Pai, Internet service providers and consumer advocacy groups have been weighing in on the Commission's proposal to eliminate the Open Internet Order and reclassify broadband as an information service. Can you tell me if the Commission is considering any other proposals that would provide similar legal and regulatory net neutrality protections?

Answer. In the *Restoring Internet Freedom Notice of Proposed Rulemaking*, the Commission sought comment on any sources of legal authority for rules in this area

other than Title II. Once the comment cycle closes, we will carefully review the proposals along these lines that are submitted into the record.

RESPONSE TO WRITTEN QUESTIONS SUBMITTED BY HON. TAMMY DUCKWORTH TO
HON. AJIT PAI

Question 1. Chairman Pai, in a presentation to investors about its Bonten and Tribune transactions, Sinclair stated that the transactions would give it “72 percent household coverage across 108 markets.” In 2004, Congress enacted the Consolidated Appropriations Act (P.L. 108–199) that directed the FCC to adopt rules that would cap the reach of a single company’s television stations to 39 percent of U.S. television households. Last April, the FCC reinstated the UHF discount regulation, which, for purposes of this national ownership cap, discounts the reach of UHF stations by 50 percent. In September of last year, the FCC under then-Chairman Wheeler eliminated this discount. What authority does the FCC have to change the national ownership cap and UHF cap either separately or in conjunction with one another?

Answer. I believe that the Commission is required to review the national ownership cap and the UHF discount in a holistic manner since they are inextricably linked. In the prior Administration, the Commission concluded that it had the authority to modify the national ownership cap and eliminate the UHF discount. The Commission will be seeking comment on both of those conclusions later this year when we initiate a rulemaking proceeding about the national ownership cap.

Question 2. In August 2016, the FCC adopted new disclosure requirements for all joint operating agreements, broadly encompassed by the term “shared services agreements” (SSAs) among broadcast television stations. Subject to approval by the Office of Management and Budget (OMB), each station that is a party to an SSA, whether in the same or different television markets, would have been required to file a copy of the SSA in its online public inspection file. Did the FCC withdraw its request to OMB to approve the collection of information regarding SSAs on January 27, 2017, and if so, why? Does the FCC plan to resubmit its request to OMB?

Answer. Yes, the FCC withdrew its request to OMB to approve the collection of information regarding SSAs so that the Commission could consider a Petition for Reconsideration regarding that collection. Depending on the decision that the Commission makes regarding that Petition for Reconsideration, the OMB approval process may be restarted.

Question 3. In March 2014, the FCC’s Media Bureau issued a public notice stating that it will closely scrutinize any proposed transaction that includes “sidecar” agreements. In such agreements, two (or more) broadcast stations in the same market enter into an arrangement to share facilities, employees, and/or services, or to jointly acquire programming or sell advertising and enter into an option, right of first refusal, put/call arrangement, or other similar contingent interest, or a loan guarantee. In February 2017, the FCC’s Media Bureau rescinded this guidance. Among the 10 markets in which Sinclair states in its FCC merger application it would need to divest stations in order to comply with the FCC’s media ownership rules, is the St. Louis television market, which includes more than a dozen Illinois counties. Would the FCC approve a divestiture to a “sidecar” station?

Answer. It would not be appropriate for me to speculate at this time about a transaction pending in front of the Commission.

Question 4. More than eight million comments were filed during the initial comment period for the 2017 Open Internet proceeding. During the 2017 Open Internet comment period, the FCC’s electronic comment filing system was subjected to multiple distributed denial-of-service attacks. Do you believe these attacks may have kept some portion of comments from being recorded? In light of these attacks, do you believe that the FCC’s information technology and cybersecurity practices are adequate? If not, what actions would you recommend to improve them?

Answer. We have had more than 13 million comments filed in the Restoring Internet Freedom docket at this juncture, and I am confident that the American people are being provided with ample opportunity to participate in this proceeding. Following the disruption on May 7–8, the Commission’s career IT professionals have taken a number of steps to minimize the chances of a similar disruption occurring in the future, and the Commission’s electronic comment filing system has been working well. We will continue to monitor the situation closely and effectuate upgrades as necessary going forward to maintain and improve the resiliency of our systems. It is important to recognize, however, that the disruption that occurred on

May 7–8 did not involve a breach of the Commission’s systems and that our security systems functioned appropriately on those days.

RESPONSE TO WRITTEN QUESTIONS SUBMITTED BY HON. MAGGIE HASSAN TO
HON. AJIT PAI

Question 1. The E-Rate program is critical to achieving our goals in regards to connectivity in schools and libraries, and the expansion has helped advance those goals. I have heard concerns from educators in my state that if confirmed you may take aim at this critical program which has been successful in connecting numerous students in New Hampshire and across the country. Will you commit to maintaining the E-Rate Program at least its current funding levels? Can you commit to waiting an adequate amount of time so that the Commission can see how effective the latest changes to the program have been?

Answer. I am deeply committed to doing everything within the FCC’s power to close the digital divide. I believe an effective E-rate program—one that promotes better connectivity for students and library patrons alike—can be a powerful tool to help bridge that divide. This is why, four years ago, I said that “E-rate is a program worth fighting for.”

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

Currently, my focus is on reducing unnecessary red tape and making it easier for schools and libraries to apply for the program and receive funding.

Question 2. A robust emergency alert system is incredibly important in reaching our Nation’s citizens in time of a crises or natural disaster. I have heard from our local broadcasters that there is great potential enhanced information delivery capabilities ATSC 3.0 (Next Gen TV) will be able to provide to the public, during an emergency situation such as a major flood or hurricane. Could you provide an update on timing for completion of this proceeding?

Answer. The record in this proceeding recently closed. We are reviewing that record currently. Our goal is to issue rules in this proceeding by the end of the year.

Question 3. As you know, pursuant to the Americans with Disabilities Act, the FCC has an important mandate to ensure that deaf and hearing-impaired individuals have “functionally equivalent” access to telecom services. How will you work to ensure that the commission fulfils its obligation to individuals with hearing impairments under the ADA?

Answer. Since day one of my Chairmanship, I’ve said the Commission has no higher calling than extending digital opportunity to all Americans. Every citizen who wants to participate in our digital economy and society should be able to do so—no matter who you are.

Communications technology has awe-inspiring power to open doors that have too-long been closed to Americans with disabilities. Last week marked the 27th anniversary of the ADA becoming the law of the land. This landmark legislation gave the FCC a mandate to ensure access to telecommunications by Americans with hearing and speech disabilities. It’s critical that the Commission fulfill its legal obligation under Title IV of the ADA to ensure that nationwide telecommunications relay services are available to people who are deaf, hard of hearing, deaf-blind, or who have a speech disability.

That’s why the FCC is seeking to improve video relay services (VRS), which can be critical for people who are deaf, hard-of-hearing, or speech-disabled to make calls over broadband using American Sign Language and a videophone. For example, we have authorized a trial that will allow VRS users to request interpreters that are skilled in specialized vocabulary, such as legal, medical, and technical computer matters, to make communication on their relay calls more effective (something I had pushed for since 2013). In addition, we are in the process of establishing performance goals and metrics to ensure the high quality of the relay services we support. I’m committed to making sure that technological inclusion is the norm, rather than the exception. I look forward to working with my colleagues on further steps to ensure that deaf and hard-of-hearing individuals are provided with functionally equivalent communications services.

RESPONSE TO WRITTEN QUESTIONS SUBMITTED BY HON. CATHERINE CORTEZ MASTO
TO HON. AJIT PAI

Question 1. Federal Siting for Telecom Services on Public and Tribal Lands

While we discussed Federal siting issues in relations to your Broadband Deployment Advisory Committee in the hearing, I just wanted to follow-up on confirming some specific details.

Can you please commit to setting a date for public display of these recommendations for Federal siting improvements?

Have you invited the Interior Department to these meetings, and have they been participating?

What other Federal agencies have you specifically invited to participate in your advisory committee's activities?

Answer. The Broadband Deployment Advisory Committee (BDAC) is a crucial component in the FCC's efforts to close the digital divide. The mission of the BDAC includes making recommendations that would accelerate the deployment of high-speed Internet access in communities across the country. The BDAC is comprised of a distinguished group of 30 innovators and leaders who have been working to bring broadband and next-generation networks to all parts of our Nation. The BDAC is on pace to deliver an initial set of recommendations by the end of the year, and we expect more recommendations to follow in 2018. Like the recommendations of our other Federal advisory committees, we expect these recommendations to be available to the public.

As you mention, one important area of focus for the BDAC is Federal siting issues. We just recently got confirmation that the Department of the Interior, the Department of Agriculture, and the Bureau of Land Management will participate in the BDAC working group on Federal siting issues, and we will launch it as soon as possible.

Question 2. Chairman Pai's Proposal for an FCC Office of Economics and Data: As we discussed in our meeting, I have interest in the Office of Economics and Data (OED) you've proposed for the Commission.

While I have written to you with additional questions about this proposal, I know you've committed to providing Congressional Appropriators your plan, and I would request that you respectfully provide the plan to myself and the members of the Senate Commerce Committee.

And specifically, in regards to this new office, can you explain how this OED office will work in coordination with the public interest standard statutorily required of the FCC that reviews transactions on a basis beyond "purely economic outcomes"?

Answer. You have my commitment to provide a final reorganization plan to the Committee and otherwise notify the Committee of our progress. I have not yet received the final recommendations from the working group that is studying the issue of how to structure the Office of Economics and Data. But I hope that the proposed OED will be on par with the Office of Engineering and Technology (OET) and coordinate with other bureaus and offices within the Commission's organizational structure. One of my goals is for the reorganization to elevate the importance of economic analysis within the Commission. The existence of this office, however, will not in any way change our emphasis on a broad range of issues that inform our overall analyses, from consumer protection to sound engineering analysis. Economics is one tool in the analytic toolbox; it is not the only tool.

Question 3. Diversity in Telecom: After our last hearing, I asked you in writing about concerns with diversity in the telecom industry, from gender, to ethnicity. You mentioned that you did not have the statutory authority to impose equal employment opportunity rules on Silicon Valley tech firms, as you have at your disposal for broadcasters and cable operators.

Have you utilized this authority for broadcasters and cable operators during your tenure as Chairman, or your entire time at the FCC?

And two, would you support having that kind of authority to ensure we can create a wider exposure of those jobs, opportunities, and thought to such an important industry?

Answer. With respect to your first question, the answer is yes. For example, the Media Bureau this year has already sent out two sets of Equal Employment Opportunity (EEO) audit letters covering over 300 broadcast stations to examine whether these broadcasters are complying with the Commission's EEO rules. With respect to your second question, I would defer to Congress on whether the FCC should have this statutory authority. However, I do believe that FCC's Advisory Committee on Diversity and Digital Empowerment could study why many companies in Silicon Valley appear to have a less diverse workforce than broadcasters and cable operators.

Question 4. Working to Bridge the Divide: In relation to the FCC, we've all heard from the Senate Commerce Chairman, as well as you yourself, concerns related to the repeated, or all too common, party line votes that take place at the Commission.

Would you agree it would serve us all better if we could get to more consensus and work together in the messages and policies you put forth at the FCC?

If reconfirmed, how will you bridge this apparent divide at the FCC?

How will you work with ALL of your fellow Commissioners to find common ground, to get 4-1 or 5-0 votes on the Commissions actions?

Answer. The answer to your first question is yes. With respect to your second and third questions, I plan to continue working with my colleagues whenever possible to find common ground. Unfortunately, there will always be some issues where it is not possible to reach unanimity. But I firmly believe that with respect to the substantial majority of the issues we face, it is possible to find common ground so long as Commissioners are willing to engage in good faith and make reasonable compromises so that the perfect does not become the enemy of the good.

I'm pleased to report that this approach appears to be working this year. For example, under the prior Chairman, only 48 percent of meeting items were adopted with no dissenting votes. But since I have become Chairman, 76 percent of meeting items have been adopted with no dissenting votes.

Question 5. E-Rate: I'm deeply concerned about your noncommittal stance towards e-rate and any future plans you have for the program.

Are you considering reducing funding for E-rate?

And, are you considering major changes to E-rate?

Answer. I am very committed to doing everything within the FCC's power to close the digital divide. I believe an effective E-rate program—one that promotes better connectivity for students and library patrons alike—can be a powerful tool to help bridge that divide. This is why, four years ago, I said that "E-rate is a program worth fighting for."

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

My immediate focus is on trying to reduce unnecessary red tape and make it easier for schools and libraries to apply for the program, not on examining the program's funding level.

RESPONSE TO WRITTEN QUESTION SUBMITTED BY HON. JOHN THUNE TO
HON. JESSICA ROSENWORCEL

Question. Millions of rural Americans lack access to broadband, and bridging the digital divide is a priority for me and the Committee. As traditional fiber, cable, and 4G broadband is deployed throughout the country, policymakers must nevertheless be creative and open-minded when exploring all options to achieving universal service. What role do you see for unlicensed spectrum (Wi-Fi, TV White Spaces, millimeter wave, etc.) in connecting unserved rural households with broadband Internet access?

Answer. Broadband is more than a technology—it is a platform for opportunity. No matter who you are or where you live, you need access to broadband communications for a fair shot at 21st century success. This is true in urban America, rural America, and everything in between.

However, access in rural communities can present a real challenge. Often the cost of financing, constructing, and operating broadband networks in remote areas is high while the number of households and businesses over which that cost is spread is low. As a result, the Commission has had a series of policies designed to boost deployment in the Nation's most difficult to serve rural areas. The most prominent of these is the high-cost universal service fund, which provides roughly \$4.5 billion in annual support to wired and wireless providers serving some of our most remote communities. Other policies, however, also assist with universal service, including build-out requirements for spectrum licensees providing wireless service that help ensure deployment covers both urban and rural populations.

Nonetheless, the data suggests that despite these efforts too many rural areas are still at risk of being consigned to the wrong side of the digital divide. In fact, in 2016 the Commission found that more than 23 million Americans in rural areas lack access to broadband. By any measure, this number is too high.

For this reason, I agree that policymakers must be willing to look at all options to achieve true universal service. As a result, I believe the Commission should always be on the hunt for good ideas that will extend the opportunities of broadband to rural communities at low cost.

The use of unlicensed spectrum in the 600 MHz band—or TV White Spaces—is one such opportunity. The use of TV White Spaces was first approved by the Commission in 2010. At that time, it updated its Part 15 rules to allow for unlicensed fixed and portable devices to operate in the broadcast television spectrum at locations where that spectrum was not in use by licensed services. In order to prevent interference to other services operating in the band—namely television—the Commission relied on geolocation capabilities in white space devices as well as databases to identify vacant channels.

In the aftermath of the 600 MHz band spectrum incentive auction there will be new opportunities to explore the use of TV White Spaces to expand broadband access. I believe the Commission can seek to develop these opportunities while also protecting incumbent services from harmful interference.

There also may be opportunities to expand the use of unlicensed spectrum in the upper portion of the 5 GHz band. At present, the Commission is working with the National Telecommunications and Information Administration and Department of Transportation on a series of tests to examine the compatibility of unlicensed devices and dedicated short range communications systems in this band. I am hopeful that this testing will result in new opportunities for unlicensed Wi-Fi services in this band—while also ensuring that automotive safety efforts using dedicated short range communications can continue.

In addition, the Commission has sought to increase the availability of unlicensed spectrum in millimeter wave bands. To this end, last year the agency established a new unlicensed band at 64–71 GHz, making a 14 gigahertz unlicensed band from 57–71 GHz. While the propagation characteristics of these airwaves present real challenges, I am confident there will be new developments in the use of millimeter wave bands that may eventually have applications in rural communities.

I support these efforts because it is essential that the Commission is, as you suggest, creative and open-minded with respect to policies designed to improve universal service and bring broadband to our Nation's most rural communities. If reconfirmed, I pledge to continue to do so.

RESPONSE TO WRITTEN QUESTIONS SUBMITTED BY HON. ROY BLUNT TO
HON. JESSICA ROSENWORCEL

Question 1. AT&T's Twitter feed was mysteriously blocked when AT&T announced that it would participate in the so-called Internet Day of Action.

While the network neutrality debate has seemingly focused on ISPs, large social media platforms such as Twitter serve as a gatekeeper for information distributed to millions of Internet users.

Should large social media platforms such as Twitter be prohibited from blocking access to content that Twitter or its employees may find objectionable?

Answer. I share your concern that this content was not available. This is not, however, a platform subject to the Communications Act. Moreover, I believe that however well intended, a new, government-based requirement on such platforms could result in an updated version of the Fairness Doctrine. Because I believe that this policy had a chilling effect on speech, I would not support such an approach.

Question 2. Does it seem intellectually inconsistent for ISPs to be prohibited from blocking lawful content, but large social media platforms should be permitted to do so?

Answer. To the extent there is incongruity here, it is largely a function of law. Companies that do not provide telecommunications are not offering services subject to the Communications Act nor the jurisdiction of the Commission more generally.

Question 3. If confirmed, do you intend to vigorously enforce laws prohibiting the broadcast of indecent material outside of the safe-harbor, when children are likely to be in the viewing audience?

Answer. Yes.

Question 4. What will you do to ensure television ratings accurately reflect the content on screen, and that there is greater accountability to parents and families in the application and review of TV ratings?

Answer. Television has the power to enlighten and entertain. But not all programming is enriching or appropriate for children. Recognizing this fact, in the Telecommunications Act of 1996 Congress called on the entertainment industry to estab-

lish a voluntary television rating system to help provide parents with the tools to block programming that is inappropriate for younger viewers. As a result of this effort, a voluntary ratings system, known as the TV Parental Guidelines, was adopted by television broadcasters and networks, cable networks and systems, and television programming producers. To help implement these guidelines accurately and consistently, an Oversight Monitoring Board was established. This board includes up to 24 members, including industry leaders and public interest representatives.

More than two decades hence, I believe it reasonable for the Commission to review this program and if necessary, encourage improvements. If re-confirmed, I would support such a re-assessment in order to ensure that this approach remains consistent with the law and ultimately useful for parents and families.

Question 5. The Americans with Disabilities Act (ADA) provides that deaf and hearing-impaired individuals have access to telecommunications services in the same way as those without hearing impairments.

If you are confirmed, will you pledge to honor this ADA requirement and ensure access for those of all ages, including our growing senior citizen population?

Answer. Yes. More than a quarter of a century ago, the Americans with Disabilities Act paved the way for the meaningful inclusion of 54 million Americans with disabilities in modern civic and commercial life. The direction in this law to ensure functionally equivalent access to communications remains the cornerstone of Commission efforts to ensure that individuals with hearing impairments have the ability to pick up the phone; connect with family, friends, and business associates; and participate fully in the world. It is especially important for senior citizens, with nearly half of the population over 75 reporting hearing difficulties.

Pursuant to the Americans with Disabilities Act, as updated by the Twenty-First Century Communications and Video Accessibility Act, the Commission has made strides in its policies to expand access to modern communications to the hearing-impaired. These efforts include continued support for telecommunications relay service, including Video Relay Service and Internet Protocol Captioned Telephone Service. It also includes the exploration of new forms of service, including Real-Time Text. In addition, the Commission has expanded the number of wireless handset models that are hearing-aid compatible, established the National Deaf-Blind Equipment Distribution Program in order to increase access to essential equipment for low-income individuals who are deaf-blind, and promoted increased access to emergency communications through the availability of texting-to-911. The Commission also has updated its policies regarding closed captioning, in order to improve the accuracy and completeness of captions.

I support these efforts because I believe they are essential for functionally equivalent access to communications services. But I also believe that as time and technology advance, it is incumbent on the Commission to review these policies in order to ensure that they are up to date. If re-confirmed, I pledge to work with my colleagues to do so.

RESPONSE TO WRITTEN QUESTIONS SUBMITTED BY HON. TED CRUZ TO
HON. JESSICA ROSENWORCEL

Net Neutrality

So called “net neutrality” as implemented in former FCC Chairman Tom Wheeler’s Open Internet Order was a bureaucratic power grab that took the Internet which has long been a transformational tool that has allowed innovation and creativity and created new economic opportunities for all Americans and turned the Internet into a regulated public utility under Title II of the Communications Act. Title II gives the government new authority over the Internet which could be used to determine pricing and terms of service.

What’s concerning about the Title II debate is the influence that edge providers such as Google, Facebook and Netflix had with the Obama White House. For example, *The Intercept* has reported that between January 2009 and October 2015, Google staffers gathered at the White House on 427 separate occasions. *The Intercept* further notes that the frequency of the meetings increased from 32 in 2009 to 97 in 2014.

This is concerning given that President Obama released a video on November 10, 2014 weighing into the net neutrality debate and advocated that the FCC regulate the Internet as a public utility. Not only did the Commission move forward and implement Title II but edge providers like Google were exempted from Title II.

Question 1. As you know, last week tech companies were involved in a so called, “Internet Day of Action” that was meant to support keeping Title II reclassification.

I found it interesting that AT&T's Twitter feed was mysteriously blocked when AT&T announced that it would participate in the Internet Day of Action. While the network neutrality debate has seemingly focused on Internet Service Providers (ISPs), large social media platforms such as Twitter serve as a gatekeeper for information distributed to millions of Internet users. Should large social media platforms such as Twitter be prohibited from blocking access to content that Twitter or its employees may find objectionable? Does it seem intellectually inconsistent for ISPs to be prohibited from blocking lawful content, but large social media platforms should be permitted to do so?

Answer. I share your concern that this content was not available. However, to the extent there is incongruity here, it is largely a function of law. Companies that do not provide telecommunications are not offering services subject to the Communications Act nor the jurisdiction of the Commission more generally.

Federal Spectrum

FCC Commissioner Michael O'Rielly stated in a 2015 blog post that, "By some accounts, the Federal Government currently occupies—either exclusively or on a primary basis—between 60 and 70 percent of all spectrum in the commercially most valuable range between 225 megahertz and 3.7 gigahertz, which comes to approximately 2,417 megahertz."

Question 2. What steps can this Committee take to incentive Federal users, especially the Department of Defense, to make more spectrum available for commercial use? Should Congress consider allowing Federal agencies to keep more of the proceeds from FCC incentive auctions?

Answer. I agree with the need to develop incentives to encourage Federal authorities with substantial spectrum holdings to make more of their spectrum available for new commercial use. In fact, I testified on this subject before the Committee on Commerce, Science and Transportation on July 29, 2015.

Today, Federal authorities have substantial spectrum assignments. Many critical missions throughout the government are dependent on wireless service. This includes systems that help defend us from attack, manage our air traffic, and monitor our water supplies. We should recognize that these are important tasks. However, we also should be willing to re-assess the airwaves used in service of these missions if there are opportunities to re-purpose them for new commercial use without sacrificing important Federal objectives.

Under our current system, efforts to re-purpose these airwaves can take years. These efforts typically involve a lot of legislative pressure and regulatory coaxing because existing government users rarely respond with enthusiasm when facing the reclamation of airwaves they presently use. But when these efforts to reclaim spectrum are successful, a three-part process follows. First, the government users are cleared out of a portion of their airwaves. Second, the government users are relocated. Third, the freed spectrum is auctioned for new commercial use. This is a slow and cumbersome process. It's not the steady spectrum pipeline the modern mobile economy needs.

A better system would be built on carrots rather than sticks. If we want a robust and reliable spectrum pipeline, it is essential that Federal authorities see gain—and not just loss—when their airwaves are reallocated for new mobile broadband use.

The best way to do this is to develop a series of incentives to serve as the catalyst for freeing more spectrum for commercial markets. This could include, as you suggest, expanding incentive auctions to Federal spectrum users. Such auctions could be modeled on the recent incentive auction in the 600 MHz band. Participating Federal authorities could receive a cut of the revenue from the commercial auction of the airwaves they clear—and could then use these funds to support relocation or other initiatives approved by Congress, including some that may have been lost to sequestration. This is a complex undertaking, because Federal authorities are subject to annual budget allocations and therefore do not operate in a strictly market environment.

Nonetheless, I believe it is an idea worth pursuing with discrete spectrum bands or agencies.

In addition, Congress could choose to update the Spectrum Relocation Fund. Today this fund assists Federal authorities with relocating their wireless functions when their spectrum is being repurposed for commercial use. But this fund also could be structured to provide incentives for government sharing by rewarding Federal users when they share their spectrum with agencies that are being relocated.

There are also laws that create perverse incentives that need review. This includes the Miscellaneous Receipts Act. This law can prevent negotiations between Federal agencies and winning bidders in wireless auctions. But with changes, it could lead to the auction of imperfect rights that would permit winning bidders to

negotiate directly with Federal authorities remaining in the band in order to help meet their wireless needs. This could speed repurposing of our airwaves and also provide commercial carriers with incentives to help update Federal systems that are past their prime.

On the flip side, a slightly different approach to incentivizing the relinquishment of underutilized Federal spectrum would be the enactment of spectrum fees. Brent Skorup at the Mercatus Center has written that, “Some countries have applied spectrum fees to government users, which generally attempt to approximate the opportunity cost of the spectrum so that users internalize the social value of the spectrum they occupy. If the opportunity cost fees are high, a user will be induced to use less spectrum to reduce its fees or leave the space completely and sell the cleared spectrum for higher-valued uses.”

Question 3. Should Congress implement a spectrum fee to incentive Federal users to consider relinquishing underutilized spectrum?

Answer. I am concerned that Federal users are not required to internalize the cost of their spectrum holdings. There is no budgetary system to account for these holdings, nor uniform method to enumerate the value of these assets. One way to ensure that government use is efficient involves the introduction of spectrum fees, as has been done by some countries to approximate the opportunity cost of continued non-commercial use of certain airwaves. However, in the near term I believe Congress should focus on the intermediate step of having the Office of Management and Budget develop a uniform system of valuation of Federal spectrum assignments. Such a system could eventually be used to develop incentives to promote the efficient use of airwaves and assist with the repurposing of Federal airwaves for new commercial use.

5G Wireless Technology Deployment

We are on the cusp of the wireless industry introducing the next generation of technology—5G. That upgrade to our existing networks is expected to bring us higher data speeds, lower latency, and the ability to support breakthrough innovations in transportation, healthcare, energy and other sectors. And as recent studies have shown, 5G is expected to provide significant benefits to state and local governments, allowing them to become smart cities. However, those networks will also require many more antenna sites than we have today—they will increasingly rely on small cell technologies. To recognize these benefits, a study performed by Deloitte shows that several steps are necessary to remove impediments to antenna siting. Texas is leading the way, as evidenced by recent legislation (Texas Senate Bill 1004) signed into law just last month that streamlines the deployment of next-generation 5G networks. It’s also my understanding that the Commission has initiated a proceeding designed to evaluate whether some of those obstacles can be removed.

Question 4. Do you support the Commission’s efforts in this area? Do you think that the Commission’s proposals are achievable, particularly considering state and local government interests in this area?

Answer. Yes. I am optimistic that the Broadband Deployment Advisory Committee, recently established by Chairman Pai, can be a useful forum for discussing these matters and improving the prospects for deployment of next-generation 5G infrastructure. In particular, I am hopeful that this group will be able to develop a streamlined, model code for state and local authorities to use for facilities siting. Then I believe the Commission should study its own policies to identify ways to incentivize officials to implement this code in order to expedite deployment further.

I also believe it is important for the Federal Government to lead by example. By some measures nearly one-third of all property in the United States is Federal land. The Commission should work with the Federal authorities with facilities on this land—including the Department of Interior, Department of Agriculture, and Department of Transportation—to develop a Memorandum of Understanding that would streamline the siting of network infrastructure.

FCC Priorities

Question 5. My top priority is regulatory reform. Please identify three meaningful regulations that you are interested in repealing during your tenure at the FCC.

Answer. I believe the Commission should eliminate the reporting obligation associated with the Open-Market Reorganization for the Betterment of International Telecommunications Act. The analysis in this report provides little to no benefit to the satellite industry, in light of the fact that the essential purposes of this law were fulfilled by the privatization of INTELSAT and Inmarsat more than a decade ago. To the extent that the Commission is unable to do this under existing law, it should seek assistance from Congress to eliminate this obligation.

I believe the Commission should reduce the filing obligations that remain on carriers completing payphone calls. There has been a sharp decline the number of payphones and the volume of calls completed on these facilities. It is time for the Commission to update its policies to reflect this reality—and it can begin by removing the costly requirement for providers to file an annual audit of their payphone call tracking systems.

I believe the Commission should eliminate the requirement that providers of international telecommunications services report annually on their traffic and revenue for international voice services, international miscellaneous services, and international common carrier lines. These requirements were put in place to help the Commission monitor settlement rates as part of its international benchmark policy. But with the growth in competition and liberalization of international services, this set of filings is no longer necessary nor useful.

ICANN

Question 6. Last year the previous administration allowed the Federal Government's contract with ICANN to expire. Do you think that was a wise and prudent decision?

Answer. During my prior tenure at the Commission I did not participate in domestic or international meetings concerning the expiration of the Internet Corporation for Assigned Names and Numbers (ICANN) contract. I also did not write or publish any material relating to this subject. Nonetheless, I am aware that the Department of Commerce chose to allow its contract with ICANN concerning the Internet Assigned Numbers Authority to expire on September 30, 2016.

I do not, however, believe that it is prudent or wise for the United States to sit back and disengage from this process. Too much is at stake. The United States must remain vigilant in order to ensure that essential ICANN functions are not at risk of transfer to another government or intergovernmental organization. To this end, I believe the Department of Commerce must periodically re-assess this transition in order to ensure that the principles of accountability, transparency, security, and stability of the Internet that informed the transition continue with management of ICANN duties today. I believe the Federal Communications Commission, to the extent useful for the Department of Commerce, could contribute to this review.

Question 7. Microsoft and Facebook and YouTube, which is owned by Google, all of whom supported President Obama's Internet transition, have signed a code of conduct with the European Union to remove so-called hate speech from European countries in less than 24 hours. Do you think these global technology companies have a good record of protecting free speech? And what can be done to protect the First Amendment rights of American citizens?

Answer. On June 1, 2016, the European Commission and four large technology companies—Facebook, Twitter, YouTube, and Microsoft—announced a code of conduct designed to counter online hate speech in Europe. These companies pledged to review the majority of requests for removal of certain hate speech in less than 24 hours. They also committed to remove or disable access to the content if necessary and to promote counter narratives to hate speech.

I appreciate the efforts by these private companies to reduce hateful conduct online. I also am aware that this code was put into place just months after terror attacks in Paris and Brussels. Nonetheless, I am concerned when United States companies with global presence operate in a manner at odds with our domestic free speech tradition. I believe it is appropriate to ask if commitment to this code implicates the First Amendment rights of American citizens. To answer this question in a comprehensive fashion, I believe a report reviewing this issue, and the implications of this code for American citizens, could be both timely and useful.

There is precedent for this approach. In 1993 the National Telecommunications and Information Administration at the Department of Commerce produced a report entitled "The Role of Telecommunications in Hate Crimes." This report, which was directed by Congress, described the relationship between electronic communications media and hate speech. It included a discussion of First Amendment principles—and their application to expressions of hate or bigotry. However, this report is dated. With so many communications platforms that have their origins in the United States now capable of global reach, the efforts of other jurisdictions to control and even dictate speech on these platforms is an issue that deserves careful attention and review. Should Congress direct the National Telecommunications and Information Administration to produce an updated version of its prior report, the Federal Communications Commission and Department of Justice should stand ready to assist.

RESPONSE TO WRITTEN QUESTIONS SUBMITTED BY HON. DAN SULLIVAN TO
HON. JESSICA ROSENWORCEL

I want to thank you and the current FCC Commissioners for working with my staff to help alleviate some of the burden that the reduction in reimbursement from the Rural Health Care program placed on Alaskan health care providers.

In my state, the price of telecommunications services is so expensive that many rural health care providers cannot afford them without support from the Rural Health Care program. Telemedicine services in Alaska are essential for many of our villages, and they are only possible if a health facility has connectivity.

In enacting the Telecommunications Act of 1996, Congress specifically directed the FCC to ensure that rural health care providers have access to telecommunications services at rates that are reasonably comparable to those for similar services in urban areas of the State. As you are aware, for the first time the demand for funding from the Rural Health Care program exceeded the \$400 million cap.

Question 1. Will you work to ensure the sustainability of the Rural Health Care Program as the FCC moves forward to review further reforms to universal service programs?

Answer. Yes.

Question 2. If confirmed, what steps would you take to address this funding issue?

Answer. I have seen first-hand village clinics in Alaska that use broadband to provide first-class care to patients in some of our most remote communities. So I know that telemedicine has a transformative power in rural areas. Moreover, I know that the provision of this kind of care is often dependent on support from the Commission's rural health care program.

The Commission's rural health care program was last substantially updated in 2012. In critical part, this modernization expanded the program from supporting rural health care providers with communications costs that exceed comparable service in urban areas to supporting broadband connectivity through health care networks. As a result of this effort, demand for the program has grown. To date, the Commission has managed this growth by pro-rating support, so that all applicants are subject to a uniform cut. I am not sure this is a sustainable approach.

Consequently, if re-confirmed, I would support a rulemaking to reconsider prioritization in this program, which could, among other things, take into account how rural the area is where support is provided.

Question 3. Will you consider beginning a rulemaking proceeding to evaluate the changes necessary to ensure that the program budget is sufficient to fulfill the purposes of the program?

Answer. Yes.

It is my understanding that environmental assessments (EAs), when required under the FCC's rules, are currently not subject to any processing timelines or dispute resolution procedures. As a result, environmental assessments for new facilities can languish for an extended period of time—sometimes years. This is an unfortunate barrier to feeding our Nation's hunger for expanded wireless broadband.

Given my seat on this committee and on EPW, I have a particular interest in finding ways to streamline these procedures.

Question 4. Will you commit to finding ways to streamline the FCC's review of environmental assessments, including through the adoption of "shot clocks" to resolve environmental delays and disputes, in addition to working on additional infrastructure reforms?

Answer. Yes. In light of the changing nature of wireless infrastructure, I think the Commission should streamline its siting policies, to the extent feasible under the National Environmental Policy Act. This law requires Federal Government agencies, including the Commission, to identify and evaluate the environmental impact of actions "significantly affecting the quality of the human environment." The Commission has an outstanding rulemaking concerning wireless infrastructure that, among other things, seeks comment on the policies it has adopted under this law. If re-confirmed, I pledge to carefully review the law and the record in order to update and modernize these policies.

RESPONSE TO WRITTEN QUESTION SUBMITTED BY HON. DEB FISCHER TO
HON. JESSICA ROSENWORCEL

Question. In recent years, there have been incredible technological advancements in telecommunication services that aid the deaf and hearing disabled. With respect to any future rulemaking—do you commit to ensuring that these technologies continue to be made available unencumbered by heavy handed regulation that could stifle innovation and impede access to these services?

Answer. Yes. Under the Americans with Disabilities Act, functional equivalency has long been the foundation of Commission policies designed to provide access to modern communications services for the deaf and hearing disabled. While this may sound like regulatory lingo, for individuals with these disabilities it means the right and ability to pick up the phone, reach out and connect, and participate more fully in the world.

Pursuant to the Americans with Disabilities Act, the Commission has adopted telecommunications relay service policies that support a variety of technologies designed for the deaf and hearing disabled, including Video Relay Service and Internet Protocol Captioned Service. I believe the continued success of these programs depends on the Commission both ensuring fair compensation for providers of these services and taking action to prevent waste, fraud, and abuse. Moreover, I believe that as communication technologies advance, it is incumbent on the Commission to periodically reassess these programs in order to continue to honor both the spirit and substance of functional equivalency. If re-confirmed, I pledge to do so mindful of the need to prevent policies that stifle innovation and impede access to new services

RESPONSE TO WRITTEN QUESTIONS SUBMITTED BY HON. RON JOHNSON TO
HON. JESSICA ROSENWORCEL

Question 1. If confirmed, will you commit to looking at the costs and benefits of regulations and consider all of the economic data in the record?

Answer. Yes.

Question 2. Are you aware that DHS is the sector specific agency for communications critical infrastructure and works with other agencies to enhance resiliency?

Answer. Yes.

Question 3. Given the role of DHS, I am concerned that any further FCC action would be duplicative and overlapping. As Chairman of the Senate Committee on Homeland Security and Governmental Affairs, I have highlighted duplicative cyber regulations across the government and am working with my colleague to harmonize these regulations. If confirmed, will you commit to work with me on cyber harmonization and defer to assigned sector specific agencies when it comes to cybersecurity?

Answer. Yes. I agree that effective efforts to manage cybersecurity risk require harmonization across government authorities.

RESPONSE TO WRITTEN QUESTION SUBMITTED BY HON. AMY KLOBUCHAR TO
HON. JESSICA ROSENWORCEL

Question. As Chairman and Ranking Member of the Senate Judiciary's Antitrust Subcommittee, Senator Lee and I have developed a strong bipartisan working relationship to promote competition, including in the cable and broadcast industries. Ms. Rosenworcel, you expressed concerns that unconditional most favored nation provisions "can make it tough for new and independent programming to get on the channel line-up of satellite and cable systems and online, as well." Ms. Rosenworcel, is this an issue that the Federal Communications Commission should continue to consider?

Answer. Yes. Today we have a dizzying array of channels available to consumers. We expect programming to be available at anytime, anywhere—and on any screen. On top of that, novel platforms for content are cropping up here, there, and everywhere. But despite all of this change, some old problems linger. This is clear from the record in response to the Commission's February 18, 2016 Notice of Inquiry and September 29, 2016 Notice of Proposed Rulemaking in MB Docket No. 16-41, *Promoting the Availability of Diverse and Independent Sources of Video Programming*, which suggests that independent programmers continue to have a difficult time securing carriage on multichannel video programming distributors. Moreover, commenters in these proceedings describe how restrictive contract provisions can limit consumer access to new programming and slow the development of innovative ways

to view content on non-traditional video platforms. As a result, I believe this issue merits continued Commission attention.

RESPONSE TO WRITTEN QUESTIONS SUBMITTED BY HON. CORY BOOKER TO
HON. JESSICA ROSENWORCEL

Question 1. WJLP, northern New Jersey's only VHF television broadcast station, has been ordered by the FCC to identify itself as channel 33 instead of its real channel, channel 3. Applications for review of numerous rulings related to this issue have been submitted with no action for up to three years. It is my understanding that contested cases can take up to seven years to reach a determination. What actions have you taken, and what actions will you take if re-confirmed, to reach a final determination on this case?

Answer. I believe that the timely disposition of matters before the Commission is critical. As a Commissioner, however, I did not participate in the decisions involved in this dispute because the resolution of substantive issues took place in the agency's Media Bureau. Nonetheless, if re-confirmed, I pledge to carefully review the facts and law involved in this situation and work expeditiously with my colleagues to resolve any matter before my office.

Question 2. E-Rate is an important Universal Service Fund program that helps underserved schools and libraries connect to high-speed Internet. I cannot overstate the value of broadband access for these learning centers. To remain competitive in the 21st century, our children must learn how to interact with the digital world.

In 2016, my home state of New Jersey received \$90 million for E-Rate, which it used to connect 181,652 students to high-speed Internet in underserved schools.¹ For these students, especially those who do not have access to broadband at home, this a potentially life-changing advance in educational opportunity. This program is critical to closing the digital divide.

Nationally, since the E-Rate Modernization Order in 2014, 30.9 million unserved students have been connected to the high-speed broadband that they need to build our Nation's future.

Will you commit to support the E-rate modernization order in its current form with need-based prioritized funding for underserved schools and libraries?

Answer. Yes. Absolutely.

Question 3. The New Jersey Division of the Deaf and Hard of Hearing (DDHH) estimates that there are approximately 850,000 New Jersey residents who experience hearing loss. Many of these individuals rely on Video Relay Service (VRS) and Internet Protocol Captioned Telephone Service (IP CTS) to communicate with family, friends, emergency services, and other important people. How will you ensure that the FCC continues to administer these programs consistent with the requirements of the Americans with Disabilities Act?

Answer. Under the Americans with Disabilities Act, functional equivalency has been the foundation of telecommunications relay service policies for more than a quarter of a century. While functional equivalency may sound like regulatory lingo, for the 850,000 New Jersey residents you reference and millions of others across the country it means that they have the right and ability to pick up the phone, reach out and connect, and participate more fully in the world.

The Commission's telecommunications relay service policies, adopted pursuant to the Americans with Disabilities Act, support a variety of programs, including Video Relay Service and Internet Protocol Captioned Service. I believe the continued success of these programs depends on the Commission both ensuring fair compensation for providers of these services and taking action to prevent waste, fraud, and abuse. Moreover, I believe that as communication technologies advance, it is incumbent on the Commission to periodically reassess these programs in order to continue to honor both the spirit and substance of functional equivalency.

Question 4. Expanding access to broadband connectivity is an incredibly important part of investing in the future of our Nation and closing the digital divide. This is especially true in rural areas. How do you view the role of TV White Spaces in expanding connectivity to hard-to-reach rural areas?

Answer. Broadband is more than a technology—it is a platform for opportunity. No matter who you are or where you live, you need access to broadband communications for a fair shot at 21st century success. This is true in urban America, rural America, and everything in between.

¹ Education Superhighway, July 2017.

However, access in rural communities can present a real challenge. Often the cost of financing, constructing, and operating broadband networks in remote areas is high while the number of households and businesses over which that cost is spread is low. As a result, the Commission has had a series of policies designed to boost deployment in the Nation's most difficult to serve rural areas. The most prominent of these is the high-cost universal service fund, which provides roughly \$4.5 billion in annual support to wired and wireless providers serving some of our most remote communities. Other policies, however, also assist with universal service, including build-out requirements for spectrum licensees that help ensure deployment covers both urban and rural populations.

Nonetheless, the data suggests that despite these efforts too many rural areas are still at risk of being consigned to the wrong side of the digital divide. In fact, in 2016 the Commission found that more than 23 million Americans in rural areas lack access to broadband. By any measure, this number is too high.

For this reason, I believe the Commission should always be on the hunt for good ideas that will extend the opportunities of broadband to rural communities at low cost. The use of unlicensed spectrum in the 600 MHz band—or TV White Spaces—is one such opportunity.

The use of TV White Spaces was first approved by the Commission in 2010. At that time, it updated its Part 15 rules to allow for unlicensed fixed and portable devices to operate in the broadcast television spectrum at locations where that spectrum was not in use by licensed services. In order to prevent interference to other services operating in the band—namely television—the Commission relied on geolocation capabilities in white space devices as well as databases to identify vacant channels.

In the aftermath of the 600 MHz band spectrum incentive auction there will be new opportunities to explore the use of TV White Spaces to expand broadband access. I believe the Commission can help develop these opportunities while also protecting incumbent services from harmful interference. Moreover, I believe that if the Commission is successful in doing so it will be able to make real progress in closing the digital divide and bringing broadband to our Nation's most rural communities.

RESPONSE TO WRITTEN QUESTIONS SUBMITTED BY HON. TOM UDALL TO
HON. JESSICA ROSENWORCEL

Question 1. As a commissioner of the Federal Communications Commission, you have direct authority over the Nation's broadcast and media marketplace. The FCC as an independent agency controls whether broadcast stations are allowed access to the U.S. airwaves, oversees elements of the contractual relationships between media outlets and their distribution partners, renders judgements on mergers and acquisitions of media properties, and issues regulations that can affect the financial future of major media companies. And ultimately, the decisions that you, your fellow commissioners, and the agency staff make affect the viability and sustainability of news media.

Accordingly, please respond directly, fully, and individually to the questions below, which will inform my ongoing consideration of your nomination to serve on the FCC Commission.

Do you believe the media is the “enemy” of the American people?

Answer. No. I believe a free and independent press is essential in a fully-functioning democracy.

Question 2. Can you assure us that you will exercise your authority as an FCC Commissioner to regulate the media in an impartial manner?

Answer. Yes.

Question 3. Will you commit to us that the FCC will not act in a manner that violates the First Amendment and stifles or penalizes free speech by electronic media, directly or indirectly, even if requested by the administration?

Answer. Yes.

Question 4. Did you commit to the administration, as a condition of your nomination, to take any action against a specific media entity or generally against broadcast entities, cable network owners or other media outlets?

Answer. No.

Question 5. Will you commit to us that you will exercise your authority as an FCC Commissioner in a manner that fully respects the absolute independence of the agency from the Executive Branch?

Answer. Yes.

Question 6. Finally, will you commit to inform us and the public of any attempt by the White House or by any Executive Branch official to influence your decision-making or direct you to take or not take any action with respect to media interests within your jurisdiction, including the license renewal applications for broadcasters (whether or not such contacts fall under the ex parte rules or other legal or ethical rules applicable to the FCC)?

Answer. Yes.

Question 7. The FCC and this Committee have been talking about the need to build out rural broadband for many years. Progress is happening, but much too slowly. The free market did not deliver rural electricity—FDR, the New Deal, and the rural electric coops did it with major USDA support. The free market will not deliver rural broadband on its own either. We need the government to act. If there is going to be an infrastructure package, rural broadband must be in it in a very big way. Will you work with both parties in Congress, and the White House, to advance a consensus, bipartisan proposal to provide rural broadband to every part of America that is bold—and provides the necessary funding to achieve this goal?

Answer. Yes.

RESPONSE TO WRITTEN QUESTION SUBMITTED BY HON. MAGGIE HASSAN TO
HON. JESSICA ROSENWORCEL

Question. As you know, pursuant to the Americans with Disabilities Act, the FCC has an important mandate to ensure that deaf and hearing-impaired individuals have “functionally equivalent” access to telecom services. How will you work to ensure that the commission fulfills its obligation to individuals with hearing impairments under the ADA?

Answer. More than a quarter of a century ago, the Americans with Disabilities Act paved the way for the meaningful inclusion of 54 million Americans with disabilities in modern civic and commercial life. The direction in this law to ensure functionally equivalent access to communications remains the cornerstone of Commission efforts to ensure that individuals with hearing impairments have the ability to pick up the phone; connect with family, friends, and business associates; and participate fully in the world.

Pursuant to this law, as updated by the Twenty-First Century Communications and Video Accessibility Act, the Commission has made strides in its policies to expand access to modern communications to the hearing-impaired. These efforts include continued support for telecommunications relay service, including Video Relay Service and Internet Protocol Captioned Telephone Service. It also includes the exploration of new forms of service, including Real-Time Text. In addition, the Commission has expanded the number of wireless handset models that are hearing-aid compatible, established the National Deaf-Blind Equipment Distribution Program in order to increase access to essential equipment for low-income individuals who are deaf-blind, and promoted increased access to emergency communications through the availability of texting-to-911. The Commission also has updated its policies regarding closed captioning, in order to improve the accuracy and completeness of captions.

I support these efforts because I believe they are essential for functionally equivalent access to communications services. But I also believe that as time and technology advance, it is incumbent on the Commission to review these policies in order to ensure that they are up to date. If re-confirmed, I pledge to work with my colleagues to do so.

RESPONSE TO WRITTEN QUESTIONS SUBMITTED BY HON. CATHERINE CORTEZ MASTO
TO HON. JESSICA ROSENWORCEL

Question 1. Diversity in Telecom: In reviewing the Federal Equal Employment Opportunity Commission’s (EEOC) 2016 report on “Diversity in High Tech,” and it contains some frustrating and concerning observations regarding minority and female employment and leadership representation. Namely:

- “Compared to overall private industry, the high tech sector employed a smaller share of African Americans (14.4 percent to 7.4 percent), Hispanics (13.9 percent to 8 percent), and women (48 percent to 36 percent).”
- “Of those in the Executives category in high tech, about 80 percent are men and 20 percent are women. Within the overall private sector, 71 percent of Executive positions are men and about 29 percent are women.”

- 2014 data of the labor force participation rate at select leading “Silicon Valley tech firms,” with similarly upsetting trends: “Among Executives, 1.6 percent were Hispanic and less than 1 percent were African American.”

If you were to be confirmed to the FCC, what do you think we could do to establish a more inviting sector to diversity of staff and leadership at the FCC, and the tech sector more broadly?

Answer. I know personally that the lack of diversity in the technology sector in this country is a tough and persistent problem. During my prior tenure at the Commission, I traveled across the country to discuss everything from spectrum policy to broadband networking and no matter where I went I encountered too few women and minorities in technical and leadership roles. This is a problem. It needs to be addressed.

I believe that talent is equally distributed, but opportunity is not. That is why I think the Commission should set up an honors engineering program to encourage a diverse group of people to work in government service in technical roles early in their careers. It would help diversify the ranks of the agency’s own engineering workforce and provide a boost for recent engineering school graduates interested in working on communications technology as they launch their professional lives. This program could easily be modeled on the Commission’s existing honors attorney program, which has helped recruit a wide range of talented, young, legal professionals to Federal service. Moreover, it would help the agency set a much-needed example for the technology sector. Over time it also could help multiply the pathways to leadership for those who are underrepresented in technical fields today.

Question 2. Chairman Pai has expressed that there is authority the FCC has to address this issue with broadcasters and cable operators, so is there additional authority you could use to aid in this pursuit of more diversity in the overall tech sector?

Answer. There are several key sections in the Communications Act that address diversity matters.

As you indicate that Chairman Pai has suggested, Sections 334 and 634 of the Communications Act specifically authorize the Commission to take steps to promote equality of employment opportunity with respect to broadcast stations and cable operators. The Commission should periodically review these policies to ensure that they are effective and that they reflect current law.

In addition, Section 309(j) of the Communications Act grants the Commission the authority to distribute spectrum licenses through a competitive bidding process. As part of this directive, Congress tasked the agency with both “avoiding excessive concentration of licenses” and “disseminating licenses among a wide variety of applicants, including small businesses owned by members of minority groups and women.” To do so, Congress encouraged the agency to “consider the use of tax certificates, bidding preference, and other procedures.” To this end, in 2015, the Commission updated its designated entity policies, which are designed to encourage a diverse range of small businesses to participate in its spectrum auctions. These updated policies were used in the forward portion of the recent 600 MHz auction. In the aftermath of a major wireless auction like this the Commission should review its designated entity policies to ensure both that they were effective and that they did not inadvertently benefit entities for whom they were not intended.

As a related matter, Section 257 of the Communications Act requires the Commission to periodically report on market entry barriers for entrepreneurs and other small businesses in the provision of telecommunications services and information services and in the provision of parts or services to providers of telecommunications services and information services. The Commission should consider including in this report a review of data regarding diversity in the communications sector, in order to gauge changes over time. By doing so, the agency could help increase transparency by encouraging companies, institutions, and organizations to account for their demographics and measure year over year gains, failures, and trends.

Finally, it is important to note that the single most effective tool that the Commission had for increasing diversity was the Minority Tax Certificate policy. This policy permitted sellers of certain media properties to defer capital gains taxes if the properties were sold to entities that increased ownership diversity in the sector. Over the course of its 17-year existence, it resulted in a five-fold increase in the number of broadcast licenses held by minority owners. In 1995, however, Congress repealed this policy, largely due to the restoration of an unrelated tax deduction. However, Congress may wish to revisit and reinstate this policy in updated form, with additional protections to prevent misuse of the deduction.

Question 3. Broadband Internet Speed Honesty: I asked Chairman Pai about a reported FCC filing from USTelecom and NCTA that is asking the FCC for a ruling

confirming that ISPs are following Federal transparency rules by posting online their average performance during times of peak usage. But I know a bipartisan group of Attorneys General are concerned such an industry petition to the FCC on cost transparency “represents nothing more than the industry’s effort to shield itself from state law enforcement.”

Do you believe that an FCC ruling would circumvent the ability of the states to protect consumers?

Answer. I am concerned that an overbroad Commission ruling could circumvent the ability of the states to protect consumers. There is a long history of concurrent Federal and state authority regarding consumer protection matters. I believe the Commission has a duty to respect this history and the authority of its state counterparts.

Question 4. How can you best ensure that ISPs are truthful with consumers, given that prices and advertised speeds often influence consumer decisions about the service that is right for them?

Answer. In order to ensure that advertised speeds are truly accurate, the Commission should review its Measuring Broadband America program. This program was put in place several years ago to assess the accuracy of speeds advertised and offered by broadband providers. For wired services, the program uses special routers in thousands of households in order to determine if there are any gaps between speeds that are advertised by providers and those that are experienced by their consumers. For wireless services, a similar test is accomplished through a software application available for iOS and Android operating systems. The agency releases annual reports summarizing both its wired and wireless findings. In light of increased interest in the gap between what is advertised by providers and what is experienced by consumers, the agency should expand this report and offer more detail regarding its findings. Then, in turn, it should use this detail to inform its Form 477 broadband deployment data-gathering process, and Broadband Progress Report pursuant to Section 706.

RESPONSE TO WRITTEN QUESTION SUBMITTED BY HON. JOHN THUNE TO
BRENDAN CARR

Question. Millions of rural Americans lack access to broadband, and bridging the digital divide is a priority for me and the Committee. As traditional fiber, cable, and 4G broadband is deployed throughout the country, policymakers must nevertheless be creative and open-minded when exploring all options to achieving universal service. What role do you see for unlicensed spectrum (Wi-Fi, TV White Spaces, millimeter wave, etc.) in connecting unserved rural households with broadband Internet access?

Answer. I agree that policymakers must be creative and open-minded when it comes to achieving universal service. And I believe that unlicensed spectrum should continue to play an important role in connecting unserved rural households with broadband Internet access. If confirmed, I would work to ensure that the FCC takes an all-of-the-above approach to spectrum, including by opening up and enabling the use of unlicensed spectrum.

RESPONSE TO WRITTEN QUESTIONS SUBMITTED BY HON. TED CRUZ TO
BRENDAN CARR

Federal Spectrum

FCC Commissioner Michael O’Rielly stated in a 2015 blog post that, “By some accounts, the Federal Government currently occupies either exclusively or on a primary basis between 60 and 70 percent of all spectrum in the commercially most valuable range between 225 megahertz and 3.7 gigahertz, which comes to approximately 2,417 megahertz.”

Question 1. What steps can this Committee take to incentive Federal users, especially the Department of Defense, to make more spectrum available for commercial use? Should Congress consider allowing Federal agencies to keep more of the proceeds from FCC incentive auctions?

Answer. There are a number of steps the Committee could take to incentivize Federal users to make more spectrum available for commercial use, while also ensuring that those users can continue to carry out their important missions. I will highlight three steps here.

First, the Committee could facilitate, or consider legislation that would require, the consolidation of various Federal use cases. Federal radar systems may be one

example. Federal users are known to operate separate systems pursuant to separate spectrum allocations that perform identical or similar functions. So it is worth exploring opportunities to consolidate those systems and spectrum allocations, which could create efficiencies, ensure that Federal users can continue to carry out their missions, and free up additional spectrum for commercial use.

Second, the Committee could convene stakeholder meetings to help identify candidate bands and map out the timeline and process for freeing those bands up for commercial use, while continuing to protect the interests of Federal users.

Third, the Committee could consider legislation that would require Federal users to free up a certain amount of spectrum (or specific spectrum bands) by a date certain, while ensuring that adequate spectrum resources remain available to Federal users to carry out their missions.

With respect to the second part of the question, I defer to Congress' ultimate judgment on this issue, but I do believe that Congress should consider allowing Federal agencies to keep some portion of the proceeds of an FCC auction of Federal spectrum as a means of incentivizing incumbents to free up spectrum.

On the flip side, a slightly different approach to incentivizing the relinquishment of underutilized Federal spectrum would be the enactment of spectrum fees. Brent Skorup at the Mercatus Center has written that, "Some countries have applied spectrum fees to government users, which generally attempt to approximate the opportunity cost of the spectrum so that users internalize the social value of the spectrum they occupy. If the opportunity cost fees are high, a user will be induced to use less spectrum to reduce its fees or leave the space completely and sell the cleared spectrum for higher-valued uses."

Question 2. Should Congress implement a spectrum fee to incentive Federal users to consider relinquishing underutilized spectrum?

Answer. While I defer to Congress' ultimate judgment on whether to implement spectrum fees, I believe that this type of incentive system certainly merits consideration.

5G Wireless Technology Deployment

We are on the cusp of the wireless industry introducing the next generation of technology—5G. That upgrade to our existing networks is expected to bring us higher data speeds, lower latency, and the ability to support breakthrough innovations in transportation, healthcare, energy and other sectors. And as recent studies have shown, 5G is expected to provide significant benefits to state and local governments, allowing them to become smart cities. However, those networks will also require many more antenna sites than we have today—they will increasingly rely on small cell technologies. To recognize these benefits, a study performed by Deloitte shows that several steps are necessary to remove impediments to antenna siting. Texas is leading the way, as evidenced by recent legislation (Texas Senate Bill 1004) signed into law just last month that streamlines the deployment of next-generation 5G networks. It's also my understanding that the Commission has initiated a proceeding designed to evaluate whether some of those obstacles can be removed.

Question 3. Do you support the Commission's efforts in this area? Do you think that the Commission's proposals are achievable, particularly considering state and local government interests in this area?

Answer. As your question indicates, 5G is expected to support breakthrough innovations. In doing so, it can create jobs, spur investment, and grow the economy for the benefit of all Americans. 5G deployments may look very different than traditional 4G deployments, as your question notes, and this is due in part to the fact that 5G deployments should involve a significantly greater number of small cells.

In April 2017, the FCC released a Notice of Proposed Rulemaking and Notice of Inquiry that seeks public comment on a number of ways that the FCC could help streamline the deployment of 5G and other wireless technologies. While I have an open mind about the FCC's proceeding, I support the Commission's effort to seek comment on these issues, and I believe that the agency can achieve results consistent with the long-standing and important role that state and local governments play in this area. Indeed, as your question notes, many state and local governments are adopting ordinances that are designed to promote 5G and small cell deployments.

FCC Priorities

Question 4. My top priority is regulatory reform. Please identify three meaningful regulations that you are interested in repealing during your tenure at the FCC.

Answer. I agree with you on the importance and need for regulatory reform. If confirmed, I would work to repeal FCC regulations that are unnecessarily limiting innovation, investment, and deployment.

First, the FCC must take action to ensure that Federal regulations are not needlessly deterring the deployment of wireless infrastructure, including infrastructure that can be used for 5G. In particular, the FCC has asked for public comment on whether it should eliminate Federal rules that could be slowing down small cell deployments. I support that inquiry. If confirmed, I would welcome the opportunity to examine the record and eliminate any Federal regulations that are only serving to slow the deployment of innovative and advanced wireless technologies.

Second, the FCC has opened a proceeding that aims to identify and eliminate rules that might be slowing the deployment of wireline infrastructure. In particular, the FCC's proceeding asks about eliminating requirements in Part 51 of the FCC's rules. Stakeholders have argued that these requirements are needlessly increasing the costs of deploying next-generation networks and slowing the roll out of new wireline services. If confirmed, I would welcome the opportunity to examine these requirements and eliminate any unnecessary ones.

Third, the FCC's Part 22 rules contain paperwork requirements that apply solely to one set of wireless licensees. Commenters have argued that these requirements impose burdensome and outdated regulations that are ripe for elimination. If confirmed, I would welcome the chance to examine the record and determine whether any such rules can be repealed.

ICANN

Question 5. Last year the previous administration allowed the Federal Government's contract with ICANN to expire. Do you think that was a wise and prudent decision?

Answer. No, I do not think it was a wise and prudent decision.

Question 6. Microsoft and Facebook and YouTube, which is owned by Google, all of whom supported President Obama's Internet transition, have signed a code of conduct with the European Union to remove so-called hate speech from European countries in less than 24 hours. Do you think these global technology companies have a good record of protecting free speech? And what can be done to protect the First Amendment rights of American citizens?

Answer. The First Amendment operates to prevent the government from abridging the freedom of speech, and Supreme Court case law is clear that there is no exception for so-called hate speech. The First Amendment thus embodies the idea that we should respond with more speech—not less and certainly not government censorship—when confronted with disfavored speech that is protected by the Constitution. To the extent companies are cooperating with governmental bodies to censor disfavored speech under a claim of removing so-called hate speech, then that activity is not consistent with those First Amendment principles. To protect the First Amendment rights of American citizens, it is important that the government not engage in censoring protected speech. I am committed to upholding and protecting the First Amendment rights of all Americans.

RESPONSE TO WRITTEN QUESTIONS SUBMITTED BY HON. DAN SULLIVAN TO BRENDAN CARR

I want to thank you and the current FCC Commissioners for working with my staff to help alleviate some of the burden that the reduction in reimbursement from the Rural Health Care program placed on Alaskan health care providers.

In my state, the price of telecommunications services is so expensive that many rural health care providers cannot afford them without support from the Rural Health Care program. Telemedicine services in Alaska are essential for many of our villages, and they are only possible if a health facility has connectivity.

In enacting the Telecommunications Act of 1996, Congress specifically directed the FCC to ensure that rural health care providers have access to telecommunications services at rates that are reasonably comparable to those for similar services in urban areas of the State. As you are aware, for the first time the demand for funding from the Rural Health Care program exceeded the \$400 million cap.

Question 1. Will you work to ensure the sustainability of the Rural Health Care Program as the FCC moves forward to review further reforms to universal service programs?

Answer. As your question indicates, the Rural Health Care program serves important purposes, particularly in Alaska where the state's size, remote areas, and varied terrain can translate into high costs of service, including for healthcare-related communications services. The Rural Health Care program helps reduce the cost of those services. If confirmed, I would look forward to working with my colleagues to ensure the sustainability of the Rural Health Care program.

Question 2. If confirmed, what steps would you take to address this funding issue?

Answer. If confirmed, I would look forward to working with all stakeholders to help ensure the Rural Health Care program continues to perform its important purposes. I can assure you that I would approach the issue of funding with an open mind.

Question 3. Will you consider beginning a rulemaking proceeding to evaluate the changes necessary to ensure that the program budget is sufficient to fulfill the purposes of the program?

Answer. If confirmed to serve as a Commissioner, I would not set the agenda at the agency—meaning, I would not have the authority to begin a rulemaking proceeding by circulating a Notice of Proposed Rulemaking. Only the FCC’s Chairman can circulate items for the Commission’s consideration. However, if confirmed, I would welcome the opportunity to work with my colleagues to ensure that the program’s budget is sufficient to fulfill the purposes it serves.

Mr. Carr, you seem to have extensive knowledge of the FCC and an idea of what you hope to focus on if confirmed. I agree with you that the technology and communications space will significantly help grow the economy, and working to grow the economy is an issue I am very focused on in Congress.

In Alaska, many places do not have any connectivity, and those same places many times are not connected by road. It is costly to deploy telecommunications infrastructure, and while these communities are extremely innovative, a lack of connectivity is a hindrance in growing their businesses and increasing their economic activity.

The carriers in my state are doing great work to bring telecommunications to communities that don’t have it, as well has to upgrade existing networks to increase speeds to their urban counterparts. Much of this is due to the great dialogue that has occurred between the FCC, Alaskan carriers, and our Alaska delegation.

Question 4. Will you work with my office to continue exploring ways to improve broadband access in Alaska?

Answer. Yes, I would welcome the chance to work with your office on ways to improve broadband access in Alaska.

It is my understanding that environmental assessments (EAs), when required under the FCC’s rules, are currently not subject to any processing timelines or dispute resolution procedures. As a result, environmental assessments for new facilities can languish for an extended period of time—sometimes years. This is an unfortunate barrier to feeding our Nation’s hunger for expanded wireless broadband.

Given my seat on this committee and on EPW, I have a particular interest in finding ways to streamline these procedures.

Question 5. Will you commit to finding ways to streamline the FCC’s review of environmental assessments, including through the adoption of “shot clocks” to resolve environmental delays and disputes, in addition to working on additional infrastructure reforms?

Answer. Yes, I am committed to identifying ways to streamline these procedures and working on additional infrastructure reforms. I would welcome the chance to work with your office on these issues.

RESPONSE TO WRITTEN QUESTIONS SUBMITTED BY HON. MIKE LEE TO
BRENDAN CARR

Question 1. My understanding is that as of today almost 200 carriers still receive over \$500 million annually in USF funds under the legacy high-cost support program in order to provide voice service in areas where multiple wireless carriers already offer mobile voice and broadband services without USF funding. Of this \$500 million, what percentage actually goes to an area where the USF funding recipient is the only wireless provider in that area?

Answer. In 2011, the FCC established an annual budget for Mobility Fund Phase II (MF-II) of up to \$500 million for ongoing support for mobile services, with up to \$100 million reserved for support to Tribal lands. In the MF-II Order the FCC released in March 2017, the FCC stated that “a conservative estimate is that three-quarters of support currently distributed to mobile providers is being directed to areas where it is not needed. In other words, carriers are receiving approximately \$300 million or more each year in subsidies to provide service even though such subsidies are unnecessary and may deter investment by unsubsidized competitors from increasing competition in those areas.”

RESPONSE TO WRITTEN QUESTIONS SUBMITTED BY HON. BILL NELSON TO
BRENDAN CARR

Question 1. The evolution of our 9–1–1 infrastructure to Next Generation 9–1–1 is a national imperative. That is why Senator Klobuchar and I have developed our Next Generation 9–1–1 Act of 2017, which is designed to give states and localities the Federal resources and support they need to upgrade their existing 9–1–1 systems to benefit our citizens and first responders who put their lives on the line every day.

Do you agree that the Nation’s transition to Next Generation 9–1–1 systems is a national imperative, and that additional Federal support would help speed up that transition?

Answer. Yes, I agree that the Nation’s transition to Next Generation 9–1–1 systems is a national imperative, and I agree that additional Federal support could help speed up that transition.

Question 2. Do I have your commitment, if you are confirmed, that you will work with Senator Klobuchar and me to make sure that we can make Next Generation 9–1–1 a reality?

Answer. Yes, if confirmed, I would welcome the opportunity to work with you and Senator Klobuchar to make sure that we can make Next Generation 9–1–1 a reality.

Question 3. I want to follow up on my question to you about E-Rate. Your response did not give me confidence that you would fully protect this program and the success of these recent reforms. Again, will you commit, if confirmed, to wait—as the FCC previously concluded that it would wait until at least next year—before attempting to make changes to this critical program?

Answer. The E-Rate program plays a critical role in the lives of students and communities across the country, including in Florida. If confirmed, I would welcome the chance to work with you, my colleagues at the FCC, and all stakeholders to ensure that the program continues to serve its important purposes and has the funding necessary to do so.

In terms of the timing of any FCC action, if confirmed to serve as a Commissioner, I would not set the agenda at the agency—meaning, I would not decide whether or when a Notice of Proposed Rulemaking or other item is circulated for the Commission’s consideration. Only the FCC’s Chairman can circulate items for the Commission’s consideration. If confirmed, and if any item relating to E-Rate is put before the Commission for consideration, I would approach the issue with an open mind and cast any vote based on the facts, the record, and the public interest.

Question 4. An independent and free press is what distinguishes the United States from so much of the rest of the world. It is a cherished tenant of our democracy—and remains critical in holding power accountable. If confirmed, will you commit that you will exercise your authority as an FCC Commissioner in a manner that fully respects the absolute independence of the media?

Answer. Yes, if confirmed, I would exercise any authority in a manner that fully respects the First Amendment rights and independence of the media.

Question 5. Will you commit, if confirmed, to inform this committee of any attempt by the White House or Executive Branch to influence your decision-making or direct you to take or not take any action with respect to media outlets in the United States or abroad, including the license renewal applications for broadcasters?

Answer. Yes.

Question 6. Will you commit, if confirmed, that you will not act in a manner that violates the First Amendment and stifles or penalizes speech by electronic media, directly or indirectly (through the “raised eyebrow” or negative action on transactions affecting licensees), even if requested by the administration?

Answer. Yes.

Question 7. I serve as ranking member on the Armed Services Committee’s Subcommittee on Cybersecurity. We live in a nation, in a world, where so much of what we do relies on connections to IP-based communications networks—and that means bad actors, anywhere in the world—with a keyboard—can potentially hack into those networks and exploit the underlying data. And it happens all day, every day.

The FCC is the expert agency overseeing our Nation’s communications networks. Yet Chairman Pai apparently does not believe the FCC has a role in our cyber defenses. Everyone agrees that we need to be doing more, not less, to protect our Nation’s communications networks against cyberattack. Frankly, in my mind, if you are keeping the FCC from being part of the solution, you are making it part of the problem.

During your confirmation hearing, you were asked about the FCC’s role in protecting the Nation’s networks from cyberattacks, and you indicated that the FCC

has network expertise, but that DHS are the experts in this area and that the FCC's authority is circumscribed. However, Congress gave the FCC the authority in Section 1 of the Communications Act specifically to ensure that nation-wide communications services are available, for the purpose of national defense and for the purpose of promoting safety of life and property.

Is it tenable for the FCC, as the expert agency over our communications networks, to sit on the sidelines in the battle to protect our Nation from cyberattack?

Answer. No, it is not. The FCC has an important role to play when it comes to protecting our Nation from cyberattacks.

Question 8. If confirmed as a Commissioner, would you have the FCC sit idly by and do nothing while foreign adversaries repeatedly attack our country's communications networks based on a narrow reading of the Communications Act?

Answer. No, I would not. The FCC has an important role to play with respect to cybersecurity.

Question 9. As the FCC General Counsel, you are the ultimate arbiter of what is an official Federal record for the agency. Earlier this year, the House Oversight Committee sent a bipartisan request to all agencies, including the FCC, about their information practices.

Have you ever worked on FCC business on a personal or other non-governmental e-mail account?

Answer. The March 2017 bipartisan letter asked the Commission to identify any senior agency officials that have used an alias e-mail account to conduct official business since January 1, 2016. I do not have and I have never used an alias e-mail account. I conduct official business and create Federal records through the official e-mail account that the FCC provided me when I joined the agency in 2012.

Question 10. Did you, Chairman Pai and other members of his staff during your tenure working at the commission discuss FCC matters or business using your personal or other non-governmental e-mail?

Answer. As indicated in response to question 9 above, I conduct official business and create Federal records through my official e-mail account that the FCC provided me when I joined the agency in 2012.

Question 11. Have you ever used any other form of personal or other non-governmental digital communication—including text messages, social media platforms, or similar services—to discuss FCC matters or business?

Answer. I have a Twitter account that I set up in July 2014, which is @BrendanCarrFCC, that I have used to tweet publicly about FCC matters or business. I also have a LinkedIn profile that identifies my position and work at the FCC.

Question 12. Past members of the FCC have sought out the guidance of state and local elected officials on matters pending before the agency. If you are confirmed, what role will consultation with state and local governments play in your decision making?

Answer. If confirmed, I would welcome the chance to receive guidance from state and local governments and elected officials on matters pending before the agency. Getting the opportunity to hear their perspectives and learn from their experiences can only improve the FCC's decision-making.

Question 13. I appreciate the information you provided regarding your use of "alias" e-mails utilizing the FCC.gov domain and the creation of Federal records. The questions posed to you, however, addressed separate, broader questions about the use of non-governmental e-mail or other digital communications to discuss FCC business or discuss FCC matters. Your responses did not appear to address the broader questions. Nor did your responses indicate whether you had used other forms of digital communications, other than Twitter and LinkedIn, to discuss FCC matters or business.

As a result, I ask that you provide additional clarifying responses regarding the following specific questions posed to you:

- Have you ever worked on FCC business on a personal or other non-governmental e-mail account [not including alias e-mail accounts utilizing the FCC.gov domain]?
- Did you, Chairman Pai and other members of his staff during your tenure working at the commission discuss FCC matters or business using your personal or other non-governmental e-mail [not including alias e-mail accounts utilizing the FCC.gov domain]?

- Have you ever used any other form of personal or other non-governmental digital communication—including text messages, social media platforms, or similar services—to discuss FCC matters or business?

Answer. With respect to whether I have discussed “FCC matters” on non-governmental e-mail or other digital forms of communications, it is not clear to me how “FCC matters” is defined in this context, but I do believe I can provide some additional information.

For instance, as disclosed in the Senate questionnaire that I submitted, I have held various positions with the Federal Communications Bar Association (FCBA). I have used my personal e-mail for communications relating to my FCBA activities, and in that context those e-mails would include discussions about FCC-related events, such as lunches that the FCBA hosted that would feature FCC staffers talking about FCC matters. So in that context, I have e-mails relating to the FCBA putting on those events and other e-mails relating to FCBA activities in this space.

Similarly, as you note in your e-mail, I have a LinkedIn profile. That profile sends updates to my personal e-mail when connections, including those that work in telecom or on FCC matters, change jobs or view my profile.

With respect to the use of non-governmental e-mail for the creation of Federal records, FCC policy, which is consistent with the Federal Records Act, provides that any such communications should be captured in an FCC record keeping system (such as my work account on the fcc.gov domain) within 20 days. The e-mail should then be removed from the non-official e-mail account. So, for instance, when I received an e-mail on my personal account that relates to official FCC business, I forwarded it to my fcc.gov e-mail account and deleted it from my personal e-mail.

RESPONSE TO WRITTEN QUESTIONS SUBMITTED BY HON. MARIA CANTWELL TO
BRENDAN CARR

Question 1. Do you agree that the FCC has a statutory mandate to make sure networks are safe and resilient?

Answer. The FCC has a statutorily-mandated role to play in helping to ensure that networks are safe and resilient. This is especially true in the context of 911 networks. In this context, in particular, the FCC must work to improve the resilience and reliability of the communications networks.

Question 2. The FCC’s 2018 budget states that the mission of the FCC includes “promoting safety of life and property through the use of wire and radio communication.”

Does ensuring that our communications networks are hardened against cyber-attacks, fall into the definition of “promoting safety of life and property through the use of wire and radio communication”.

If not why not?

Answer. Yes, I believe it does.

RESPONSE TO WRITTEN QUESTIONS SUBMITTED BY HON. BRIAN SCHATZ TO
BRENDAN CARR

Question 1. In 2014, when President Obama expressed his support for strong net neutrality rules, the Department of Commerce submitted an ex parte notice with the FCC officially putting the President’s statement in the record. Did the White House file an ex parte with the FCC when it announced its support for the current proceeding to unravel the Open Internet Order?

Answer. During the July 19, 2017 hearing, you asked whether the FCC’s ex parte rules require the filing of a letter concerning the Administration’s July 18, 2017 statement regarding net neutrality.

I believe that the relevant statement was issued by the Principal Deputy Press Secretary, Sarah Huckabee Sanders, during a press briefing with reporters. That statement is as follows:

[Y]esterday Sean [Spicer] was asked about the administration’s position on the concept of net neutrality, and he said we’d get back to you. The administration believes that rules of the road are important for everyone—website providers, Internet service providers, and consumers alike.

With that said, the previous administration went about this the wrong way by imposing rules on ISPs through the FCC’s Title II rulemaking power. We support the FCC chair’s efforts to review and consider rolling back these rules, and

believe that the best way to get fair rules for everyone is for Congress to take action and create regulatory and economic certainty.

This does not constitute an ex parte presentation within the meaning of the FCC's rules. *See, e.g.*, 47 C.F.R. § 1.1200 et seq. The FCC's ex parte rules govern presentations to or from Commission decision-making personnel. This statement, which was made in the course of a press conference at which no FCC decision-makers were present, is not such a presentation. Thus, the FCC's rules do not require the submission of any ex parte notice with the FCC, and to the best of my knowledge no such filing has been made.

As your question notes, the Obama Administration, through the Department of Commerce, filed an ex parte letter on November 10, 2014. As stated in that letter, and in contrast to the circumstances discussed above, that filing disclosed that Jeff Zients, Director of the National Economic Council and Assistant to the President for Economic Policy, met privately with FCC Chairman Tom Wheeler and FCC General Counsel Jonathan Sallet to convey President Obama's ask that the FCC classify broadband under Title II and adopt four specific rules outlined in detail in the ex parte submission.

Question 2. Have there been any communications between you, your office, and the White House about net neutrality?

Answer. No.

Question 3. Have you or the White House filed the required ex parte notices for any communications you would have had about net neutrality?

Answer. I have not had any discussions with the White House about net neutrality or any other topic that have required the filing of an ex parte notice.

Question 4. Mr. Carr, in your role as general counsel, you are the chief legal officer responsible for determining what the FCC considers as part of the record in its proceedings. On your watch, how has the FCC considered President Trump's tweets on issues and pending matters under your jurisdiction?

Answer. I am not aware of any tweets from the President that the FCC should treat as part of the record in any of its proceedings.

RESPONSE TO WRITTEN QUESTION SUBMITTED BY HON. EDWARD MARKEY TO
BRENDAN CARR

Question. Earlier this year, the majority of the Commission indicated that a market is competitive where only one provider has service, and potentially a second provider may enter the market. Do you take the position that the agency should not regulate when there is a monopoly? What is your view on duopoly and what actions should the agency take? What is your plan to evaluate, on an ongoing basis, conditions in business data services?

Answer. In April 2017, the Commission adopted an order concerning the regulatory framework that should apply to business data services. That decision is now on appeal in the U.S. Court of Appeals for the Eighth Circuit.

The FCC has many options available when determining the appropriate method of regulating any particular market. The degree and type of regulation depends on the specific facts and circumstances of that market, as well as any relevant statutory provisions. So it is not possible to provide a definitive answer as to the appropriate regulatory framework that the FCC should apply without the benefit of a developed record and knowing the particular features of the relevant market and applicable statutory provisions. But in general, the Commission can choose from, *inter alia*, *ex ante* regulation, *ex post* regulation, or other methods of promoting competition, investment, and innovation. I would always look to apply the regulatory method that reflects the facts, the law, and the public interest.

In terms of my plans for evaluating the conditions in the business data services market in particular, if confirmed, I would welcome the chance to work with my colleagues on this issue.

RESPONSE TO WRITTEN QUESTIONS SUBMITTED BY HON. CORY BOOKER TO
BRENDAN CARR

Question 1. Mr. Carr, you say in your written testimony, "When there are marketplace failures that harm consumers, the agency [the FCC] must take action consistent with the scope of our authority and the direction provided by Congress." I'd like to ask you about a marketplace failure that was described in a comment submitted to the Commission in regard to Chairman Pai's proposal to roll back Net

Neutrality. The comment was submitted by Level 3 Communications, a global communications provider.

According to Level 3, before the 2015 Open Internet Order, large consumer ISPs “refused to augment” Level 3’s interconnection capacity unless Level 3 agreed to new, recurring charges. The ISPs did not justify these charges in terms of cost, and the charges frequently exceeded the price that Level 3 charges its own customers for global connectivity. Until the Open Internet Order, Level 3’s customers paid the price in congestion and consumer experience. Then, after the Open Internet Order was adopted, the ISPs came to the table and renegotiated interconnection agreements.

These were not disputes between reasonable parties over how to share the cost of doing business—the ISPs were gatekeeping.

This is a clear example of ISPs charging tolls for capacity not because they need to meet their own costs, but just because they can. Why should the FCC relinquish its authority to protect the many consumers and businesses who benefit and rely upon a free and open internet?

Answer. In the 2015 Open Internet Order, the Commission discussed interconnection and it specifically noted the perspective on interconnection disputes raised by Level 3. The Commission stated that “the causes of past disruption and—just as importantly—the potential for future degradation through interconnection disputes—are reflected in very different narratives in the record” and that “[t]he record reflects competing narratives.” Based on that, and other considerations, the Commission stated in the 2015 Open Internet Order that “this Order does not apply the open Internet rules to interconnection.” The Commission then noted in the Order that its “‘light touch’ approach does not directly regulate interconnection practices.”

Right now, the FCC has a pending proceeding that is examining the appropriate regulatory framework for interconnection. If confirmed, I would examine this issue in light of the facts, the law, and the public interest.

Question 2. Chairman Pai has defended his rollback of Net Neutrality by claiming that we have not seen evidence of harm to consumers from ISPs restricting access to broadband capacity. This claim contradicts numerous findings by the FCC, the Department of Justice, and the D.C. Circuit Court that large ISPs have acted and will act on the incentive and the ability to discriminate against competitors, especially Online Video Distributors or O-V-Ds, who rely on them for broadband capacity.

The Department of Justice could not have made this point clearer in the Charter/Time Warner Cable complaint:

“Some MVPDs have sought to restrain nascent OVD competition directly by *exercising their leverage over video programmers to restrict the programmers’ ability to license content to OVDs.*”¹

DOJ has declined or imposed conditions on multiple mergers now to alleviate this concern. The Commission made similar findings in its recent Open Internet proceedings, and the D.C. Circuit confirmed these findings twice.

Do you agree with the Department of Justice, the D.C. Circuit Court, and the Federal Communications Commission in their previous findings that ISPs can and do use their market power to discriminate against competitors?

Based on the record I have outlined, how can Congress, OVD competitors, and consumers be expected to believe that large ISPs will enter any voluntary framework that forfeits their clear incentive and ability to undermine market competition?

Answer. In the 2015 Open Internet Order, the Commission stated that “[c]onsistent with the [D.C. Circuit] *Verizon* court’s analysis, this Order need not conclude that any specific market power exists in the hands of one or more broadband providers in order to create and enforce these rules. Thus, these rules do not address, and are not designed to deal with, the acquisition or maintenance of market power or its abuse, real or potential.” Similarly, the Commission stated in the 2015 Open Internet Order that “our reclassification of broadband Internet access service as a ‘telecommunications service’ subject to Title II below likewise does not rely on such a test or any measure of market power.”

On appeal, the D.C. Circuit stated that “the partial dissent disagrees with our conclusion that the Commission had ‘good reasons’ to reclassify because, according to the partial dissent, it failed to make ‘a finding of market power or at least a consideration of competitive conditions.’ Concurring & Dissenting Op. at 10. But noth-

¹DOJ, quoted in Incompas public comment to Restoring Internet Freedom NPRM, July 17, 2017. See Pp. 13–16.

ing in the statute requires the Commission to make such a finding.” The Concurring and Dissenting Opinion similarly stated that “[t]he [2015 Open Internet] Order made no finding on market power.”

So it is not clear to me that the Department of Justice, the D.C. Circuit, and the FCC have all made the finding of market power indicated in your question. With respect to the second part of your question, the FCC has a pending proceeding that seeks comment on the regulatory framework that should apply to broadband Internet access services and, if confirmed, I would make any decision in that proceeding based on the record, the law, and the public interest.

Question 3. WJLP, northern New Jersey’s only VHF television broadcast station, has been ordered by the FCC to identify itself as channel 33 instead of its real channel, channel 3. Applications for review of numerous rulings related to this issue have been submitted with no action for up to three years. It is my understanding that contested cases can take up to seven years to reach a determination. What actions have you taken, and what actions will you take if re-confirmed, to reach a final determination on this case?

Answer. If confirmed, I can commit to you that I would act quickly to cast a vote on any decision that is presented to the Commission concerning this matter.

Question 4. E-Rate is an important Universal Service Fund program that helps underserved schools and libraries connect to high-speed Internet. I cannot overstate the value of broadband access for these learning centers. To remain competitive in the 21st century, our children must learn how to interact with the digital world.

In 2016, my home state of New Jersey received \$90 million for E-Rate, which it used to connect 181,652 students to high-speed Internet in underserved schools.² For these students, especially those who do not have access to broadband at home, this a potentially life-changing advance in educational opportunity. This program is critical to closing the digital divide.

Nationally, since the E-Rate Modernization Order in 2014, 30.9 million unserved students have been connected to the high-speed broadband that they need to build our Nation’s future.

Will you commit to support the E-rate modernization order in its current form with need-based prioritized funding for underserved schools and libraries?

Answer. The E-Rate program plays a critical role in the lives of students and communities across the country, including in New Jersey, as your question notes. I support a strong and effective E-Rate program, and I can commit to you that I approach this issue with an open mind. If confirmed, I would welcome the chance to work with all stakeholders to ensure that the program continues to serve its important purposes and has the funding necessary to do so.

Question 5. The New Jersey Division of the Deaf and Hard of Hearing (DDHH) estimates that there are approximately 850,000 New Jersey residents who experience hearing loss. Many of these individuals rely on Video Relay Service (VRS) and Internet Protocol Captioned Telephone Service (IP CTS) to communicate with family, friends, emergency services, and other important people. How will you ensure that the FCC continues to administer these programs consistent with the requirements of the Americans with Disabilities Act?

Answer. VRS and IP CTS are serving important purposes and helping to ensure that those with hearing loss can communicate with family, friends, and emergency services, as your question notes. The FCC has taken important steps this year to improve VRS services and, if confirmed, I would welcome the opportunity to work with all stakeholders to ensure that the FCC administers these programs consistent with the requirements of the Americans with Disabilities Act.

Question 6. Expanding access to broadband connectivity is an incredibly important part of investing in the future of our Nation and closing the digital divide. This is especially true in rural areas. How do you view the role of TV White Spaces in expanding connectivity to hard-to-reach rural areas?

Answer. I agree that expanding access to broadband connectivity is incredibly important. And I agree that this is especially true in rural areas. The FCC must take an all-of-the-above approach to expanding connectivity and that includes consideration of the role that TV White Spaces can play in reaching rural areas.

²Education Superhighway, July 2017.

RESPONSE TO WRITTEN QUESTIONS SUBMITTED BY HON. TOM UDALL TO
BRENDAN CARR

Question 1. As a commissioner of the Federal Communications Commission, you have direct authority over the Nation's broadcast and media marketplace. The FCC as an independent agency controls whether broadcast stations are allowed access to the U.S. airwaves, oversees elements of the contractual relationships between media outlets and their distribution partners, renders judgements on mergers and acquisitions of media properties, and issues regulations that can affect the financial future of major media companies. And ultimately, the decisions that you, your fellow commissioners, and the agency staff make affect the viability and sustainability of news media.

Accordingly, please respond directly, fully, and individually to the questions below, which will inform my ongoing consideration of your nomination to serve on the FCC Commission.

Do you believe the media is the "enemy" of the American people?

Answer. No.

Question 2. Can you assure us that you will exercise your authority as an FCC Commissioner to regulate the media in an impartial manner?

Answer. Yes.

Question 3. Will you commit to us that the FCC will not act in a manner that violates the First Amendment and stifles or penalizes free speech by electronic media, directly or indirectly, even if requested by the administration?

Answer. Yes.

Question 4. Did you commit to the administration, as a condition of your nomination, to take any action against a specific media entity or generally against broadcast entities, cable network owners or other media outlets?

Answer. No.

Question 5. Will you commit to us that you will exercise your authority as an FCC Commissioner in a manner that fully respects the absolute independence of the agency from the executive branch?

Answer. Yes.

Question 6. Finally, will you commit to inform us and the public of any attempt by the White House or by any Executive Branch official to influence your decision-making or direct you to take or not take any action with respect to media interests within your jurisdiction, including the license renewal applications for broadcasters (whether or not such contacts fall under the ex parte rules or other legal or ethical rules applicable to the FCC)?

Answer. Yes.

Question 7. The FCC and this Committee have been talking about the need to build out rural broadband for many years. Progress is happening, but much too slowly. The free market did not deliver rural electricity—FDR, the New Deal, and the rural electric coops did it with major USDA support. The free market will not deliver rural broadband on its own either. We need the government to act. If there is going to be an infrastructure package, rural broadband must be in it in a very big way. Will you work with both parties in Congress, and the White House, to advance a consensus, bipartisan proposal to provide rural broadband to every part of America that is bold—and provides the necessary funding to achieve this goal?

Answer. Yes.

RESPONSE TO WRITTEN QUESTION SUBMITTED BY HON. MAGGIE HASSAN TO
BRENDAN CARR

Question. To the Panel: As you know, pursuant to the Americans with Disabilities Act, the FCC has an important mandate to ensure that deaf and hearing-impaired individuals have "functionally equivalent" access to telecom services. How will you work to ensure that the commission fulfils its obligation to individuals with hearing impairments under the ADA?

Answer. I agree that the FCC has a mandate to ensure that deaf and hearing-impaired individuals have "functionally equivalent" access to telecom services. At the FCC, I have had the chance to work on efforts to help improve the quality of the agency's VRS and other programs and, if confirmed, I would welcome the opportunity to work with all stakeholders to make sure the FCC is fulfilling its obligations in this area.

RESPONSE TO WRITTEN QUESTIONS SUBMITTED BY HON. CATHERINE CORTEZ MASTO
TO BRENDAN CARR

Question 1. Diversity in Telecom: In reviewing the Federal Equal Employment Opportunity Commission's (EEOC) 2016 report on "Diversity in High Tech," and it contains some frustrating and concerning observations regarding minority and female employment and leadership representation. Namely:

- "Compared to overall private industry, the high tech sector employed a smaller share of African Americans (14.4 percent to 7.4 percent), Hispanics (13.9 percent to 8 percent), and women (48 percent to 36 percent)."
- "Of those in the Executives category in high tech, about 80 percent are men and 20 percent are women. Within the overall private sector, 71 percent of Executive positions are men and about 29 percent are women."
- 2014 data of the labor force participation rate at select leading "Silicon Valley tech firms," with similarly upsetting trends: "Among Executives, 1.6 percent were Hispanic and less than 1 percent were African American."

If you were to be confirmed to the FCC, what do you think we could do to establish a more inviting sector to diversity of staff and leadership at the FCC and the tech sector more broadly?

Chairman Pai has expressed that there is authority the FCC has to address this issue with broadcasters and cable operators, so is there additional authority you could use to aid in this pursuit of more diversity in the overall tech sector?

Answer. Diversity at the FCC is important, and I am pleased that the agency has promoted a diverse group of individuals to leadership positions at the Commission.

With respect to the agency's efforts more broadly, the FCC is in the process of forming a new Federal advisory committee on Diversity and Digital Empowerment. The Commission has stated that "[t]his Committee will provide advice and recommendations to the Commission regarding how to empower disadvantaged communities and accelerate the entry of small businesses, including those owned by women and minorities into the media, digital news and information, and audio and video programming industries." If confirmed, I would welcome the opportunity to work with this group, and other stakeholders, on the important issue of diversity in the technology and telecom sectors.

With respect to the FCC's statutory authority, I am not aware of a provision that grants the FCC broad authority with respect to promoting diversity in the overall tech sector. I defer to Congress' ultimate judgment on whether to provide such authority to the FCC, but I would work to implement any such legislation.

Question 2. Broadband Internet Speed Honesty: I asked Chairman Pai about a reported FCC filing from USTelecom and NCTA that is asking the FCC for a ruling confirming that ISPs are following Federal transparency rules by posting online their average performance during times of peak usage. But I know a bipartisan group of Attorneys General are concerned such an industry petition to the FCC on cost transparency "represents nothing more than the industry's effort to shield itself from state law enforcement."

Do you believe that an FCC ruling would circumvent the ability of the states to protect consumers?

How can you best ensure that ISPs are truthful with consumers, given that prices and advertised speeds often influence consumer decisions about the service that is right for them?

Answer. As your question indicates, on May 15, 2017, USTelecom and NCTA filed a petition for declaratory ruling asking the Commission to clarify certain aspects of the Commission's regulations governing broadband speed disclosures. On May 17, 2017, the FCC released a public notice that sought comment on that petition. Comments were due June 16, 2017, and reply comments were due July 3, 2017. If confirmed, I would reach any decision in that proceeding only after considering the record, the law, and the public interest.

With respect to ISPs, the FCC currently has an open proceeding that considers the regulatory classification of broadband Internet access service and the rules regulating ISPs' conduct. If confirmed, I would approach that proceeding with an open mind.

Question 3. E-Rate: I'm deeply concerned about your noncommittal stance towards e-rate and any future plans you have for the program.

Are you considering reducing funding for E-rate?

And, are you considering major changes to E-rate?

Answer. The E-Rate program plays a critical role in the lives of students and communities across the country, including in Nevada. If confirmed, I would welcome the

chance to work with you, my colleagues at the FCC, and all stakeholders to ensure that the program continues to serve its important purposes. I commit to you that I would approach this issue with an open mind. I am not considering any changes at this time.

