S. Hrg. 114-607

OVERSIGHT OF THE FEDERAL COMMUNICATIONS COMMISSION

HEARING

BEFORE THE

COMMITTEE ON COMMERCE, SCIENCE, AND TRANSPORTATION UNITED STATES SENATE

ONE HUNDRED FOURTEENTH CONGRESS

SECOND SESSION

MARCH 2, 2016

Printed for the use of the Committee on Commerce, Science, and Transportation



U.S. GOVERNMENT PUBLISHING OFFICE

25-081 PDF

WASHINGTON: 2017

SENATE COMMITTEE ON COMMERCE, SCIENCE, AND TRANSPORTATION

ONE HUNDRED FOURTEENTH CONGRESS

SECOND SESSION

JOHN THUNE, South Dakota, Chairman

ROGER F. WICKER, Mississippi ROY BLUNT, Missouri MARCO RUBIO, Florida KELLY AYOTTE, New Hampshire TED CRUZ, Texas DEB FISCHER, Nebraska JERRY MORAN, Kansas DAN SULLIVAN, Alaska RON JOHNSON, Wisconsin DEAN HELLER, Nevada CORY GARDNER, Colorado STEVE DAINES, Montana BILL NELSON, Florida, Ranking
MARIA CANTWELL, Washington
CLAIRE McCASKILL, Missouri
AMY KLOBUCHAR, Minnesota
RICHARD BLUMENTHAL, Connecticut
BRIAN SCHATZ, Hawaii
EDWARD MARKEY, Massachusetts
CORY BOOKER, New Jersey
TOM UDALL, New Mexico
JOE MANCHIN III, West Virginia
GARY PETERS, Michigan

Nick Rossi, Staff Director

Adrian Arnakis Deputy Staff Director
Rebecca Seidel, General Counsel
Jason Van Beek, Deputy General Counsel
Kim Lipsky, Democratic Staff Director
Chris Day, Democratic Deputy Staff Director
CLINT Odom, Democratic General Counsel and Policy Director

CONTENTS

	Page
Hearing held on March 2, 2016	rage
Statement of Senator Thune	1
Statement of Senator Nelson	3
Letter dated March 1, 2016, to Hon. Tom Wheeler, Chairman; Hon.	
Mignon Clyburn, Commissioner; Hon. Jessica Rosenwercel, Commis-	
sioner; Hon. Ajit Pai, Commissioner; and Hon. Michael O'Reilly, Com-	
missioner, Federal Communications Commission from Claire McCaskill, U.S. Senator	4
Letter dated March 8, 2016, to Hon. Claire McCaskill from Ajit V. Pai,	4
Commissioner, Federal Communications Commission	6
Letter dated March 16, 2016, to Hon. Claire McCaskill from Tom Wheel-	U
er, Chairman, Federal Commissions Commission	6
Letter dated March 16, 2016, to Hon. Claire McCaskill from Jessica	
Rosenworcel, Commissioner, Federal Communications Commission	7
Letter dated March 24, 2016, to Hon. Claire McCaskill from Michael	
O'Reilly, Commissioner, Federal Communications Commission	8
Statement of Senator Wicker	33
Statement of Senator Schatz	$\frac{35}{37}$
Statement of Senator Markey	39
Statement of Senator Booker	41
Letter dated March 1, 2016, to Chairman Tom Wheeler, Commissioner	
Mignon Clyburn, Commissioner Michael O'Reilly, Commissioner Ajit	
Pai, and Commissioner Jessica Rosenworcel from the companies of	
Access Humboldt, American Library Association, AT&T, Benton Foun-	
dation, Center for Media Justice, Center for Rural Strategies,	
CenturyLink, Comcast, Common Cause, Common Sense Kids Action,	
Connected Nation, Inc., Cox Communications, EveryoneOn, Frontier	
Communications, Media Mobilizing Project, Multicultural Media, Telecom and Internet Council, National Digital Inclusion Alliance, Na-	
tional Hispanic Media Coalition, OCA—Asian Pacific American Advo-	
cates, Public Knowledge, Schools, Health & Libraries Broadband Coali-	
tion, The Greenlining Institute, and Verizon	43
Statement of Senator Fischer	44
Letter dated March 14, 2016, to Hon. Deb Fischer from Tom Wheeler,	
Federal Communications Commission	45
Statement of Senator Moran	47
Statement of Senator Johnson	50
Statement of Senator Gardner	53 56
Statement of Senator Daines Statement of Senator Peters	58
Statement of Senator Klobuchar	60
Statement of Senator Sullivan	61
Statement of Senator Blumenthal	64
Witnesses	
Hon. Tom Wheeler, Chairman, Federal Communications Commission	10
Prepared statement	11
Hon. Jessica Rosenworcel, Commissioner, Federal Communications Commission	15
sion	15 16
Hon. Ajit Pai, Commissioner, Federal Communications Commission	18
Prepared statement	19

14
Hon. Michael O'Rielly, Commissioner, Federal Communications Commission Prepared statement
Hon. Mignon L. Clyburn, Commissioner, Federal Communications Commission
Prepared statement
Appendix
Response to written questions submitted to Hon. Tom Wheeler by:
Hon. John Thune
Hon. Roger F. Wicker
Hon. Roy Blunt
Hon. Kelly Ayotte
Hon. Ted Cruz
Hon. Jerry Moran
Hon, Ron Johnson
Hon. Dean Heller
Hon. Steve Daines
Hon. Maria Cantwell
Hon. Amy Klobuchar
Hon. Richard Blumenthal
Hon. Edward Markey
Hon. Cory Booker
Hon. Tom Udall
Hon. Joe Manchin
Response to written questions submitted to Hon. Jessica Rosenworcel by:
Hon, John Thune
Hon. Roy Blunt
Hon. Ted Cruz
Hon. Deb Fischer
Hon. Dean Heller
Hon. Steve Daines
Hon. Claire McCaskill
Hon. Richard Blumenthal
Hon. Joe Manchin
Response to written questions submitted to Hon. Ajit Pai by:
Hon. John Thune
Hon. Ted Cruz
Hon. Ron Johnson Hon. Dean Heller
Hon. Claire McCaskill
Hon. Richard Blumenthal
Response to written questions submitted to Hon. Michael O'Rielly by:
Hon. John Thune
Hon. Ted Cruz
Hon. Deb Fischer
Hon. Ron Johnson
Hon. Dean Heller
Hon. Claire McCaskill
Hon. Richard Blumenthal
Response to written questions submitted to Hon. Mignon L. Clyburn by:
Hon. John Thune
Hon. Ted Cruz
Hon. Deb Fischer
Hon. Dean Heller
Hon. Claire McCaskill
Hon. Richard Blumenthal
Hon. Cory Booker

OVERSIGHT OF THE FEDERAL COMMUNICATIONS COMMISSION

WEDNESDAY, MARCH 2, 2016

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

The Committee met, pursuant to notice, at 10:05 a.m. in room SR-253, Russell Senate Office Building, Hon. John Thune, Chair-

man of the Committee, presiding.

Present: Senators Thune [presiding], Wicker, Blunt, Ayotte, Fischer, Moran, Sullivan, Johnson, Heller, Gardner, Daines, Nelson, Cantwell, Klobuchar, Blumenthal, Schatz, Markey, Booker, Manchin, and Peters.

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

The CHAIRMAN. This hearing will come to order. Welcome to to-day's hearing on Oversight of the Federal Communications Commission. During our oversight hearing last March, I expressed my amazement that an agency as important as the Federal Communications Commission has not been reauthorized by Congress in 25 years, making it the oldest expired authorization within the Commerce Committee's expansive jurisdiction.

Reversing a quarter century of legislative inertia takes time, but together we are beginning to make some progress. For example, today's hearing marks the first time this century the full FCC has appeared before this committee twice during a single Congress. Another example is our unanimous approval last year of Senator Heller's FCC Consolidated Reporting Act, which would make the Commission's various marketplace examinations less burdensome on

the agency, as well as more informative to Congress.

Reauthorizing the FCC is our responsibility as legislators and representatives of diverse constituencies who are increasingly affected by a regulatory agency with nearly half a billion dollar budget. It's time for this committee to get back to regularly authorizing the Commission as part of its normal course of business. To that end, in the next few days, I will introduce the FCC Reauthorization Act of 2016, and it is my intent to mark up the bill in the coming

We have before us today a very familiar face, Commissioner Jessica Rosenworcel, who is appearing before the Committee for the fourth time this Congress. Commissioner Rosenworcel's re-nomination is currently pending before the full Senate.

Commissioner, I support your confirmation, and I was pleased to process your nomination through the Committee last year. I appreciate your public service at the FCC and your prior service to this committee.

Last year's oversight hearing came shortly after the very successful auction of AWS-3 spectrum, which netted more than \$41 billion in winning bids. That record-setting auction was the product of the 2012 Spectrum Act, which also authorized the innovative incentive auction of broadcast TV airwayes that is scheduled to begin next month.

In the incentive auction, the FCC is charged with a balanced mission: one, reallocate the spectrum voluntarily relinquished by TV stations to commercial wireless users, and, two, protect both the TV stations that continue to operate following the auction and their viewers. Congress provided nearly \$2 billion to reimburse stations forced to relocate during the so-called post-auction repack, and the FCC has established a timeline to complete the repacking process.

Concerns have been raised, however, that the reimbursement funds and time allotted for repacking may be inadequate. I am hopeful that will not be the case. Nevertheless, these concerns deserve and will receive the close attention of this committee. I know my colleagues and I all wish to see a successful incentive auction

and a successful repacking process.

While local broadcast TV remains an important and popular medium, the broader video market continues to dramatically change and grow. In fact, the video services market is one of the most dynamic segments of the communications space. It is driving tremendous innovation in consumer electronics, dynamic experimentation in video distribution business models, and growing broadband data consumption by consumers.

It is not a coincidence that the parts of the video market seeing the most innovation are also the least regulated. Amidst this increasingly competitive video reality, the FCC recently proposed a partisan rulemaking to have the government somehow produce better results than the astonishing and consumer-empowering disrup-

tion that is already happening.

Ranking Member Nelson sent Chairman Wheeler a letter shortly before the FCC's adoption of this new technology regulation proposal. I agree with Senator Nelson's sentiment that, and I quote, 'Advances abound in the competitive video navigation device market, and that Section 629 should always be implemented with an eye toward what is actually happening in the marketplace.

I want to further echo Senator Nelson's warning to the Commission that Section 629 does not contemplate imposing regulations by which third parties gain for their own commercial advantage the ability to alter, add to, or interfere with the programming provided by content providers. Again, that's from Senator Nelson's letter.

The bottom line is that today's video market is increasingly competitive, and traditional pay-TV subscribers are rapidly finding new, more user friendly, and less expensive ways to receive the TV services they purchase on an increasing array of consumer devices, including some made by the largest companies on the planet.

Finally, I would like to address the issue of standalone broadband support for small rural carriers. Because of flawed Universal Service Fund rules, these providers lose all support for serving households that choose to subscribe to broadband while not simultaneously purchasing landline telephone service. Last March, all five of you commissioners made commitments to me and this committee to fix the counterproductive loophole by the end of 2015.

It is my understanding that an item is currently on circulation at the Commission that would fix the standalone broadband problem and which reflects a negotiated compromise and some other complex USF reforms that have been linked to this simple objective. While the 2015 deadline for standalone broadband has recently passed, I am glad the extra time appears to have given a fair chance for rural providers to assess the impact of those complex reform proposals on their businesses and on the rural broadband customers they serve.

I look forward to seeing the full plan, assessing its impact on South Dakotans, and continuing to provide oversight of the FCC's implementation of these reforms as Chairman of this committee. In the meantime, I would like to thank all of you for fulfilling your commitment to fix the standalone broadband issue for rural consumers across this nation.

Now, before I conclude, I would like to say a word regarding the report issued earlier this week by Chairman Johnson. Among other things, the report finds that the FCC, and I quote, "Failed to live up to standards of transparency." I want to thank Chairman Johnson and his staff for their work on this report, and I hope the Commission, rather than resorting to a defensive posture, will look for ways to demonstrate the kind of transparency expected of our independent agencies. Today's hearing provides one opportunity to do just that.

So I look forward to hearing your testimony and appreciate very much having all our commissioners here before us today, and I look forward to having an opportunity to ask you some questions later.

But I turn now to our distinguished Ranking Member, the Senator from Florida, Senator Nelson, for his opening statement.

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

Senator Nelson. Thank you, Mr. Chairman, and I return the compliments to you in the way that the two of us have worked together in a bipartisan way on a number of thorny issues, trying to boil them down to a common approach, and I am encouraged that we will continue in the Committee, thanks to yours and your staff's approach to leadership.

On behalf of Senator McCaskill, which we all know is going through a difficult time, I want to ask that her letter to the Commissioners and then their responses, when they submit them, be submitted into the record and entered into the record as a part of today's hearing.

today's hearing.

The CHAIRMAN. Without objection. [The information referred to follows:]

UNITED STATES SENATE Washington, DC, March 1, 2016

Hon. Tom Wheeler, Chairman Hon. Mignon Clyburn, Commissioner Hon. Jessica Rosenworcel, Commissioner Hon. AJIT Pai, Commissioner Hon. Michael O'Rielly, Commissioner Federal Communications Commission Washington, DC.

Dear Chairman Wheeler and Commissioners Clyburn, Rosenworcel, Pai, and O'Rielly:

At a March 18, 2015, Federal Communications Commission oversight hearing held by the Senate Commerce, Science, and Transportation Committee, I suggested four specific reforms of the Lifeline program that should be implemented by the commission as part of any effort to expand the program to cover broadband service. Given the opportunity to disagree with any of the reforms, a bipartisan majority of the commission raised no objections, and in fact most spoke favorably of the proposed reforms.

Based on my work closely examining the Lifeline program for more than four years and my work over the course of my career in bringing transparency and accountability to government programs, I continue to believe any final Lifeline modernization order should include the following reforms:

- 1. Take eligibility determination out of the hands of telecommunications carriers;
- 2. Improve competition among participating telecommunications carriers;
- 3. Make sure consumers have "skin in the game"; and
- 4. Place a cost-cap or other cost-control mechanism on the program.

I was pleased to see that the Notice of Proposed Rulemaking approved by the commission on June 18, 2015, proposed removing carriers from eligibility determination and creating minimum service standards for carriers. I was also pleased to see that the NPRM sought to make increasing competition among carriers a priority, which will benefit both the consumers that participate in the program as well rate-payers who fund it. While the NPRM requested comment on whether and how to cap the Lifeline program, I am concerned it did not go further.

When a Republican-majority commission last expanded the Lifeline program in

When a Republican-majority commission last expanded the Lifeline program in 2008 to allow the participation of pre-paid wireless carriers, the commission did so without putting additional accountability or cost-control measures in place. The result was a program that grew from \$800 million in 2008 to \$2.1 billion in 2012. Although spending on Lifeline in 2014 was down to \$1.6 billion, likely as a result of reforms adopted in 2012, the program is still spending twice what it was in 2008 while reports continue of waste fraud and abuse

while reports continue of waste, fraud, and abuse.

Particularly given that the NPRM included no estimate for what expanding the Lifeline program to cover broadband could cost, or for what savings could be realized by other proposed reforms, the commission should adopt a cost cap or other effective cost control for the Lifeline program to prevent a repeat of the unchecked increase in spending that was seen the last time the program was expanded. There is simply no justification for allowing the Lifeline program to remain the only Universal Service Fund program without a cost control mechanism in place.

The goal of a spending cap is not to deny telecommunications services to those who need them most, but rather to ensure the Lifeline program is accomplishing its intended goals. A cap imposed by the commission can also be revisited by the commission should spending approach that level and a determination can be made at that time whether eligibility criteria should be changed, the level of subsidy reduced, or the cap increased.

With the commission poised to vote on a final Lifeline modernization order as early as this month, I request that you each provide a written response by Wednesday, March 16, 2016, indicating your position on applying a cost-control mechanism to the Lifeline program.

Modernizing the Lifeline program to cover broadband service as opposed to basic phone service is a worthy goal and one I support in concept if accompanied by appropriate structural reforms to the program. Commissions under President Ronald Reagan and President George W. Bush created and expanded the Lifeline program without adequate accountability or cost controls in place. In 2012, the commission took its first step in the 30-year history of the Lifeline program to impose some accountability in the program for providers and beneficiaries. Those measures fell

short of what was needed. However, this commission has the opportunity to adopt the reforms necessary to both bring the program into the 21st century and restore the confidence of the Congress and the American people that the Lifeline program is working effectively.

Sincerely,

CLAIRE MCCASKILL, U.S. Senator.

Q. With the Commission poised to vote on a final Lifeline modernization order as early as this month, I request that you each provide a written response by Wednesday, March 16, 2016, indicating your position on applying a cost-control mechanism to the Lifeline program.

Thank you for the question, Senator.

I agree that the Lifeline program, like all of the Federal universal service programs, should have robust cost controls and oversight to protect against waste, fraud and abuse. The explosion of fraud occurred due to (in)decisions from previous administrations, but under this administration, our focus has been on addressing program deficiencies and reigning in abusers of the program.

In 2012, the FCC's substantial clean-up of Lifeline's inherited vulnerabilities saved American consumers in excess of \$2.75 billion. Additionally, the duplicates database, non-usage rule and other measures adopted nearly four years ago have put the program on a more sound footing. While I was Acting Chairwoman, the agency took swift and strong enforcement action proposing fines of over \$100 million

against providers that violated our rules. But I agree, more must be done.

Specifically, the provider should no longer determine program eligibility. I have been vocal in my call for this since November 2014. Allowing providers to determine customer eligibility has created incentives for fraud, increased privacy concerns and has left us with a program structure that is less than dignified. A neutral, third-party verifier, coupled with the existing national duplicates database, will eliminate the ability of carriers to enroll ineligible consumers and ensure only qualified consumers sign up for service.

We also need minimum levels of service. The lack of any standards has been extremely profitable to some at the expense of their consumers and the universal service fund. The number of minutes offered today is so low that consumers may have more of an incentive to get another phone in order to stay connected. That should be eliminated as we impose minimum standards. And, while I disagree with the FCC putting its thumb on the scale and distorting the market to require a minimum payment or to mandate that the service be "free," I do agree we need minimum standards so that consumers have a floor that provides robust service. In addition, the FCC should institute additional reforms to ensure that consumers have choices comparable to what the rest of us receive. To me, this means lower cost options as well as higher cost plan offerings with more or less data where consumers pick the plan that fits their budget and meets their needs.

I believe these programmatic changes will not only put the Lifeline program on a sound footing, but the proposed modifications will actually exceed any cost control measures that are in place for the other universal service programs. Even so, I am open to a budget provided that it is consistent with our treatment of other universal service programs and does not, for example, foreclose over half of the eligible population from participating. The FCC does not artificially limit the number of rural carriers that can receive high cost funding and we should not place more constraints on those who are our most vulnerable. Indeed, the budget for the high cost program is \$4.5 billion annually, of which \$2 billion is allocated for the smaller carriers that serve 3.88 million lines, whereas, according to USAC, over 38 million households qualify for Lifeline. The value of getting these low income households connected with broadband, or ensuring they can stay connected for \$9.25 a month, has a far greater societal impact than the billions of dollars allocated to "connect" (or more accurately stated, to pass by) the remaining unserved households. Indeed, the potential reverberating benefits back to society of reduced healthcare costs, skilled jobs with a better education and the ability to provide a pathway out of poverty and off of government benefits programs are endless.

¹Remarks of Commissioner Mignon Clyburn, Reforming Lifeline for the Broadband Era, American Enterprise Institute, November 12, 2014, available at https://apps.fcc.gov/edocs-public/attachmatch/DOC-330453A1.pdf.

I believe the Commission should keep all of this in mind as we set a budget for Lifeline. Sincerely,

MIGNON L. CLYBURN.

FEDERAL COMMUNICATIONS COMMISSION Washington, DC, March 8, 2016

Hon. CLAIRE McCaskill, United States Senate, Washington, DC.

Dear Senator McCaskill,

Thank you for your recent letter on the need to reform the FCC's Lifeline program. I share your concern that last year's Notice of Proposed Rulemaking did not go far enough on whether and how to ca p the Lifeline program. Like you, I am concerned that spending in this program has almost doubled since the end of 2008. And like you, I am concerned that waste, fraud, and abuse are still rampant.

In your letter, you asked for my position on applying a cost-control mechanism In your letter, you asked for my position on applying a cost-control mechanism to the Lifeline program. I unequivocally support applying a budget to the Lifeline program. The Commission promised that it would put the program on a budget in 2013. Now, it's time to follow through. Every other program supported by the Universal Service Fund is on a budget. Like you, I believe that there is s imply no justification to treat the Lifeline program differently.

I look forward to continue working with you and other members of the Senate Committee on Commerce, Science, and Transportation to resolve this issue.

Sincerely.

AJIT V. PAI, Commissioner.

The Honorable John Thune, Chairman, Committee on Commerce, Science, and The Honorable Bill Nelson, Ranking Member, Committee on Commerce, Science, and Transportation

> FEDERAL COMMUNICATIONS COMMISSION Washington, DC, March 16, 2016

Hon. CLAIRE MCCASKILL, United States Senate, Washington, DC.

Dear Senator McCaskill:

Thank you for your letter recognizing both the need for appropriate structural reforms to the Lifeline program and the value of modernizing the program to cover broadband.

Last week, I circulated a proposed Order for my colleagues' consideration that would modernize the Commission's Lifeline program to meet a critical 21st Century need: making broadband more affordable for low-income Americans. At the same time, the proposed Order would put in place a number of key programmatic reforms designed to protect the integrity of the Lifeline program and build on the Commission's recent efforts to root out waste, fraud, and abuse in the program.

Your letter specifically asks for my views on the importance of a "cost-cap or other cost control mechanism" for the Lifeline program. I agree that such a mechanism is prudent to safeguard the financial stability and integrity of the Lifeline program while ensuring access for all eligible consumers. I have therefore proposed that, for the first time ever, the Commission take the necessary step of implementing a budget mechanism for the Lifeline program. The proposed approach has two parts.

First, the proposed Order would set a Lifeline budget of \$2.25 billion, indexed to inflation, that takes into account current participation rates, possible growth of the program as eligible consumers are made aware of its benefits, and safeguards in place to prevent waste, fraud, and abuse. This proposed budget acts as a ceiling, which allows for responsible organic growth from the current spending level, based on increased participation by eligible consumers generated by the program's support for broadband service. By establishing a reasonable budget in conjunction with complementary structural reforms, our goal is to meaningfully, but responsibly, narrow the digital divide that has left 64.5 million people in the U.S. disproportionately those with the lowest incomes-without an Internet connection. The Commission took a similar approach in setting a budget for the Connect America Fund to put the Commission on a path to responsibly modernize the high cost universal service fund.

Commission on a path to responsibly modernize the high cost universal service fund. Second, the proposed Order establishes a process for the full Commission to promptly evaluate and address Lifeline funding in advance of the program hitting that \$2.25 billion budget. Specifically, if expenditures in the Lifeline program reach 90 percent of the budget in a given year, the proposed Order requires Commission staff to notify the Commission and prepare a written analysis of the causes of the spending growth, with action by the full Commission within six months of receiving the report. This mechanism will ensure that the Commission has the notice and comprehensive information it needs to determine the reasons for growth in the program and a process to promptly make any necessary changes to the program in response.

That budget mechanism would work in concert with other proposed structural reforms to further ensure the integrity of the modernized Lifeline program. Under the proposed Order, the Commission would establish a National Eligibility Verifier that removes telecommunications carriers from making eligibility determinations; make targeted changes to encourage robust competition in the Lifeline program; and implement minimum service standards to ensure eligible subscribers' benefits are directed only to quality services that are worthy of universal service funding. I expect that these rules will make Lifeline a truly 21st Century program that effectively and responsibly makes broadband service accessible for low-income households.

I also appreciate your recognition of the successful program reforms the Commission has implemented since 2012 to prevent waste, fraud, and abuse in the Lifeline program, such as creating the National Lifeline Accountability Database to prevent subscribers from receiving more than one benefit. As a result of these and other reforms, disbursements in the Lifeline program decreased from nearly \$2.2 billion in 2012 to under \$1.5 billion in 2015. The proposed Lifeline Order now before the Commission builds on these efforts. Through the budget mechanism and other reforms, like implementing a National Eligibility Verifier, the Commission would take the additional steps necessary to shut the door on the program's remaining fiscal vulnerabilities and ensure responsible spending in the program.

The proposed Lifeline Order was designed with two equally important goals in mind-to help connect low-income Americans to the Internet and to ensure the fiscal integrity of the program going forward. We need not choose between the two. We can and must have both.

I appreciate your interest in this matter and our work on this issue has benefited from your input and guidance. Your views are important and will be included in the record of the proceeding and considered as part of the Commission's review. Please let me know if I can be of any further assistance.

Sincerely,

Tom Wheeler, Office of the Chairman.

FEDERAL COMMUNICATIONS COMMISSION
Washington, DC, March 16, 2016

Hon. CLAIRE McCaskill, United States Senate, Washington, DC.

Dear Senator McCaskill:

Thank you for your March 1, 2016, letter regarding the Lifeline program at the Federal Communications Commission. As your letter acknowledges, this program got its start more than three decades ago, back when President Ronald Reagan was in the White House and when most communications involved a cord. Today, the Lifeline program supports telephone access in approximately 13 million low-income households across the country. However, broadband is clearly the communications technology of our time. As a result, I believe the program needs to be modernized to reflect this reality. Moreover, I believe if the FCC does this right, this program can help address the Homework Gap by making it possible for more students in low-income households to get the connectivity they need to do basic schoolwork.

income households to get the connectivity they need to do basic schoolwork. As you note, the Lifeline program has been subject to abuse, largely as a result of its expansion and rapid growth beginning in 2008. The FCC cracked down on this abuse in 2012 with, among other things, new auditing requirements and the creation of the National Lifeline Accountability Database. Recognizing that additional

measures were necessary, last Summer the FCC began a rulemaking to explore how to continue to further update and modernize the program. I fully supported this

rulemaking.

This this end, I appreciate the reform ideas that you set forth at the March 18, 2015, Senate Commerce, Science, and Transportation Committee oversight hearing. Your letter specifically asks about my position with respect to one of these ideas—applying a cost control mechanism to the Lifeline program. I believe that the FCC should apply a cost control mechanism to the Lifeline program and regularly review other internal controls. The Lifeline program needs such measures in order to ensure accountability and prevent abuse going forward.

Thank you for your attention and interest in this program.

Sincerely,

JESSICA ROSENWORCEL.

FEDERAL COMMUNICATIONS COMMISSION Washington, DC, March 24, 2016

Hon. CLAIRE McCaskill, United States Senate, Washington, DC.

Dear Senator McCaskill,

Thank you for your letter of March 1, 2016, regarding potential reforms of the Lifeline program. I very much agree with your suggestion that the Commission should institute a budget for the program and have long advocated this approach. Like you, I envision such a "budget" as a spending cap that would need to be revisited by the Commission in the event any increase in the amount is considered necessary. I have shown some willingness to moderate this position to some degree, but none of my suggestions have yet been embraced by my colleagues. In order to protect contributing consumers, I remain hopeful that the Commission will ultimately implement such a mechanism for real cost control of the program.

Sincerely.

MICHAEL O'RIELLY,
Commissioner.

The CHAIRMAN. And I would also say to my colleague from Florida that I think all of us on this committee express our thoughts and prayers to our colleague, who is a very active and respected member of this committee, and hope and pray for a quick recovery.

Senator Nelson. Thank you, Mr. Chairman. And this is significant because it has been over a year since all five commissioners have appeared before this committee, and a lot has happened in the interim.

Now, I really appreciate, Mr. Chairman, what you said about Commissioner Rosenworcel's re-nomination and the confirmation that we attempt to get as soon as possible, and I want to recall for the record that at the end of the 113th Congress, we had—now, this is December 2014—we had one Republican FCC Commissioner, Mike O'Rielly, who is here, awaiting confirmation. The Democrats agreed to confirm Commissioner O'Rielly's nomination without pairing him with any other nominee in exchange for a promise that Republicans would confirm Democrat Jessica Rosenworcel quickly in the new Congress.

Senator McConnell promised Senator Reid—and I am getting this straight from Senator Harry Reid—and promised then Chairman Jay Rockefeller that they would move the Rosenworcel nomination without delay in the new Congress if the Democrats in the last Congress, that is, in 2014, agreed to move Commissioner O'Rielly's nomination.

Commissioner Rosenworcel's nomination is now on the Executive Calendar. I know, Chairman, that you are working with Leader McConnell to make this happen. We don't want to lose her leader-

ship and thoughtful approach to the crucial issues.

But, Mr. Chairman, this has been now over a year. As promised, it didn't happen in the first year of the new Congress, last year, 2015. Here we are in the second year of the new Congress. Finally, she's on the calendar. I hope we will move to fulfill the promise that was made in order to confirm Commissioner O'Rielly. And I want to thank all of the Commissioners for appearing today.

As our Nation grows ever more Internet-enabled, more connected, and more mobile, this FCC's role becomes ever more critical. You are the expert agency that Congress created over all things communications. You have a statutory mandate to protect consumers, promote competition, ensure universal service, and preserve public safety. And as technology transitions, these core directives do not necessarily follow. So that's where you come in.

In terms of protecting consumers, I want to call your attention to the ongoing problem of spoofing. Last week, Senator Fischer and I introduced the Spoofing Prevention Act of 2016, designed to update the law and provide the FCC with more enforcement tools to combat these abusive phone scams. Americans lose millions of dollars each year to these scams, and that's especially true of vulnerable senior citizens.

We must protect the public from these scammers, and I hope that the Committee can act swiftly on Senator Fischer's and my legislation. In the meantime, I expect the FCC to do everything

that it can under current law to stop these scammers.

Now, with regard to promoting competition, there has been intense interest in the past few weeks on your recent set-top box proposal. I support the existing statutory obligation to promote competition and choice in how consumers access their pay television programming. But it is essential that any new FCC rules in this area must not harm the production and distribution of video content, and my letter to the Chairman said just that.

The FCC, too, has worked hard to keep the U.S. competitive in our national spectrum policy. In a matter of weeks, the Commission will launch the first voluntary spectrum incentive auction. The

agency deserves much praise for getting us to this point.

At the same time, many of us have heard concerns about what may happen after the auction during any repacking of TV stations. Obviously, we will continue to watch the FCC's work closely in order to make sure that TV viewers are not disenfranchised at the end of this important process.

I want to recognize the work being done by the Commission related to 5G, the next-generation wireless services. The nation is once again on the verge of a wireless revolution, and the work on a new spectrum frontier for such services is vital to American leadership in this area. Tomorrow, this committee will take up the bipartisan MOBILE NOW Act that Chairman Thune and I have referenced. That bill is designed to help move the ball forward on 5G.

With regard to universal service, as important as it is to promote cutting-edge communications technologies, it is equally important that all Americans have access to these networks. I know that the FCC has been spending significant time considering reforms to the Lifeline program. I want to make it fairly obvious that we must have a Lifeline program that helps low-income Americans obtain access to broadband in order for them to participate in today's digital economy. Failing to do so risks exacerbating the digital divide.

With regard to public safety, a call to 911 remains the most important call any one of us will ever make. I hope you all will keep

that in mind, and I look forward to your testimony.

The CHAIRMAN. Thank you, Senator Nelson. We're going to proceed now, and we'll start on my right and your left with the Chairman of the Commission.

So Chairman Wheeler, if you'll go first, then we'll just work down

the dais from there. So thank you for being with us.

And, by the way, I would add, too—I know it's hard to enforce the timeline, but there are some of you on the panel who have been on this side, and you know how nice and how much the staff would appreciate it if you would confine your comments to as close to 5 minutes as possible. I know you have written statements, too, that we will certainly include in the record.

Mr. Chairman?

STATEMENT OF HON. TOM WHEELER, CHAIRMAN, FEDERAL COMMUNICATIONS COMMISSION

Chairman WHEELER. Thank you very much, Mr. Chairman, and members of the Committee. I know we all look forward to discussing the matters of importance that you have identified as well

as some others. So I will heed your admonition and be brief.

Four quick topics: First, as has been referenced, we're only 26 days away from the world's first incentive auction. Next week, we will have a workshop and a WebEx for broadcasters who are desiring to participate so that they can work through their processes and begin to understand even more. The following week, we will release the forward auction participants. The third week, we will have practice sessions after we have distributed to the participating broadcasters their own security token so they can actually practice and stress the system. And the flag falls in 3 weeks and 5 days. But who's counting?

Second, I have just returned with my colleagues, Commissioner Rosenworcel and Commissioner Clyburn, from the Mobile World Congress, the big gathering of the mobile industry in Barcelona, where the buzz was all about 5G. Commissioner Rosenworcel made some remarks there that were spot-on insofar as the importance of spectrum in 5G. Your MOBILE NOW legislation is an important part, as you both, Chairman Thune and Ranking Member Nelson,

have referenced.

But I want to make sure that everybody understands there's a difference between the way we approach 5G spectrum and the way the rest of the world does, because we've just met with the rest of the world. We will allocate 5G spectrum faster than any nation on the planet. We already have a proceeding underway. We will bring that proceeding to closure this summer. We will then get out of the way and let innovation and competition reign.

Now, I've been approached by various other governments saying, "You need to wait until there are standards." It's not our philos-

ophy to engage in such industrial policy. We are world leaders in 4G because of the fact that we made spectrum available, and we let competition and innovation reign. I believe that that is the same strategy that will bring us to world leadership in 5G.

Third, the last time we were together—Mr. Chairman, you've referenced this—we pledged rate-of-return carrier reform and broadband support to unserved areas before the end of the year. As you said, we met the goal, but not the calendar. Thank you for your

understanding.

It was a complex issue, but thanks to the work of Commissioners O'Rielly and Clyburn, we have a bipartisan plan that was not only negotiated with our offices, which is no easy undertaking in and of itself, but also negotiated with the major associations of the parties involved, which increased the complexity. Commissioner O'Rielly dove into the specifics of the issue and exhibited the kind of bringing people together attitude in finding solutions that made him such an effective member of the staff of this body. Commissioner Clyburn, who had over a decade of experience dealing firsthand with this issue at the state level, brought that kind of expertise and experience and helped us through that process.

None of us got everything we wanted, nor did any of the associations get everything they wanted. But we have a solid bipartisan reform and broadband funding for unserved areas, in particular,

that will serve the test of time.

Last—and this is not last in priority. It's just last on the list. Public safety, as embodied by 911, is dangerously close to a crisis as the digital world passes it by. Twenty-first century lifesaving is

being blocked by 20th century technology.

We at the FCC have done all within our power to move the nextgeneration 911 capabilities of digital ahead. We've improved 911 location accuracy. We've been pushing for text to 911 deployment. We've improved network resiliency, and we just completed a year-long process where we brought all the experts from around the country to spend a year developing a plan for just what does it take to get to the next-generation 911.

We have submitted that task force plan to this committee. Congress holds the key to whether there will be a next-generation 911, and we look forward to working with you in achieving that goal.

Thank you, Mr. Chairman.

[The prepared statement of Chairman Wheeler follows:]

PREPARED STATEMENT OF HON. TOM WHEELER, CHAIRMAN, FEDERAL COMMUNICATIONS COMMISSION

Introduction

Chairman Thune, Ranking Member Nelson, and Members of the Committee, thank you for this opportunity to join with my colleagues to discuss our work and mission at the Federal Communications Commission.

It has been almost a year since I last testified before this Committee. The Commission has been hard at work to facilitate dynamic technological change to enable economic growth and ensure that our communications networks reflect our core values—universal access, public safety, and consumer protection. Preserving and promoting competition continues to be the underlying foundation of our agenda.

I am proud to report that the Commission has made significant progress in support of these goals, and we continue to see that America's communications tech-

nology sector is thriving and consumers are better served and protected.

Today, I'll highlight some of our most significant actions since we last met, and also preview some of the issues we will be focused on moving forward.

Rate-of-Return Modernization

In recent months, I've had the privilege of visiting Kentucky and Montana to learn first-hand about digital opportunities and connectivity challenges in rural communities. On my recent visit to eastern Kentucky I visited two towns being reshaped by the broadband revolution. McKee, Kentucky or as some call it, "Silicon Holler," where there is now fiber to every home and business in the county, and Hazard, KY where I had the privilege to meet a former coal miner who is now working as a coder in the innovation economy. It was a striking reminder that the Commission's work can be a critical component to renewed economic growth. Our 21st century economy demands nothing less than vigorous broadband connections for rural, urban and suburban alike.

The Commission has a Congressional mandate to preserve and advance universal service so that all Americans have access to reasonably comparable communications services at reasonably comparable rates. Promoting universal access to communica-

services at reasonably comparable rates. Fromoting universal access to communications is not just a statutory obligation; it's smart public policy. Expanding Internet access opens up new opportunities for economic growth, job creation, education, healthcare, public safety, and many other national challenges.

In 2011, the Commission voted unanimously to expand rural broadband access by modernizing the Universal Service Fund. The Commission took an inefficient program for delivering telephone service and created the Connect America Fund to support expanded broadband connectivity in rural America. These reforms have already delivered significant benefits. CAF-supported projects are in the process of connecting 1.7 million Americans in 45 states, and, over the next six years, CAF is poised to invest \$9 billion and leverage private investment to deliver broadband to 7.3 million rural Americans. In addition, universal service reforms have dramatically reduced waste within the program.

Last year, I pledged to Chairman Thune and other Members of this Committee that we would bring forth a solution for the next phase of universal service modernization: reforming support for "rate-of-return" carriers. As the result of months of arduous efforts by Commissioners Clyburn and O'Rielly and their staffs, we re-

cently circulated a bipartisan Order to fulfill that promise.

The proposed Order sets forth a package of reforms to address rate-of-return issues that are fundamentally intertwined—the need to modernize the program to provide support for stand-alone broadband service; the need to improve incentives for broadband investment to connect unserved rural Americans; and the need to strengthen the rate-of-return system to provide certainty and stability for years to come. The proposed Order will help to ensure that Federal universal service funds are spent wisely, for their intended purpose, and takes concrete steps to bring broadband to the millions of rural Americans who remain unserved today.

I am grateful to Chairman Thune for his leadership on this issue and his patience

as we worked on this important bipartisan reform.

Incentive Auction

An unquestioned headliner of the Commission's March 2016 agenda is the Incentive Auction. The FCC staff has been working tirelessly to design this first-of-its-kind auction ever since Congress authorized it in February 2012. All systems are

go to launch this historic auction in 26 days.

Getting to this point represents the culmination of four years of hard work at the Commission, following the groundbreaking work of this Committee and Congress in enacting the Spectrum Act. It has required tireless efforts by our auction task force and multiple bureaus and offices, the active involvement of my fellow Commissioners, and input from stakeholders and public interest groups representing the full range of opinions.

We are encouraged by the strong interest that we have seen both from broadcasters interested in selling their spectrum and the broad assortment of parties in-

terested in buying it.

Our key goal is to repurpose as much spectrum for mobile broadband as the market demands to meet growing consumer needs, and that means deploying networks using these frequencies in a timely manner. To ensure preservation of service for broadcast viewers and timely network deployment, we have been focused on postauction planning for over a year, including the release of the draft relocation reimbursement form and a reimbursement cost catalog, and we've already begun to pivot and to accelerate our planning for the post-auction transition.

I recognize that getting the transition right is as important as getting the auction itself right. Like the auction, the transition will be a complex, multi-disciplinary effort that will span several years. The task force approach has served us well in designing and implementing the auction, and I believe it is the appropriate structure for ensuring that the transition has the focus and attention it requires. I therefore intend to maintain the task force when the auction is complete; as we move forward, its mission will evolve from auction to transition.

Spectrum Frontiers—5G

Just as bipartisan support helped enable the incentive auction, there is growing bipartisan interest in the next big thing in spectrum policy: 5G. With very fast speeds, scale to support billions of sensors, and reduced latency, 5G will allow us to realize the full potential of so many promising, yet nascent broadband-enabled breakthroughs. It won't just unleash commercial broadband, satellite, or government uses, but applications on the horizon, like Internet of Things and connected cars, and others we can't accurately predict today.

Fundamentally, we're approaching 5G as we have with previous generations of wireless by adopting a flexible use policy and assuring that spectrum is available to be deployed when the private sector has arrived at the requisite technical standards and network architectures. This approach made us successful as global leaders in AGLITE

At this point, none of us knows exactly what 5G will be, but we can be certain that the spectrum requirements will be dynamic and ever changing. Accordingly, our spectrum policy must be equally dynamic to address a wireless reality that is still evolving. We must continue to employ flexible use policies and reliance on private-sector innovation and investment, while increasing our commitment to spectrum sharing, opening new bands for broadband, and smart approaches to wireless infrastructure.

I commend Chairman Thune and Ranking Member Nelson for coming together to introduce the MOBILE NOW Act, which aims to facilitate investment in 5G technology by removing barriers to infrastructure deployment—a goal we share at the Commission. Commissioner Pai has been a strong advocate for eliminating barriers to wireless infrastructure deployment and I look forward to working with him and the other Commissioners on this important issue moving forward. Rest assured that spurring 5G innovation and deployment is one of the Commission's highest priorities

In fact, the Commission launched what we call our Spectrum Frontiers rule-making to explore the use of millimeter wave spectrum—the airwaves at 24 GHz and above—for 5G. I was disappointed that one of the bands the FCC identified for possible 5G use—28 GHz—was rejected for study by the International Telecommunication Union at last year's World Radio Conference in Geneva. While international coordination is preferable, I believe we should move forward with exploration of the 28 GHz band, and we plan to act on the Spectrum Frontiers proceeding this summer

I just returned from the Mobile World Congress in Barcelona where 5G was the primary object of interest at the conference. Commissioner Rosenworcel spoke eloquently at that meeting about the need for 5G spectrum and how it will improve the quality of mobile services and enable new, heretofore unknown services. My bilateral meetings with foreign regulators in Barcelona made it clear—they are looking pointedly at the United States, watching our 5G-related initiatives very closely.

Competition | Set-Top Boxes

Going back to my nomination hearing, the most consistent theme of my messages to Congress—or any audience—has been that "competition, competition" is the most effective tool for driving innovation and consumer benefits.

One area where competition is virtually non-existent and consumers are literally paying the price is the set-top box marketplace. Today, 99 percent of pay-TV customers lease set-top boxes from their video providers, paying an average of \$231 a year. Even when the company has recovered the cost of the box, consumers must continue to pay a rental fee month after month. Collectively, these consumers are spending \$20 billion annually. Senator Markey and Senator Blumenthal deserve recognition for shining a spotlight on this issue.

Last month, the Commission launched a proceeding to introduce competition into the set-top box marketplace, as Congress mandates. Specifically, we propose establishing open standards for video navigation devices like set-top boxes, the same way we have standards for cell phones and Wi-Fi routers. The new rules would set the stage to provide device manufacturers, software developers and others the information they need to introduce innovative new ways for consumers to access and enjoy their favorite shows and movies on their terms, while at the same time maintaining strong security, copyright and consumer protections.

This proposal will *not* require changes in the programming business practices of pay-TV providers; it will *not* require consumers to purchase new boxes; and it will *not* harm minority programming opportunities. Again, this is all about whether the standard for set-top boxes should be a closed standard or an open standard.

Lifeline Modernization

At a time when our economy and lives are increasingly happening online, be it job applications, math homework, or neighborhood listserves, it doesn't make sense for Lifeline—the Commission's program to help low-income Americans afford access to the vital communications—to remain focused only on 20th century narrowband voice service. Competing and thriving in the 21st century economy requires affordable broadband.

Building on earlier reforms adopted under Chairman Genachowski and Chairwoman Clyburn that cracked down on waste, fraud, and abuse and weeded out over a billion dollars in payments to ineligible recipients, the Commission initiated a proceeding last June to recast Lifeline for the broadband era.

The first principle of Lifeline reform is allowing the program to support both fixed and mobile broadband service. We will establish minimum standards of service that Lifeline providers must deliver to receive funds. We will also improve Lifeline's management and design to get to the heart of the historic issues that have undermined this program's efficiency. We will streamline the requirements to become a Lifeline provider and take a hard look at the burdens we place on those providers to make it easier for carriers to participate in the Lifeline program. Too many of our country's leading service providers as well as many local, innovative, small providers do not provide Lifeline service. The more service providers we can encourage to participate, the better that service will become.

Commissioner Clyburn has been a tireless champion of this effort, and I am working with her and my other colleagues to propose final rules in the not-too-distant future.

Next-Generation 911

I remain committed to working with Congress and other stakeholders to improve our 911 system. Public safety is one of the primary and essential missions of the Commission, and it cannot be left behind in this technological revolution. But, in too many communities, the communications technology behind the 911 system is dangerously out of date. Too many Public Safety Answering Points have been unable to incorporate Next Generation capabilities and functions into their operations. PSAPs also face constant challenges to maintain adequate funding for ongoing operations.

We at the FCC are committed to doing everything in our power to make the NG911 transition happen. We have taken action on such issues as improving 911 location accuracy, pushing the deployment of text-to-911, and improving the reliability of legacy, transitional, and Next Generation 911 networks. We have also convened our PSAP Task Force, which has recently come back with great recommendations on how to build the Next Generation architecture for PSAPs. Modernizing the Nation's 911 system will take work from many stakeholders and I am encouraged by the recent creation of a coalition to lead a national effort to successfully implement NG911 for all states and territories by the end of 2020.

I know that public safety is also a priority of this Committee, and I would urge its Members to do all in their power to make sure our Nation's PSAPs have the tools and resources they need to accelerate the transition to NG911.

Privacy

At the direction of Congress, the FCC has worked for years to implement laws that protect the privacy of consumers when they use communications networks and services, notably with rules to protect Customer Proprietary Network Information (CPNI). We need to make sure our policies are keeping up as communications technology continues to evolve.

The Open Internet Order expressly determined that privacy protections of Title II should be applied to broadband providers and, in fact, the provisions of Section 222 apply to broadband providers right now. But we have a responsibility under the Communications Act to consider whether further guidance and consideration by the Commission could better protect the privacy of consumers.

We're committed to taking a thoughtful, rational approach to addressing privacy protections and data security for consumers' use of Internet access services. We've begun the process of talking to stakeholders about section 222 in the broadband context, and continue to invite conversations about core privacy principles—transparency, choice and security—while also taking into account the FTC's complementary.

tary leadership and precedents, consumer expectations and the thriving innovation economy.

Conclusion

The Commission has focused on harnessing the power of communications technology to grow our economy and enhance U.S. leadership, while preserving timeless values like universal service. As my testimony reflects, we have made significant progress toward these goals to the benefit of the public. And, to be clear, this is not an all-inclusive list. We continue to work on efforts to remove barriers to infrastructure deployment, empower Americans with disabilities, and improve the agency's internal operations, to name a few.

I look forward to discussing these actions with the Committee today and working with you and my fellow Commissioners to build on this progress and maximize the

benefits of communications technology for the American people.

The CHAIRMAN. Thank you, Chairman Wheeler. Commissioner Rosenworcel?

STATEMENT OF HON. JESSICA ROSENWORCEL, COMMISSIONER, FEDERAL COMMUNICATIONS COMMISSION

Commissioner ROSENWORCEL. Thank you. Good morning, Chairman Thune, Ranking Member Nelson, and the members of the Committee. Thank you for the opportunity to appear before you today. It's my fourth time this Congress. But who's counting?

As my colleague mentioned, last week, I had the privilege of speaking at the Mobile World Congress in Barcelona. It's a global gathering to discuss wireless technology. The good news is that the United States leads the world in the current generation of wireless technology known as 4G. While we have only 5 percent of the globe's population, we have over one-third of its 4G deployment. But what I learned in Barcelona is that we have work to do to maintain our leadership role.

Now, the good news is that wireless policy is front and center. This month, at the FCC, we will begin the world's first spectrum incentive auction, and, of course, this week, in front of this committee, you will consider MOBILE NOW legislation to advance our

Nation's leadership in wireless policy.

So in light of all of this, I am going to focus my remarks today on three aspects of the future of spectrum policy. First, the future of spectrum policy requires looking at millimeter wave spectrum. Today, the bulk of our wireless networks are built at 3 Gigahertz or below. But in the future, we are going to have to bust through that 3 Gigahertz ceiling and start looking at airwaves north of 24 Gigahertz. We are going to have to look at airwaves that go to infinity and beyond.

Now, the signals at these high stratospheric frequencies do not go far. But if we combine them with dense networks of small cells, we are going to be able to have wireless networks that are 10 to 100 times faster than what we have today. These networks are going to be a formidable part of the next generation of wireless technology known as 5G.

The race to 5G is on. What I learned last week is that our counterparts in Europe and Asia are already making headway. So it is imperative that the FCC complete its outstanding millimeter wave rulemaking and get it done this year.

Second, the future of spectrum policy requires not just more licensed spectrum but also more unlicensed spectrum. In short, we need more Wi-Fi. Unlicensed spectrum like Wi-Fi democratizes Internet access, encourages permissionless innovation, and contributes \$140 billion to the U.S. economy every year. It's good stuff. So in any effort to increase the licensed spectrum pipeline, we need to

explore a cut for unlicensed. Call it the Wi-Fi dividend.

Right now at the FCC, we have a golden opportunity for a Wi-Fi dividend in the upper portion of the 5 Gigahertz band. Thanks to the encouragement of this committee, we have smart framework for testing this band for unlicensed use while also protecting automobile safety. We need to work with our colleagues at the Department of Transportation and the Department of Commerce and get

this testing underway.

Third, the future of spectrum policy requires that we focus on the ground as much as on the skies. Spectrum gets all the glory, but the unsung hero of the wireless revolution is infrastructure, because no amount of spectrum will lead to better wireless service without good infrastructure on the ground. That means we need dig-once policies, we need smarter practices for deployment on our Federal lands, and we need updated policies for the deployment of small cells, which are going to be critical for next-generation 5G networks.

Now, if we do these three things, we will create dramatic opportunities for new wireless services across the country. And let me finish by highlighting that last point, not in technical terms, but in human terms. We have problems to solve, resources that are constrained, and communities that need help navigating what is possible in the digital age.

But we are on the cusp of cars that drive themselves, streets that can be safer, commute times that can be cut, emergency services that are more effective and healthcare that is more personalized, and communities with more capability across the board because

they are more connected. It's already happening.

The City of Chicago is deploying wireless sensors to help solve problems before they occur with childhood asthma, flash flooding, and street congestion. Coachella, California, has made Wi-Fi available on its school buses to help bridge the homework gap and help students who lack the connectivity they need to do basic school work. And wireless smart sewer systems have saved the City of South Bend, Indiana, millions by providing real-time analysis of waste water.

These efforts are exciting, and they can be bigger and bolder if we have forward thinking steps with spectrum policy and if we take them right now.

Thank you.

[The prepared statement of Commissioner Rosenworcel follows:]

PREPARED STATEMENT OF HON. JESSICA ROSENWORCEL, COMMISSIONER, FEDERAL COMMUNICATIONS COMMISSION

Good morning, Chairman Thune, Ranking Member Nelson, and members of the Committee. Thank you for the opportunity to appear before you along with my colleagues at the Federal Communications Commission.

Last week I spoke at the Mobile World Congress in Barcelona. It's a global gathering to discuss wireless technology and the good things we can do with this invisible infrastructure. The United States has led the world in deployment of the current generation of wireless technology, known as 4G. While we have only five per-

cent of the world's population, we have one-third of all 4G deployment. But what I learned in Barcelona is that we have work to do to stay in the lead.

The good news is that wireless policy is front and center right now at the FCC. This month we will begin the world's first spectrum incentive auction. I know these matters are front and center for this Committee, too, as this week it will take up MOBILE NOW legislation. In light of this, I want to focus my statement today on

three aspects of the future of spectrum policy.

First, the future of spectrum policy requires looking at millimeter wave spectrum. Today, the bulk of our wireless networks are built on spectrum below 3 GHz. But in the future we need to bust through this ceiling and look high-really high-to infinity and beyond. We need to explore spectrum above 24 GHz and even north of 90 GHz. At these high frequencies, propagation is a challenge. But we can turn this limitation into a strength if we combine these stratospheric frequencies with dense networks of small cells. This will enable us to deliver wireless speeds more than 10 times higher than what we have today. This approach will be a major force in the next generation of wireless services, known as 5G. The race to 5G is on—and our counterparts in Europe and Asia are already making progress. So it's essential that the FCC get going, by completing our outstanding millimeter wave spectrum rule-making this year and leading the way with the 28 GHz band.

Second, the future of spectrum policy requires not just more licensed spectrum—but also more unlicensed spectrum. In short, we need more Wi-Fi. Unlicensed spectrum, like Wi-Fi, democratizes Internet access, encourages permissionless innovation, and is responsible for \$140 billion in economic activity every year. Historically, the legislative process has overlooked the value of unlicensed spectrum because it gets low marks in the scoring process at the Congressional Budget Office. But this accounting misses the mark—because the broader benefits of unlicensed spectrum to the economy are so great. So in any effort to increase the licensed spectrum pipe-

line, we need to explore a cut for unlicensed—call it the Wi-Fi dividend.

Right now at the FCC we have a golden opportunity for a Wi-Fi dividend in the upper portion of the 5 GHz band. Thanks to the encouragement of this Committee, we have a smart framework for testing this band for unlicensed use while also promoting vehicle safety. We need to work with our colleagues at the Department of Transportation and Department of Commerce and get this testing underway.

Third, the future of spectrum policy requires that we focus on the ground as much as on the skies. Spectrum gets all the glory. But the unsung hero of the wireless revolution is infrastructure. Because no amount of spectrum will lead to better wire-

less service without good infrastructure on the ground.

We can begin with Dig Once policies—which can pave the way for more broadband deployment by ensuring that when construction crews are building or repairing roads, broadband conduit is deployed at the same time. We should also take a comprehensive look at tower siting on Federal lands—which make up as much as one-third of our national real estate. We can expedite deployment here by creating an open data inventory of infrastructure and standardizing the use of contracts from the General Services Administration.

At the same time, we need to think beyond traditional tower siting. 5G use of millimeter wave spectrum puts a new premium on small cells. To get this infrastructure in place we will need to find ways to harmonize municipal review by developing

model practices and program alternatives.

If we do these things, we will create dramatic opportunities for new wireless tech-

nologies across the country

Let me finish by highlighting that last point—not in technical terms, but in human terms. We have problems to solve, resources that are constrained, and communities that need help navigating what is possible in the digital age. But we are on the cusp of cars that drive themselves, streets that can be safer, commute times that can be cut, emergency services that are more effective, healthcare that is more personalized, and communities with more capability across the board because they are more connected.

There's evidence it's already happening. The City of Chicago is deploying wireless sensors to help solve problems before they occur-with childhood asthma, flash flooding, and street congestion. Coachella, California, has made Wi-Fi available on its school buses to bridge the Homework Gap and help students who lack the connectivity they need at home do basic schoolwork. And wireless smart sewer systems have saved the City of South Bend, Indiana, millions by providing real-time analysis of its wastewater.

These efforts are exciting. But they can be even bigger and bolder if we take forward-thinking steps with spectrum policy—and take them right now.

Thank you. I will be happy to answer any questions you might have.

The CHAIRMAN. Thank you, Commissioner Rosenworcel. Commissioner Pai?

STATEMENT OF HON. AJIT PAI, COMMISSIONER, FEDERAL COMMUNICATIONS COMMISSION

Commissioner Pai. Chairman Thune, Ranking Member Nelson, and members of this Committee, thank you for holding this hearing. I'd like to focus this morning on four issues on which this committee has led: direct dialing 911, contraband cell phones, 5 Gigahertz spectrum, and millimeter wave spectrum.

First, ensuring direct access to 911 is important, both to me and to members of this committee. Last month, Senators Fischer and Klobuchar, along with Senators Cornyn, Cruz, and Schatz, introduced the Kari's Law Act of 2016. I commend those Senators for

their leadership.

Many knew of the tragedy that inspired this legislation. In December 2014, Kari Rene Hunt Dunn was attacked and killed by her estranged husband in a hotel room in Marshall, Texas. Her 9-yearold daughter tried calling 911 four times as she had been trained to do. But those calls never went through, because the hotel's phone system required her first to dial a 9 before 911.

When I first learned about this sad case 2 years ago, I started an inquiry into the status of 911 dialing. And to date, we have made substantial progress across this country in fixing the problem. When we started, for example, no major hotel company required franchisees to permit direct to 911 dialing. Today, nearly

every major chain does.

But the job isn't done, and that's why the Kari's Law Act of 2016 is needed. It would require that all multiline telephone systems sold, leased, or installed in the United States allow direct 911 dial-

ing as the default setting. I hope this bill becomes law soon.

Second, I want to turn to the threat posed by inmates' use of contraband cell phones. These devices present a major threat to public safety, and that threat has only grown worse of late. Contraband cell phones are now flooding into our Nation's jails and prisons. Inmates are using them to order hits, to run drug operations, arrange gang activity, and victimize innocent members of the public. I heard about these disturbing developments firsthand last October when I visited a maximum security prison in Jackson, Georgia.

We cannot let inmates treat prison as just another base of operations for criminal enterprises. We need to act. Now, in 2009, this Committee passed bipartisan legislation to help law enforcement combat this serious threat, and in 2013, the FCC picked up the baton with a Notice of Proposed Rulemaking. In it, the agency teed

up technological solutions and regulatory reforms.

We now need to follow through. To help do that, I announced earlier this week that I would hold a field hearing on contraband cell phones in South Carolina on April 6. I hope that this event will reboot the conversation and build the foundation for a robust FCC

response.

Third, I want to thank the Committee for its leadership in identifying and drawing attention to the 5 Gigahertz band, a band ideally suited for unlicensed use. Four years ago, the Spectrum Act called on the FCC to begin the process of opening up this band, and the FCC did that in 2013. Since then, Senators Marco Rubio and Cory Booker have introduced the Wi-Fi Innovation Act, a substan-

tial measure which would help move the process forward.

Right now, there are up to 195 Megahertz of 5 Gigahertz spectrum that the FCC could open up for consumer use. Putting this spectrum to work could herald a new world of Gigabit Wi-Fi. So the FCC needs to get this done. But progress hasn't been fast enough. Both Qualcomm, through its re-channelization approach, and Cisco, through its detect and avoid proposal, have identified paths forward, and I hope that we get this proceeding across the finish line and soon for the benefit of American consumers.

Fourth and finally, I want to commend Chairman Thune and Ranking Member Nelson for the introduction of the MOBILE NOW Act and for the spirit of bipartisanship which they showed in engaging in that measure. In particular, I want to commend them for calling on the FCC to move forward on opening up the millimeter

wave bands for mobile use.

Companies are now investing heavily in mobile technologies that rely on spectrum above 24 Gigahertz as part of their work on 5G technologies. We should aid those efforts with rules that will allow 5G to develop in the United States as quickly as technology and consumer demand will allow.

Now, on that score, there is plenty of work to do. The FCC recently adopted a notice of proposed rulemaking addressing some bands above 24 Gigahertz, but we left 12,500 Megahertz of spectrum on the cutting room floor. I called on the agency to focus on those bands as well. So I'm glad that this committee, too, is looking to move more massive swaths of millimeter voice spectrum into the commercial marketplace.

Chairman Thune, Ranking Member Nelson, and members of this Committee, thank you once again for holding this hearing. I look forward to answering your questions and to continuing to labor

alongside you on these critical matters.

Thank you.

[The prepared statement of Commissioner Pai follows:]

PREPARED STATEMENT OF HON. AJIT PAI, COMMISSIONER, Federal Communications Commission

Chairman Thune, Ranking Member Nelson, and Members of the Committee, thank you for giving me the opportunity to testify this morning. Since 2012, it has been an honor to work with you on a wide variety of issues, from encouraging broadband deployment in rural America to saving taxpayers over \$3 billion by

They are: (1) ensuring direct dialing for 911 calls; (2) combating the threats posed by inmates' use of contraband cellphones; (3) freeing up 5 GHz spectrum for the next generation of unlicensed use; and (4) opening up spectrum bands above 24 GHz for 5G and other innovative wireless technologies.

I'll start with the two public safety issues.

Direct Dial 911.—Ensuring direct access to 911 is important both to me and the Members of this Committee. Last month, Senators Deb Fischer and Amy Klobuchar, along with Senators John Cornyn, Ted Cruz, and Brian Schatz, introduced The Kari's Law Act of 2016. I commend those Senators for their leadership.

Many people now know the tragedy that inspired this legislation. In December 2014, Kari Rene Hunt Dunn was attacked and killed by her estranged husband in a Marshall, Texas, hotel room. Her nine-year-old daughter, who was with her, tried calling 911 four times as she had been taught to do. But her calls for help never went through. That's because the hotel's phone system required guests to dial a "9" before calling 911.

When I learned about this two years ago, I started an inquiry into the status of 911 dialing at properties across the country that use multi-line telephone systems. I wanted to understand the scope of the problem and what we could do to fix it. At the time, I gave Kari's father, Hank Hunt, my personal commitment that I would do my best to ensure that no one would ever again confront that situation.

Hank has been a tireless advocate for this cause. One year ago, I visited Marshall Texas, and the 911 dispatch center where the call from Kari's daughter would have—and should have—gone. I was honored to stand with Hank and report on the

progress that had been made in just one year's time.

The progress continues to this day. The American Hotel & Lodging Association, which has been a leader in changing industry practice, just sent me a progress report. When we started, none of the major hotel companies required franchisees to permit direct 911 dialing. Now, nearly every hotel chain, including Best Western, Carlson Rezidor, Hilton, Hyatt, La Quinta, Motel 6, Starwood, and Wyndham has established such a requirement as part of its brand standard. When we started, direct dial 911 calls would not have gone through at 55 percent of franchised hotels. Now, that percentage is substantially lower. Consider InterContinental, which includes Holiday Inn, Crowne Plaza, and Staybridge. At the start of my inquiry, it reported that nearly 1,000 of its properties lacked direct dialing capability. Today, each and every one of those properties allows direct dialing.

And the progress isn't limited to hotels. Even the FCC itself has changed; it now allows direct 911 dialing. I want to thank Chairman Wheeler for making this hap-

But the job isn't done. The Kari's Law Act of 2016 would take us one step closer to accomplishing Hank's mission. It would require that all multi-line telephone systems sold, leased, or installed in the United States allow direct 911 calling as the default setting. So I applaud the efforts of Hank, Members of this Committee, and the many others who are making a difference on this issue. I hope this bill, like Congressman Louie Gohmert's companion legislation in the House of Representatives, becomes law soon.

Contraband Cellphones.—I want to turn next to another public safety issue that this Committee has worked on. That is the threat posed by inmates' use of contraband cellphones. This Committee has a longstanding interest in this issue. For instance, in 2009, this Committee examined bipartisan legislation designed to help

law enforcement combat this threat.

In 2013, the FCC picked up the baton by releasing a Notice of Proposed Rule-making. The agency teed up technological solutions and identified possible regulatory reforms—everything from streamlining our review of spectrum leases to making it easier for corrections facilities and wireless providers to work together. To date, the FCC has not taken further action in the rulemaking.

The use of contraband cellphones is a major public safety problem. And the threats they pose have only gotten worse over the past few years. They are now flooding into our Nation's jails and prisons. Inmates are using them to order hits, run drug operations, direct gang activity, and victimize innocent members of the public.

I've heard about these disturbing developments firsthand. Last October, I visited a maximum-security prison in Jackson, Georgia, to learn more about this problem. To put it mildly, I was disturbed by what I heard.

Georgia Department of Corrections Commissioner Homer Bryson, Warden Bruce Chatman, and other corrections officers told me that prisoners are using contraband cellphones to extort the family and friends of the incarcerated, putting inmates' safety and lives at risk. For example, inmates texted the wife of one Georgia prisoner and demanded \$1,000. When she couldn't gather the money, she was texted an image of her husband with burns, broken fingers, and the word "RAT" carved into his forehead. In another case, a woman received images on her phone of her incarcerated boyfriend being strangled with a shank held to his head. She was told that unless she forked over \$300, the beatings would continue. She could only afford to send about half that amount. Sadly, the assaults didn't stop, and after a severe beating, he died.

The problem is not limited to any one state. In South Carolina, for example, a gunman kicked down the door of a corrections officer in the early morning hours and shot him six times in the chest and stomach. Thankfully, he survived. The hit was coordinated by an inmate using a contraband cellphone, and it was ordered because the officer was too good at his job-which involved confiscating contraband,

including cellphones.

These devices aren't only used for violent crimes. Inmates are also using them to run phone scams and con innocent members of the public out of their hard-earned

The bottom line is this: The status quo is not acceptable. We cannot let inmates treat prison as just another base of operations for criminal enterprises. The FCC

To help meet that obligation, I announced earlier this week that I will hold a field hearing on contraband cellphones in Columbia, South Carolina, on April 6, 2016. By gathering more facts and discussing possible solutions, I hope the field hearing will reboot the conversation and build a foundation for a robust FCC response. The FCC needs to do everything it can to help law enforcement combat this problem. I intend to do my part to make that happen. I look forward to working with my colleagues at the FCC and the Members of this Committee on this matter.

I'll turn next to two spectrum issues that this Committee has been considering. 5 GHz Band.—I want to thank the Committee for its leadership in identifying and drawing attention to the 5 GHz band, a band ideally suited for unlicensed use. The Spectrum Act, which was signed into law four years ago last week, called on the FCC to begin the administrative process for opening up the 5 GHz band. The FCC

did that in 2013.

Since then, Senators Marco Rubio and Cory Booker have introduced the Wi-Fi Innovation Act. That bill would require the FCC to test the feasibility of opening the upper portion of the 5 GHz band to unlicensed use—a portion of the band known as U-NII-4. Chairman Thune and others have also played key roles in helping to move the ball forward on this part of the 5 GHz band. I applaud those efforts.

Taken together, in the U-NII-4 band as well as the lower, U-NII-2B band, there

are up to 195 MHz of spectrum that the FCC could open up for consumer use. It is not hyperbole to say that this could transform the wireless world. For this spectrum is tailor-made for the next-generation of unlicensed use. Its propagation characteristics minimize interference in the band, and the wide, contiguous blocks of spectrum allow for extremely fast connections, with throughput reaching one gigabit per second. The technical standard to accomplish this, 802.11ac, already exists, and devices implementing it are already being built. All of this means we can rapidly realize the benefits of more robust and ubiquitous wireless coverage for consumers, more manageable networks for providers, a new test bed for innovative application developers, and other benefits we can't even conceive today. I think you would be hard pressed to find a band that would be easier to open up for consumer use.

So the FCC needs to get this done. But progress has not been fast enough. I have been calling on the FCC to open these bands up since 2012. Both Qualcomm, through its re-channelization approach, and Cisco, through its detect-and-avoid proposal, have identified paths forward. I hope the agency gets this proceeding across

Spectrum Above 24 GHz.—Finally, I want to commend Chairman John Thune and Ranking Member Bill Nelson on the introduction of the MOBILE NOW Act. In particular, I commend them for calling on the FCC to move forward on opening up mil-

Indeter-wave bands for mobile use.

Not long ago, most would have thought of the millimeter wave bands as dead zones when it came to mobile services. After all, nearly all commercial mobile networks operate in frequencies below 3 GHz. But as has been the hallmark of the communications sector, engineers are finding a way and technology is advancing.

Companies are now investing heavily in mobile technologies that rely on spectrum

above 24 GHz as part of their work on 5G mobile technologies. Over a year ago, I visited Samsung's 5G research lab near Dallas, Texas. There, engineers are hard at work developing base stations and mobile technologies that are crossing into these spectrum frontiers. Their experiments with multiple-input, multiple-output antennas no bigger than a Post-it note have already demonstrated that 5G technologies can use millimeter wave bands to deliver mobile speeds in excess of 1 gigabit per second.

More recently, I attended Intel's demonstration of its millimeter wave technology at the FCC's headquarters. It showed how spectrum above 24 GHz can be used to beam signals off tables, buildings, or other objects to find the most efficient, highestcapacity connection between a base station and mobile user. These and many other efforts will enable consumers to enjoy the next generation of wireless connectivity.

What is the FCC's role here? In my view, we should put a framework in place that will allow 5G to develop in the United States as quickly as the technology and consumer demand allow. The U.S. has led the world in 4G, and there is certainly a lot of running room left with LTE and LTE-Advanced. But we must continue to lead as mobile technologies transition to 5G. The key is to make sure that the FCC does not become a regulatory bottleneck or send signals that would lead companies

to focus their research and investments abroad.

On that score, there's plenty of work to do. On the plus side, we unanimously inquired about opening up numerous millimeter-wave bands in 2014, and the record

contained robust support for moving forward on them.

But our recent rulemaking only addresses some of the bands above 24 GHz. There's another 12,500 MHz of spectrum in the 24 GHz band, 32 GHz band, 42 GHz band, and the 70 and 80 GHz bands that might be used for mobile services. I called on the FCC to focus on those bands as well. Although I wish that the Commission had found a way to do so, I'm glad that this Committee is looking to move those massive swaths of spectrum into the marketplace. I hope those efforts bear fruit and

that the Commission will take appropriate action soon.

Chairman Thune, Ranking Member Nelson, and Members of the Committee, thank you once again for holding this hearing and allowing me the opportunity to testify. I look forward to answering your questions, listening to your views, and con-

tinuing to work with you and your staff in the days ahead.

The CHAIRMAN. Thank you, Commissioner Pai. Commissioner O'Rielly?

STATEMENT OF HON. MICHAEL O'RIELLY, COMMISSIONER, FEDERAL COMMUNICATIONS COMMISSION

Commissioner O'RIELLY. Thank you, Chairman Thune, Ranking Member Nelson, and members of the Committee, for the opportunity to participate in the Committee's FCC oversight process.

The Commission has collectively recognized the need to act on wireless issues and especially next-generation networks, commonly referred to as 5G. To realize private sector deployments, it is paramount that additional licensed and, where appropriate, unlicensed bands be made available in both the traditional sub-6 Gigahertz frequencies and higher bands, including those above 24 Gigahertz.

The U.S. is currently the world leader in 4G wireless communications because our Nation's wireless providers endeavored to meet the insatiable consumer demand for new data services and recognized the economic value in doing so. Any unnecessary delay risks another nation setting the terms of the next 15 years of wireless communications, something which we should make sure does not

happen.

Along the same lines, I find it necessary to express my concerns with the outcome of last November's World Radiocommunications Conference. Member nations were unable to agree to even study certain bands for future mobile use. In particular, the failure to study 28 Gigahertz of highly favored band for 5G in the U.S. and other leading technology companies means that the U.S. will move forward with our own studies and deployment, bypassing the ITU and undermining its future.

Besides spectrum, companies will need to deploy additional facilities in a timely and cost-effective manner. Unnecessary siting expenditures will slow down 5G and broadband deployment. Let me suggest a few ways in which burdens can be reduced for small cell

and tower siting.

First, the Commission must follow through on its commitment to expand the relief provided to small cell and DAS installations. In addition, despite the best effort of the Congress, localities are still blocking far too many facility siting attempts. Some options to deal with this include ending repetitive permit requirements when multiple small cells are sited in close vicinity and preventing permits from being denied based on localities' estimate of sufficient infrastructure and coverage. For larger towers, co-location must be promoted, including by reducing burdens for replacement towers and compound expansion, and by resolving the decades old problem of twilight towers which will also promote co-location and wireless deployment.

Changing topics, Congress should be mindful of efforts by the Commission to expand its regulatory mission, including to cover non-communication companies like edge providers. These decisions often impact entities that are not familiar with the Commission's activities and potentially subject them to get another regulatory

body or conflicting set of rules.

Separately, the Commission's creative license in regard to statutory interpretation is beyond measure. In some instances, the FCC has set aside the intent of Congress, deals struck at the time, reams of its own precedent, and sometimes even the English language to reinterpret a statute and to force old statutory paradigms onto new innovations, all in a single minded pursuit of a particular outcome. The result: Permissionless innovation is being put through the unnecessary wringer, which threatens American economic output, employment, and innovation.

I would also like to bring to your attention three issues where a change in law could be beneficial. First, payments made in response to USF-related forfeiture orders or consent decrees should go back to the fund, thereby reducing the amount of money needed from consumers. Second, legislation in the area of pirate radio could be helpful to give the Commission more enforcement tools and better focus its efforts. Finally, as I have often highlighted shortcomings in the Commission's processes, I want to again acknowledge Senator Heller's continuing reform efforts. Sadly, I must report there are no updates on our end.

Thank you for your time, and I stand ready to answer any questions you may have.

[The prepared statement of Commissioner O'Rielly follows:]

PREPARED STATEMENT OF HON. MICHAEL O'RIELLY, COMMISSIONER, FEDERAL COMMUNICATIONS COMMISSION

Thank you, Chairman Thune, Ranking Member Nelson, and Members of the Committee for the opportunity to participate in the Committee's FCC oversight process. Since this time last year, a lot has occurred at the Commission, and more difficult issues are expected in the coming months. While fundamental differences remain on many matters, individual Commissioners still seek to find agreement on particular issues whenever possible.

Future Wireless Spectrum Demands

One instance where there has been general recognition at the Commission for the need to act is on wireless issues. Much of the recent dialogue pertaining to wireless communications has focused on next generation wireless networks, commonly referred to as "5G." Early visions, architecture designs and equipment demonstrations indicate significant improvements in speed, latency and capacity. I've seen this technology firsthand during my travels in the U.S. and internationally, and expect to see more in the coming weeks. While early reports are exciting and promising, it is important to proceed with an open mind and an eye towards flexibility in order to promote innovation and investment, as many of the concepts and eventual standards may change in the years leading to wide scale deployment. To that end, everyone may want to be slightly careful not to over-hype the technology until it is further along a trajectory.

To realize private sector 5G deployments in the future, action is needed now to allocate additional spectrum. It is paramount that additional licensed and, where appropriate, unlicensed bands be made available in both the traditional sub-6 GHz frequencies and higher bands, including those above 24 GHz. The broadcast spectrum incentive auction, if successful, may provide one source of new low-band spectrum. Further, significant work has been done by the Commission on freeing millimeter bands, and I look forward to completing a final item in the summer and expanding the scope of bands in a further notice, per my request. On that note, the Commission should be willing to consider spectrum blocks that total less than 500 megahertz, and no high-band spectrum block should be automatically off the table, especially since we do not know where technological enhancements will take us.

The U.S. is the current world leader in 4G wireless communications, because our Nation's wireless providers endeavored to meet the insatiable consumer demand for

The U.S. is the current world leader in 4G wireless communications, because our Nation's wireless providers endeavored to meet the insatiable consumer demand for new data services and have recognized the economic value in doing so. That leadership position will be challenged in the future, however, because other nations see the value in being the first to deploy 5G. Any unnecessary or artificial delay risks another nation setting the terms of the next 15 years of wireless communications,

something we should make sure doesn't happen.

Along the same lines, I find it necessary to express my concerns with the outcome of last November's World Radiocommunication Conference (WRC-15). While the U.S. may have achieved certain stated goals on the non-commercial side, WRC-15 proved to exemplify a broken and outdated process. Although I only attended the first week of the conference, I can report that some attending nations participated in parliamentary games for the sole purpose of protectionism. Lost in this process was a recognition of the need to meet the spectrum demands of wireless providers—here and abroad.

In a number of critical spectrum bands, the International Telecommunication Union (ITU)-led body was unable to agree to even study certain bands for potential harmful interference to incumbent users if new wireless services were to be permitted. This lack of collegiality and professionalism undermined the future of the organization. In particular, WRC-15's inability to permit a study of the 28 GHz band -highly favored for 5G use in the U.S. and other leading technology countries—means that the U.S. will move forward with our own studies and deployment, bypassing the ITU. As for those governments that may not share our forward-looking approach, they will be left on the sidelines.

Wireless Infrastructure

Going forward, the next generation of wireless networks also poses another challenge that must be addressed—infrastructure siting. To realize the promise of 5G, companies will need to expeditiously deploy facilities in a cost effective manner. Unnecessary siting expenditures substantially risk slowing 5G and broadband deployment. I look forward to working with the Committee on this issue going forward, and I offer a few ways in which burdens can be reduced for small cell and tower siting.

First and foremost, the Commission must abide by its commitment to expand upon the historic preservation and environmental process relief provided to small cell and DAS installations, in its October 2014 Infrastructure Order within the time-frame allotted, which is rapidly approaching 18 months. This process needs to be completed as quickly as possible and under no circumstances should it extend be-

yond this fall.

In addition, despite the best efforts of Congress, localities are still blocking far too many facilities siting attempts. The horror stories are endless: permitting problems, excessive fees and *de facto* moratoria, especially in obtaining the requisite site approvals in rights-of-way. Some options to deal with this include ending repetitive permit requirements when multiple small cells are sited in close vicinity, and preventing permits from being denied based on a locality's estimate of sufficient infrastructure and coverage. Everyone wants the benefits of wireless broadband services, but that cannot be accomplished without infrastructure.

For larger towers, collocation must be promoted. Process improvements could include reducing burdens for replacement towers and compound expansion. Oftentimes, it is cheaper to build a replacement tower directly next to an existing facility on land already zoned for that purpose than fortifying an old structure. Additionally, sometimes the area of a tower site has to be increased slightly to permit backup power facilities and provider backhaul equipment. Such changes should not

require a repeat of the arduous siting review process.

Resolving the decades-old problem of twilight towers will also promote collocation and wireless deployment. Productive conversations with shareholders are occurring, but we need greater accommodation in order to develop a lasting resolution by this summer or fall. My goal here is to solve this problem and any disputes in a quick but thoughtful way, not punish or subject wireless companies to our Enforcement Bureau and huge payouts.

Lastly, one of the most frequent complaints I hear about are problems with siting on Federal lands. I appreciate this Committee's efforts to tackle this problem, among others, in the MOBILE NOW bill. Although the FCC does not have a role here, I offer to assist in any way possible.

Areas of Concern/Troubling Developments

Congress should be mindful of efforts by the Commission to expand its regulatory mission. For example, over the last couple of years, the Commission has expanded the scope of its reach to cover non-communications companies, like so-called "edge providers." This practice is exceptionally disturbing because these decisions often impact entities that are not familiar with or do not closely follow the Commission's activities. Beyond potentially subjecting these providers to yet another regulatory body or a conflicting set of new rules, the Commission is using the process to establish precedent under questionable procedures.

lish precedent under questionable procedures.

Take, for instance, the case of First National Bank, which was served a citation for possible violations of the Telephone Consumer Protection Act based solely on its terms of service, without even making a single so-called "robocall." Before First National was ever notified about the citation, the Commission had already tried the case through the press, harming the company's reputation. Interestingly, the citation was dismissed two months later without similar fanfare. The Commission has also negotiated settlements with providers under cloak of protected negotiations, meaning no other party was made aware or allowed to comment, and then tried to treat the terms of those agreements as some kind of precedent and apply them to other unsuspecting companies.

Separately, the Commission's creative license in regard to statutory interpretation is beyond measure. While an argument can be made that the Commission has always taken some latitude when interpreting the provisions in current law, a number of recent items have stretched the boundaries of logical reasoning. It's what late Justice Scalia might have referred to as "interpretive jiggery-pokery," and these newly "found" grants of authority have been used to initiate questionable proceedings and implement suspect policies. In essence, the FCC has been known to set aside the intent of Congress, deals struck at the time, reams of its own precedent, and sometimes even the English language itself to "reinterpret" a statute, all in a single-minded pursuit of a particular outcome.

Moreover, this disingenuous approach to statutory interpretation is being used as a means to force old statutory paradigms on to new innovations, over and over again. Wireless broadband networks are transformed into Title II wireline phone companies, over-the-top video providers are being shoehorned into Title VI as MVPDs, apps offered by video providers are magically set-top boxes, and "tech transitions" has become a rallying cry for saddling new fiber deployments and services with legacy obligations, instead of actually transitioning away from old technologies and the outdated rules that governed them.

Without attempting to re-litigate the Commission's Net Neutrality decision, it seems necessary to remind everyone of the implementation concerns expressed by many at the time. In particular, opponents of the Commission's rules highlighted how innovation would be subject to the whims of the Commission under the so-called "general conduct standard." Considering the Commission's approach to zero rating offerings, it is apparent that our concerns were warranted. Specifically, the Commission blessed such offerings one month, unleashed a regulatory inquisition the next month, and then seemingly dismissed concerns the following month. Along the way, the Commission has been unwilling to provide any closure, thus ensuring that the entities and their products remain under public suspicion. "Permissionless" innovation is being put through an unnecessary wringer, which threatens American economic output, employment, innovation, and other critical factors to our Nation's success.

Suggestions for Possible Legislative Changes

1. USF Penalties and Fines Redistributed

With your indulgence, I would also like to bring to your attention an issue where a change in law could benefit all consumers that pay to support the Federal universal service fund (USF or Fund). Under current law, payments made in response to FCC or Enforcement Bureau forfeiture orders or consent decrees—including those involving failure to contribute to USF or outright fraud against the Fund—are remitted to the U.S. Treasury. While this makes sense in many contexts, different treatment may be warranted for USF actions. In those instances, consumers have

paid extra on their monthly phone bills to support USF while companies have shirked their legal responsibilities or abused USF programs to the detriment of consumers. Under those circumstances, it would seem that an appropriate remedy would be to remit the USF portion of the fines or "voluntary contributions" back to the Fund, thereby returning at least a portion of the money that should have gone to USF in the first place.

In the past, arguments have been made that it would be hard to track down which consumers overpaid and reimburse them. But it doesn't have to be that complicated. Payments that are made to the Fund in a given quarter as a result of enforcement actions can be used to offset overall program spending in the next quarter, thereby reducing the amount that consumers need to pay on their phone bills that next quarter. While this may not provide full compensation to each individual consumer that was harmed, it is better than the current situation where no money is returned to USF and no ratepayer receives any offset. And with USF spending trending higher each year, I imagine that even a modest reduction in fees on consumer phone bills would be a welcome change. Further, by dedicating such collected monies to the Fund, it should decrease concerns in this instance that the Commission's enforcement activities could be driven by its desire for additional budgetary resources.

2. Pirate Radio

In the last year, I have been drawing attention to the problem of pirate radio. It may not be a huge concern nationwide, but it's expanding at an alarming rate in places like Florida, New York, New Jersey, and California. And as the equipment needed for high-powered broadcasting is becoming less expensive and more widely available, we can anticipate that the pirate problem will spread to more cities if current trends continue. Far from the amateurish operations that some may be picturing, modern pirate radio stations can be very sophisticated, established, and lucrative.

Pirate stations drain resources from legitimate broadcasters and cut off the public from critical emergency information. That they are allowed to flourish and expand uninterrupted is a major failing on the Commission's part. It is a fundamental responsibility of the FCC to defend the radio band and all of our licensed spectrum from illegal interference, regardless of who is doing the interfering, or why.

We need to increase enforcement activity in the field, first and foremost. I also believe the fight to eliminate pirate radio could get a significant boost from a concurrent outreach and education effort. Legitimate building owners, advertisers, political campaigns, concert promoters, and the like, want nothing to do with facilitating illegal activities. But they may not be aware of the pervasiveness and seriousness of the problem. So I'm working with the Chairman and my colleagues to clearly outline the Commission's pirate radio policies and enforcement goals in an advisory document we can use to spread the word. Legislation in this area could be helpful as well, to give the Commission more enforcement tools and better focus its efforts. Such an undertaking would need to be fairly and carefully balanced so as not to unnecessarily threaten legitimate businesses that find themselves caught in the web of a pirate radio station's lies and deceit.

3. Process Reform

Finally, as I have often highlighted shortcomings in the Commission's processes, I would be remiss if I failed to acknowledge Senator Heller's continuing reform efforts, and note any developments on internal reforms contemplated on our end. Unfortunately, there is no update on this front, and the same failures of transparency and fairness continue to impact the quality of both public input and Commission decisions.

To discuss just one example, documents circulated to the Commissioners for a decision are still not available for public review at the same time, and far from being isolated to one particular issue, the pitfalls of this approach are seen regularly. Stakeholders in Commission proceedings often have incorrect or incomplete information about what is being considered, and Commissioners are not even permitted to discuss the substance beyond what the Chairman has chosen to make public. So our ex parte meetings are far less productive than they could and should be, and there are sometimes nasty surprises when an item is finally released. Several people who met with me or my staff last month regarding the set-top box proceeding noted the fact that they were at a disadvantage, not having been able to read such a complex document packed with novel statutory interpretations and proposals before attempting to engage with the Commission on the substance. And the problem will be exacerbated later this year when the Commission heads into even more uncharted terri-

tory like privacy. There is no need for this predicament, and it is easily remedied. The issues may be up for debate, but transparency should never be.

The CHAIRMAN. Thank you, Commissioner O'Rielly. Commissioner Clyburn?

STATEMENT OF HON. MIGNON L. CLYBURN, COMMISSIONER, FEDERAL COMMUNICATIONS COMMISSION

Commissioner CLYBURN. Chairman Thune, Ranking Member Nelson, members of the Committee, good morning. What a privilege it is for me to appear before you. Today, I would like to center my testimony on two Congressional directives relating to universal service and diversity.

I took seriously my commitment to you, Chairman Thune, to modernize the universal service support program for rate-of-return carriers and stop penalizing carriers whose customers migrate to broadband-only lines. This collaborative process has resulted in reforms that are a win-win for rural customers and those who contribute to the Universal Service Fund.

Commissioner O'Rielly and the Chairman—I joined them, I'm thankful to say. We presented a framework for consideration that should modernize the program in a manner that is simple, rewards efficiency, and sets forth a path to ensure that we connect unserved households and disaggregate support in areas served by an unsubsidized competitor.

But as laudable as this proposal is, the FCC still must address the lack of broadband access on tribal lands and the gaps that remain in mobile broadband coverage throughout this Nation. Millions of Americans are stuck in digital darkness. They lack the technological infrastructure needed to improve their lives, particularly when it comes to healthcare. Life-saving and life-changing technologies, like the one I witnessed in Ruleville, Mississippi, that manages the care of patients with chronic diabetes, are only possible if broadband is both available and affordable.

When it comes to universal service reform, we have no choice but to modernize—or allow me to boldly say this morning completely overhaul—the Federal Lifeline program. We can never forget that Section 254 of the Communications Act places equal weight on the needs of low-income consumers as it does for those living in rural areas when it comes to access to advanced services. The FCC should never turn its back on this directive.

So let us roll up our sleeves, refrain from dwelling on what may be wrong, and start working on fixing and finding solutions to address whatever is deficient in Lifeline so that low-income Americans once and for all may have access to those life-changing opportunities that broadband has unleashed for the rest of us.

Section 257 of the Communications Act tasks the Commission with identifying and eliminating market entry barriers and promoting the purposes of favoring diversity of media voices, vigorous economic competition, technological advancement, and promotion of public interest, convenience, and necessity. However, I have spoken to dozens of independent programmers who say they face insurmountable challenges when it comes to acquiring carriage; that it is difficult to receive fair or reasonable contract terms; and growth

in their online distribution model is prohibited or inhibited because program distribution access is often restricted via contract.

For every independent programmer that reaches an agreement with an MVPD, there are countless others who cannot even get a simple telephone call returned. So I am pleased to say that my fellow commissioners joined me in voting for an Independent Programming Notice of Inquiry during our February meeting, which will launch discussions about what role, if any, the Commission should play in addressing obstacles that may be preventing greater access by consumers to independent and diverse programming.

Members of the Committee, I am truly grateful for the opportunity to speak with you today and look forward to answering any questions you may have.

Thank you.

[The prepared statement of Commissioner Clyburn follows:]

PREPARED STATEMENT OF MIGNON L. CLYBURN, COMMISSIONER, FEDERAL COMMUNICATIONS COMMISSION

Chairman Thune, Ranking Member Nelson and members of the Committee, good morning.

What a privilege it is for me to appear before you today. I have had the distinct honor, thanks in large part to this committee, of serving as an FCC Commissioner for nearly seven years and, prior to that, as a South Carolina state commissioner for 11 years. During these last 18 years, I have been committed to ensuring that there is a regulatory backstop in place to bridge divides in situations where the market either is not functioning properly or forecloses opportunities.

This morning, I would like to center my testimony on two Congressional directives

relating to universal access and diversity.

Universal access. I took seriously my commitment to Chairman Thune to modernize the universal service support program for rate of return carriers and stop penalizing carriers whose customers migrate to broadband-only lines. This collaborative process, of which you should be proud, has resulted in reforms that I believe are a win-win for rural consumers and those who contribute to the Universal Service Fund. We have laid out a framework that modernizes the program in a manner that is simple, rewards efficiency, and sets forth a framework to ensure that we connect unserved households, and disaggregate support in areas served by an unsubsidized competitor. Support will be directed and targeted to areas that today lack access.

Did this come without difficulty? No, it did not. Real change is rarely ever easy, but this modernization was necessary for us to promote rather than discourage broadband deployment in communities that need it the most. And, consistent with our 2011 reforms, there are no flash cuts but a gradual transition so providers have time to adjust to these changes.

I was pleased with the outcome and sincerely believe that this coordinated effort with both Commissioner O'Rielly and Chairman Wheeler satisfies our commitment to this Committee and adopts a sustainable framework to achieve our long-term uni-

versal service goals.

Updating our rate of return system adds to the list of universal service reforms that I am proud to say that I have supported since arriving at the FCC, including the 2011 reforms to universal service for price cap carriers, updating our E-rate program to close broadband connectivity gaps within our schools and libraries, and ensuring that rural health care providers have access to the telecommunications and broadband services their communities need and deserve. Collectively these reforms will help ensure that broadband access is a reality for all parts of our Nation.

But as laudable as these universal service reforms are, the FCC still has work to do when it comes to addressing the lack of broadband access on Tribal Lands and gaps that remain in mobile broadband coverage throughout this Nation. Millions of Americans are stuck in the digital darkness and lack the technological infrastructure needed to improve their lives, particularly when it comes to healthcare. I have visited communities and witnessed firsthand the transformative power of telemedicine, but such life-changing technologies like the ones I witnessed in Ruleville, Mississippi, are only possible if broadband service is both available and affordable. In

areas where the private sector has not invested because the business case cannot be made, the FCC needs to do all in its power to step up and close these gaps.

Finally, it cannot be said that our job is done when it comes to Universal Service

reform if we fail to modernize, or dare I say, completely overhaul the Federal Life-line Program. The FCC allocates over \$8 billion annually for deployment of advanced services but we lack any mechanism to ensure that once deployed, service is affordable. We cannot lose sight of the fact that Section 254 of the Act places the same weight on the needs of low income consumers as it does for those living in rural areas when it comes to access to advanced services and the FCC should never turn its back on that directive. We must abandon the too common pastime of simply criticizing the existing program and work collectively to find common sense solu-tions to truly fix whatever is deficient in Lifeline so that low income Americans may once and for all have access to those life-changing opportunities that broadband has unleashed for the rest of us.

I look forward to working with the Chairman, my colleagues and members of this Committee to close the gaps on Tribal Lands, adopt a permanent mobility fund, and modernize the Lifeline for the 21st Century.

Diversity. Section 257 of the Communications Act tasks the Commission with two important goals, to: (1) identify and eliminate market entry barriers for small businesses, and (2) promote the purposes of "favoring diversity of media voices, vigorous economic competition, technological advancement, and promotion of the public interest, convenience, and necessity." Since 2010, I have been calling on the Commission to establish innovative and legally sustainable approaches for greater participation by new entrants and small businesses in all aspects of the communications industry. I am pleased to report that last summer, we reformed our Part 1 Competitive Bidding rules so that small businesses have increased flexibility needed to secure financing and develop business models to effectively compete in an increasingly consolidated wireless market. The upcoming incentive auction will offer applicants a unique opportunity to acquire substantial amounts of valuable wireless spectrum below 1 GHz. By adopting these reforms before that historic auction, we are enabling the deployment of mobile broadband networks in a manner that promotes com-Fostering diversity is an important aspect of the Commission's work. While we

often speak about this issue in the context of the quadrennial media ownership review, and rightly so, diversity is also a concern in the multichannel video programming distribution marketplace. In my years at the Commission, I have met with and spoken to dozens of independent programmers who share a common refrain: each says that they are facing insurmountable challenges when it comes to acquiring carriage; that it is difficult to receive fair or reasonable contract terms; and growth in their online distribution model is inhibited, because program distribution access is often restricted via contract. And for every independent programmer that can reach an agreement with an MVPD, there are countless others that cannot get a simple

phone call returned.

During last year's AT&T/Direct TV merger, a number of these issues were raised yet again by many parties, including independent and network-affiliated programmers as well as small cable operators, who repeatedly requested relief. While we concluded that it was best not to deliberate these issues during merger considerations, the level of concern, I felt, merited a separate proceeding where we could explore and gain a better understanding of the video programming marketplace and whether certain practices by operators, as claimed, are limiting the ability to reach viewers. That is why I am pleased that my fellow Commissioners joined me in voting for the Independent Programming Notice of Inquiry, which was adopted during the February meeting. Discussions about what role, if any, the Commission should play in addressing obstacles that may be preventing greater access by consumers to independent and diverse programming will be launched, triggering a fact-finding exercise that will start a conversation on how best to promote the availability of diverse and independent sources of video programming. While I am not sure where this conversation will take us, I am sure that it is time that we have it.

I am grateful for the opportunity to speak with you today and look forward to answering any questions you may have on how the FCC can continue to promote greater access to communications technologies and services for all Americans. Thank you.

The CHAIRMAN. Thank you, Commissioner Clyburn.

Thank all of you for being here again and for sharing your thoughts with us about the priorities of the Commission and the things that we should be focused on here in the Congress as well. Chairman Wheeler, next January, there's going to be a new President of the United States. Your term doesn't technically expire until January 1, 2018. FCC Chairmen have traditionally resigned from the FCC when a new President is inaugurated, and that enables the newly elected President to nominate a Chairman to lead the FCC who is from the same party as the new President.

So my question—you can probably figure out where I'm going with this—is do you intend to respect that tradition and resign from the FCC when the new President takes office unless explicitly

asked to stay on?
Chairman Wheeler. Thank you, Mr. Chairman. This is a ways off. I understand precedent. I understand expectations. I also understand that 10 or 11 months is a long time. So it's probably not the wisest thing in the world to do to make some kind of ironclad commitment. But I understand the point you're making.

The CHAIRMAN. And you understand the tradition that histori-

cally is what's observed with regard to that.

Chairman Wheeler. I understand it.

The CHAIRMAN. Chairman Wheeler, it's my understanding that Commission rules prohibit the disclosure of nonpublic information to any person outside the Commission except as authorized in writing by the Chairman. These rules limit the ability of Commissioners and the FCC employees to discuss certain nonpublic matters with outside stakeholders, making the Chairman's waiver authority a potentially valuable tool when dealing with outside inter-

Chairman Wheeler, yes or no, will you provide to the Committee any written exceptions that you've signed while serving as Chairman of the Commission?

Chairman Wheeler. Yes, sir.

The CHAIRMAN. Thank you.
Commissioner O'Rielly, you have recently written about your concern that, and I quote, "The application of this rule in the current Commission serves as a roadblock to effective public participation and ultimately damages the FCC's credibility as an agency." Would you like to expand or share your concerns?

Commissioner O'RIELLY. Yes. I'll make two points. One is I think that it inhibits my ability to talk to outside parties who come in to see me. They will suggest certain ideas, ways to change things, and I can't correct them in terms of anything that they may be mistaken about. They may have some information. They may be missing other parts. So it's hard to have a full dialog on how to make a best idea and how to-and I can, at the same time, test out ideas that I have before these parties. So it inhibits my ability.

Two is I think that the rule as being applied is discriminatory, because the rest of my colleagues don't have the advantages that the Chairman has and that they have used at the time at the Commission. There are a number of things that have happened that disclosure of nonpublic information that we're not able to take advantage of. So I think fair application of the rule would make more

The CHAIRMAN. I'll direct this to all of the Commissioners. It deals with Section 629—which I referenced in my opening remarks—of the Communications Act which provides the FCC with

authority regarding paid TV set-top boxes. The section is clearly aimed at actual physical equipment, which is obvious when one considers the legislative history, the plain language of the statute, and the consumer experience as it was 20 years ago when the provision was added to the law.

So the question is if a paid TV service is offered in a manner that requires no set-top box, in other words, no physical equipment or devices needed to access the programming, does Section 629 remain either necessary for or applicable to that paid TV service?

Mr. Chairman, do you want to lead off?
Chairman Wheeler. Gee, Mr. Chairman, everything in the world is going software. You know, the networks themselves used to be run by hardware and are now run by software. That doesn't mean that we don't have jurisdiction over those kinds of activities. I think the statute talks about equipment, device and devices, and in a software world, you cannot consider the kind of functionality that the statute talks about and not consider software.

The Chairman. Commissioner Rosenworcel?

Commissioner Rosenworcel. The Chairman's point is fundamentally correct that so many functions that took place over hardware are now taking place over software. I think what is also fundamental is that Congress wanted to make sure that this market was competitive, and whether we're dealing with hardware or software, I think we want to find a way to make that happen.

Commissioner Pal. Mr. Chairman, I think this question raises the basic approach that Commissioner O'Rielly raised concerns about, which is that the agency is taking statutes that were written, in this case, almost a quarter century ago and expanding them dramatically to assert jurisdiction over an entirely new market-

In my view, as a policy matter, instead of doubling down on 1990s era technology—I mean, very few consumers I know are enthusiastic about their set-top boxes—we should encourage efforts to migrate to an apps-based economy, where instead of spending a couple of hundred dollars on a box and \$15 a month, you could spend zero to \$5 on an app which would allow any navigational device, from a tablet to a smart phone, to effect the same functions.

The CHAIRMAN. Commissioner O'Rielly?

Commissioner O'RIELLY. Short answer, no, and I'm happy to expand upon that. I agree with my colleague's point in terms of the elimination of boxes going forward.

Commissioner Clyburn. I agree that the current construct may on its surface seem limiting. But what we have the capacity to do, and I trust that we will continue to have the flexibility to do, is look through and recognize that though the words may be different, the application and the functionality, I believe we should look through current lenses and apply and interpret the framework which has either worked well or needs room for improvement in order to really interpret, again, through today's lens how we approach the directive that you have given us to ensure a competitive marketplace when it comes to what we now refer to as a set-top

The CHAIRMAN. I have just one quick "yes or no" question for all five commissioners, and then I'll ask in a later round to follow up. Do you agree that a consistent legislative reauthorization process would produce a more responsible and productive relationship between the FCC and the Congress?

Chairman Wheeler. It is your right to write the rules, sir.

The CHAIRMAN. I assume that's a yes.

Commissioner Rosenworcel. Yes.

Commissioner Pal. Yes.

Commissioner O'RIELLY. Yes, I defer to Congress on that.

Commissioner Clyburn. I also defer to Congress.

The CHAIRMAN. All right. Well, if there's a specific provision that you suggest that the Committee include in an FCC reauthorization bill, I hope that you'll feel free to follow up after the hearing with any suggestions that you might have about that because it's something that I think would be very useful in terms of making the relationship between the Congress and the FCC more productive, probably more trusted, and more understood, for sure.

Senator Nelson?

Senator Nelson. Set-top box. We don't want to threaten the vibrant market for quality video programming. So, Mr. Chairman, how do you respond to the concerns that I raised about the impact your proposal could have on existing copyright and contract provisions for video content? Does the FCC—does your proposal impact third parties, whether they'll be able to alter or add to video programming or advertising contained in such programming?

Chairman Wheeler. Thank you, Senator Nelson. I think there are probably several responses to that. One, that which the cable operator puts out should remain sacrosanct and untouched, and nothing in our proposal creates an opportunity for that to happen, because copyright law remains in place, because the language that we used actually was lifted from the cable card language now being used by cable companies in their cable card and has proved sufficient to protect against that.

And, third, is we actually asked in paragraph 80, I think, in the notice, "But if you think that's not good enough, tell us what would make it good enough, because it's not our goal to cause harm."

Senator Nelson. OK. Let's go to spoofing. Chairman, now, I laid out what's happening. I mean, citizens are really getting taken, and they're losing thousands of dollars. And the sad cases are someone's life savings because, particularly, a vulnerable senior citizen has been fooled by the number that's calling. Mr. Chairman, many of the provisions in our bill that we recommended to Congress in the FCC in 2011—I know you're going to agree that it's important for Congress to give you the tools necessary to combat the sophisticated spoofing scams.

Commissioner Rosenworcel, I appreciate your attention to phone scams. What has the FCC learned from its inquires into the phone scams? Do you agree that more needs to be done to inform consumers about their options for avoiding or stopping these scams?

Commissioner ROSENWORCEL. Yes, Senator. Thank you for the question. We've got bad actors, scammers, and fraudsters right now who spoof telephone numbers to defraud consumers and try to wrongfully obtain something of value from them. We've got to put a stop to it. I know you were responsible for the Truth in Caller

ID Act about 5 years ago, and that has been a helpful source of au-

thority for the FCC.

But what we found in the intervening years is that fraud has moved offshore. It's now coming from international locations. It has also migrated to texting. So what I appreciate about your new legislation is that you're giving us the jurisdiction to resolve those problems and try to get these bad actors out of the business of spoofing once and for all.

Senator Nelson. Senators Klobuchar and Blunt have joined Sen-

ator Fischer and me on that legislation.

Chairman Wheeler. Senator, can I just pile on for one second?

Senator Nelson. Please.

Chairman Wheeler. I may be the only member on this panel who has actually been victimized by this. I came home a couple of weeks ago, and my wife says to me, "The IRS is calling and saying we owe them money." This was news to me, and—

Senator Nelson. You didn't fall for it, did you?

Chairman WHEELER. So I said, "Boy, they called the wrong number, because I'm the Chairman of the FCC."

[Laughter.]

Chairman Wheeler. And so we got the information, and I took it to our enforcement bureau, and they started drilling down, and guess what? This was a U.S. number, but it was coming from abroad, and we couldn't get to it. So, believe me, we understand and are with you on this.

Senator Nelson. By the way, the Do Not Call List—it doesn't

work.

[Laughter.]

Senator Nelson. I mean, it's gotten so bad, I don't want a landline. And now I'm getting the calls I don't want on a cell phone. I hope you all will look at that.

All right. Well, I've run out of time. I'll do a second round.

The CHAIRMAN. Are you tired of hearing from those Presidential campaigns in Florida?

[Laughter.]

Senator Nelson. As a matter of fact, that's right. And I was wondering when you were asking the Chairman a few minutes ago about what he intends to do in the future—you mean, you don't think that President Trump would re-nominate him?

[Laughter.]

The CHAIRMAN. Well, I guess he won't be running Democrats for Trump in Florida, I assume.

Senator Wicker?

STATEMENT OF HON. ROGER F. WICKER, U.S. SENATOR FROM MISSISSIPPI

Senator WICKER. Commissioner O'Rielly, you gave the shortest answer concerning Section 629, so I'm going to ask you to expand, because we have the benefit here of someone who has been on both sides of this dais on this issue. You were a staffer here during the consideration of the 1996 Telecommunications Act, so can you tell us what you believe Congress intended when it drafted the language 20 years ago. Do you believe the FCC's proposal aligns with Congressional intent?

Commissioner O'RIELLY. Thank you, Senator. There are a few of us in a number of different roles that are still involved from the 1996 Act. Having worked for then Chairman Tom Bliley, who was the author of this provision, I can tell you that I had an opportunity—I was in every meeting that we had on the Telecomm Act relating to his work, and this was one of his priorities.

His intention of that provision was to make the availability of set-top boxes or navigation devices in retail establishments. And on behalf of a particular retailer at the time that no longer exists, Circuit City—you may have heard of it. It's the previous Best Buy of the world. It no longer exists. And the issue has somewhat moved

on in the time.

So my argument is—and I made this point when this issue was adopted—is that the provision itself is looking at a previous time when set-top boxes were on the hardware side of the equation. We didn't contemplate at the time that it was going to be, you know,

an application world in 1994 and 1995.

You also have to keep in mind the context, and I made this point in my statement. You have to look at the context of the deal that was struck. We had to work with then Speaker Gingrich, who was representing on behalf of his constituent, Scientific Atlanta from Georgia. We also had to work with Senator Coverdale, who also represented Scientific Atlanta, in terms of the scope of what we were able to achieve in that provision.

I don't believe, when you look at the text of the language, when it talks about boxes, interactive communications equipment and other equipment, that it gets to the application side, that it gets to an application-only world that Senator Thune talked about in his question. I think it is over-broad and penalizing going forward.

his question. I think it is over-broad and penalizing going forward. Senator WICKER. Now, Commissioner Pai seems to suggest that a \$5 or \$10 app would suffice and make this proposed rule change

irrelevant. Do you agree with him?

Commissioner O'RIELLY. I do. I'm not even sure it's in a \$5 or \$10—I have 20 video apps on my phone that exist today, and I can get them directly from the programmer, and I can get them directly from my cable provider. So those apps are free, and I watch programming on my phone, on my tablet, and I can watch it on my TV through those applications without having to have a set-top box.

Senator Wicker. So in terms of helping the consumer, it just seems to me there is a question of who is being helped by this rule.

Commissioner Pai, Senator Nelson seems to make a pretty good point about his concerns. Chairman Wheeler says you've got nothing to worry about. So what do you say to that? Help us out.

Commissioner PAI. Senator, thank you for the question. I think while everybody agrees that this programming stream should remain sacrosanct, to borrow the Chairman's phrasing, unfortu-

nately, nothing in the document actually protects it.

So we asked repeatedly, for example, of interested parties before our vote: Would the programming stream remain intact? Would a third-party set-top box manufacturer, for instance, be able to extract ads that were in the programming stream and insert their own, and/or insert their own ads layered on top of it? We were told, "Well, no. We're going to rely on market forces to govern that."

But I think, as Ranking Member Nelson adequately pointed out, the copyright and all these other intellectual property issues involve very delicate contractual and other arrangements that are going to be disrupted. And I think that's part of the reason why we heard from an incredible panoply of programmers, especially minority programmers, who told us, "We don't want this kind of disruption, because it's ultimately going to decrease the amount of compensation and protection we have for our intellectual property."

Senator WICKER. Thank you, sir.

Commissioner Clyburn, thank you for your interest in rural America. On this panel, we have Senators from states with significant rural populations—Mississippi, South Dakota, Missouri, Nebraska, Kansas, Nevada, Colorado, and on and on. Thank you for coming to Sunflower County, Mississippi.

Commissioner Clyburn. Absolutely.

Senator Wicker. And you're going to be back in Mississippi

Commissioner Clyburn. Yes, sir.

Senator WICKER. I hope we can visit at that time. You and I discussed this earlier, but I think you'll acknowledge the incredible benefit to public health and education in ensuring that we continue to connect wirless-only households through the Mobility Fund. It seems to me the FCC must do no harm to existing coverage in rural states when considering future changes in the USF support

for wireless. What do you say to that?
Commissioner CLYBURN. So from a number of degrees, I agree with you. I have been speaking for a number of years about the FCC establishing a permanent Mobility Fund. You and I both know when we travel down from Jackson to Ruleville-which I did take that drive—that there are spots along the road where we have absolutely no coverage. We feel extremely vulnerable. The citizens that live off the side of those roads are extremely vulnerable, particularly those who are wireless-only consumers. They deserve

So I look forward to continuing to work with you to see that we have the resources in place to target Universal Service funding to those areas where it is absent, to reform the Universal Service program, the Lifeline program, to ensure that those who do not have connectivity—there are 5 million people in this Nation without any

phone service. We need to address them, particularly.

So I look forward to continuing to work with you, coming back to Jackson and outside of the area. I'm spending more time in Mississippi than in South Carolina, incidentally, another rural state. And I'm, again, looking forward to working with you to truly connect, particularly, those unhealthy doughnut holes where there is no connectivity whatsoever.

Senator Wicker. Thank you, ma'am. The Chairman. Thank you, Senator Wicker.

Senator Schatz?

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

Senator Schatz. Thank you, Mr. Chairman. I want to thank the Commissioners for their dedication and their expertise. We don't always agree on every particular action you're taking, but I think we all agree on the objectives of the FCC, and I think one area where we've been able to achieve some pretty good bipartisan

agreement is in spectrum policy.

Senator Moran and I have been working together with the Chairman and the Ranking Member on an amendment to Chairman Thune and Ranking Member Nelson's MOBILE NOW bill to make sure that more unlicensed spectrum is available in the future. I think we need a clear plan to support continued innovation in the unlicensed band, because it has become an affordable way for people from all walks of life to get online and a way for carriers to off-load traffic.

Our experience with Wi-Fi is the best example of the opportunity ahead, and I believe if we want to continue to empower consumers and provide entrepreneurs the space to innovate, we've got to focus on Wi-Fi.

Commissioner Rosenworcel, thank you for your leadership, not just on 5G, but on the Wi-Fi dividend. What I'd like you to do is just flesh out why you think this is so important and what you think the unique policy challenges are in the context of the Communications Act and also the FCC's authorities.

Commissioner Rosenworcel. Well, thank you, Senator Schatz, and thank you for your work on behalf of unlicensed spectrum policy, because good spectrum policy requires both licensed and unlicensed spectrum. There's no better evidence of that than taking a look at Wi-Fi. It has democratized Internet access. It has created a space for permissionless innovation, which is vital for the Internet of things, and it's also how so many of our carriers manage their licensed networks, because they offload their traffic onto that. On top of that, it's an economic boon—\$140 billion of activity every year.

But, traditionally, unlicensed spectrum has kind of been an afterthought. It was reserved for scraps of spectrum we didn't know what to do with. And the truth is we actually need an unlicensed plan that involves low-band, mid-band, and high-band spectrum. It shouldn't be an afterthought. It should be front and center in our spectrum policy.

Senator Schatz. Can you talk about the mechanics of why it's so difficult to have a plan? I mean, I think it's important for the public to understand that the financial incentives are just not there when you're talking about the auctions, because this is really a

commons.

Commissioner Rosenworcel. You're absolutely right, because everybody here knows the Congressional Budget Office combs through legislation, and on spectrum policy, it always delivers high marks when we sell spectrum at auction. But it delivers low marks if we reserve it for unlicensed or Wi-Fi activity, which is a shame because of the broader economic benefit of having unlicensed around. So I think that accounting is dated. It misses the mark, and it shortchanges our wireless future.

Senator Schatz. Thank you, Commissioner.

Chairman Wheeler, I wanted to talk to you about the zero rating programs. I know that you specifically sort of held harmless those programs in the Open Internet Order. But I'm personally struggling with my view on this, and I think some of the members of the Committee are likewise. There are obviously great opportunities for consumers, to provide additional access to the Internet.

On the other hand, it's not at all clear to me that some of the programs are all that different from that which is prohibited in the Open Internet Order. So I'd like you to kind of flesh out first of all what your overarching thinking is regarding this and then how the Commission goes ahead and evaluates the plans that are being provided by individual companies.

Chairman Wheeler. Thank you, Senator. I would just take one—I'm not sure that we held harmless in the Open Internet Order. What we did in the Open Internet Order was to specifically say that this is something that should not be decided here in the Open Internet Order, because, as you point out, can you make the case that it is helpful, because in some cases it increases choice and lowers cost? Yes. Can you make the case that in some instances it is harmful because it is used as a tool against competition and a tool to operate against other folks? Yes.

So the question becomes: How do you make those kind of judgments? And that's the power of the regulatory agility that is in the Open Internet Order. So what we have been doing is collecting information and going through a process right now in which we are developing the data points necessary to reach the kind of conclusions that you're specifically talking about here. The staff is far down the path on this. As you indicate, this is not a light lift, but this is something that we are undertaking.

Senator SCHATZ. Well, I'll finish with this, with the indulgence of the Chairman. This is, I think, squarely the jurisdiction of the expert agency. But I think the policy makers have to think through the balancing act going forward, because I think zero rating programs are going to be coming fast and furious, and some of them are going to be right on that edge of at least violating the spirit of the Open Internet Order, and some of them are going to be great and easy to approve. But, you know, there are going to be some policy questions that percolate up to the Committee. Thank you. The CHAIRMAN. Thank you, Senator Schatz.

I have Senator Blunt, who has left us. So Senator Markey, followed by Senator Ayotte.

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

Senator Markey. Thank you, Mr. Chairman, very much. Going back to the set-top box, I'm very familiar with this provision. Chairman Bliley and I are the co-authors of that provision in 1996. By the way, I'm also the author of the Do Not Call List, and it's iust-

[Laughter.]

Senator Markey. It's just as relevant today as it was a quarter of a century ago, and we do want that, obviously, to be updated and enforced as diligently as possible.

I, obviously, had many, many, many conversations with Tom Bliley on what our legislative intent was, and I know what we wanted to do. We wanted to just break down this monopoly that existed that forced consumers to purchase—not purchase, actually—to rent a set-top box from the company.

The reason that we were both concerned with it was that we had just finished the process of preventing consumers—to purchase phones. For 75 years, Americans had been forced to rent a phone,

a black rotary dial phone, from the phone company.

It's a good business model, \$3 a month, 12 months a year, for 50 years. That's what our mothers and fathers had to do. It's a good business model if you can make someone rent something and pay you \$1,800 to rent this, at that time, hunk of junk. Companies were ready to move on and innovate—new companies. So we had to break it down so that you didn't have to rent anymore.

So along comes the cable industry and adopts the same model, that the consumer is forced to rent a set-top box. They can't go out and get a different box from an innovative company. That's what

Tom Bliley and I wanted to see accomplished.

And where are we 20 years later? Here's where we are. Ninetynine percent of all Americans are still renting a set-top box. That's not innovation—99 percent. What's the average per family? Two hundred and thirty-two dollars per year to the cable companies, to the satellite companies, to rent the box.

So we haven't seen any innovation. We haven't seen any breakthroughs. We're still waiting for the revolution where you can go down to the store or download the app that allows you to have a new way of accessing this information in the modern era. That's what it was all about.

So for the purposes of this discussion, net neutrality is to content what this set-top box rulemaking is to ensuring that the devices, the access points, allow for the consumer to control, the consumer to decide. So that's pretty much what this whole debate is about.

So, Mr. Chairman, how closely can we analogize this revolution to the black rotary dial phone revolution in terms of our need to open up innovation so that the consumer has more choices?

Chairman Wheeler. Well, thank you, Senator. I think the analogy is spot-on, and here's the fascinating thing about it. You know, the cable industry was for it before they were against it. They filed with us in 2010, saying that they wanted exactly the kind of things that we're talking about here now. Today, however, everybody is in-

venting all these imaginary horribles.

I mean, the most interesting thing to me—and I pointed it out to Senator Nelson. We stole the language from the cable card license agreement because that's been working, and we put it in the item. But it is now announced to us that that language, which has been working for the last several decades, is now a complete and total failure. And one can only scratch their head and say, "Gee, there must be a bigger agenda being played here than the facts."

Senator MARKEY. And can I just say we're still in the set-top box era. Comcast, just one company, a great company, by the way—but Comcast is installing 40,000 set-top boxes a day in America—a day.

So we're in the set-top box era.

There's a 99 percent control by these companies, and to pretend otherwise is just to ignore the real life experience of every single American who has that clicker with that set-top box in front of them, and they would like another choice if we can provide it for them. They might stick with the incumbent, but I'll tell you one thing. The incumbent is going to start to innovate real fast with regard to what that box can do, because there's nothing like Darwinian, paranoia-inducing competition to spur innovation that makes consumers feel good and lowers the price that they have to pay to rent the box if that's what they want to continue to do.

So thank you all so much for your great work.

Thank you, Mr. Chairman.

The CHAIRMAN. Thank you, Senator Markey.

Senator Ayotte?

STATEMENT OF HON. KELLY AYOTTE, U.S. SENATOR FROM NEW HAMPSHIRE

Senator Ayotte. Thank you, Chairman. I want to thank all the

Commissioners for being here.

I wanted to ask Commissioner Rosenworcel—this is an issue that I've raised repeatedly before the Commission when you've come before this Senate committee, and that is the Universal Service Fund issue. I appreciate some of the reforms that you've made on the distribution side, and, obviously, there are additional issues that have been raised here today with the Chairman that I hope are also addressed on the distribution side.

I also continue to remain concerned on the contribution side. I urge you all to take a nice trip through New Hampshire and have the same experience in many rural parts of New Hampshire where there is no telecommunications coverage. But we're 50th in terms of support under the Universal Service Fund, out of 56 states and territories. We are a net donor, where my constituents are paying over \$37 million in a year, and they're getting back approximately \$15 million in return. It's a very bad deal for my constituents, given that we have real needs in my state where it would help the economic development and wellbeing of my constituents.

I know that as the Chair of the Federal-State Joint Board, Commissioner, you have said you're going to wait on what you might do on contribution reform based on what the court does on the Open Internet Order. And I'm trying to understand why we have to wait, because recently, the Congress permanently enacted the Internet Tax Freedom Act, which would say very clearly where policymakers are on both sides of the aisle on this issue. We should ensure that you aren't taxed when you have access to the Internet, because we want to make sure everyone has access, and that's obviously the goal of the Universal Fund itself.

So I would ask you, Commissioner: Why do we have to wait for the Open Internet Order to make reforms to the contribution side, especially when Congress has so clearly spoken, most recently with a permanent extension of the Internet Tax Freedom Act? My constituents are really tired of waiting for contribution reform, and they're putting a lot of money into this, and we're not getting the

value back from the fund.

Commissioner ROSENWORCEL. Thank you, Senator, and you're right. We have talked about this extensively. I want to start by saying I am a New Englander. That's where I grew up. So I know exactly what you speak of in terms of the inability to get service

in parts of New Hampshire and northern New Hampshire, in particular.

Senator Ayotte. That's right.

Commissioner ROSENWORCEL. So that's familiar to me. To the extent that you're saying that we are not acting, I just want you to know that we're actually working. We're working extensively behind the scenes.

Just two weeks ago, I met in Washington with my state colleagues who are on the joint board who are from all across the country, Florida, Washington state, Michigan, and state staff who are from other locations, and we talked extensively about new models for moving forward, because our existing Universal Service system, which supports communications in so much of rural America, is right now dependent on an assessment on old fashioned long distance service, which we all know does not represent the future of communications. And if we want to make sure that we get high-speed broadband everywhere, including places in New Hampshire, we know we're going to have to update the way that we collect that, and we are working behind the scenes now, combing over models and trying to understand the impact on consumers and businesses if changes are made.

Senator Ayotte. So the thing that I would like to understand—and I'd also like Commissioner Pai to jump in, because I know he has expressed some opinions on this as well. Why does the Open Internet Order jeopardize the potential to do contribution reform? What risks are there with this Open Internet Order that, in fact, it could end up with a Universal Service tax on Internet services? Presumably, this would be contradictory to the policy that is very strongly bipartisan as reflected in ITFA that we don't want to tax

access to the Internet.

So if you could both comment on that, I'd appreciate it.

Commissioner ROSENWORCEL. So I want to be clear. I agree with that policy. We're not looking to change it. We're just looking to modernize the system. To the extent that we're talking about why this court case matters, it's just fundamentally statutory. Under Section 254(d) of the Communications Act, the collection obligation is on telecommunications services, and so we need to make sure that that definition is a stable one so that we assess ways to move forward.

We're looking at a variety of ways, numbers-based contributions, expanding the contribution base with traditional telephony. We're looking at a connections-based system. In other words, we're looking at models with our state colleagues from all across the country right now with the goal of making sure that rural communication stays strong.

Senator AYOTTE. I would like to have Commissioner Pai, with the

Chairman's latitude, also comment on this issue.

Commissioner PAI. Thank you, Senator. I'll try to be brief. I have concerns both in terms of timing and in substance. In terms of timing, when the FCC adopted the Open Internet Order on February 26, 2015, the joint board was slated to give us a recommendation on contributions reform in April 2015.

If you look buried in footnote 1471 of the 317-page Order, we say we anticipate a short extension of the Joint Board's deadline would

be appropriate. We are now almost a year after—over a year after the Open Internet Order. We still have no recommendation.

Now, I think that it's pretty clear that a broadband Internet access tax would be pretty unpopular, especially in light of the bipartisan chorus, as you pointed out, that state and local governments should not be able to tax the same. And I think it's remarkable that in light of the fact that the FCC has declined to refrain from imposing these regulations on all these other areas, all these other Title II regulations, that this one, a politically salient one, is being put off for a later time.

I think that it's also telling that the agency is already spending money in anticipation of getting a greater amount of revenue from the Universal Service Fund. For example, we boosted the e-rate budget by \$1.5 billion a year last year. By all accounts, next month, we are going to expand the Lifeline program to broadband without any meaningful budget or cap. So that money is already being

spent, and it has to come from somewhere.

I would respectfully submit to you that, ultimately, it is going to be in the form of a broadband tax. Every one of your constituents is going to have to pay more for Internet access to fund the FCC's spending obligation that's already made through the Universal Service Fund. So both in terms of timing and substance, I believe that we should be straightforward with the American people and decline this opportunity to impose a broadband tax.

Senator Ayotte. Well, I hope we would. My constituents are not going to want to pay that tax, and I don't think there's support for that tax. So I hope that we would clearly take that off the table.

The CHAIRMAN. Thank you, Senator Ayotte.
I have Senator Booker followed by Senator Fischer followed by Senator Moran.

STATEMENT OF HON. CORY BOOKER, U.S. SENATOR FROM NEW JERSEY

Senator Booker. Commissioner Wheeler, would you just respond to that, the expenses and the tax issue, because I think it's important to hear your thoughts.

Chairman WHEELER. The challenge that Commissioner Rosenworcel and her team are facing is that there is a diminishing amount of services money on which a fixed amount of overhead is

being charged. That means that it has to continually go up.

Now, sometimes we sit around and our colleagues complain, "Oh, my goodness. The Universal Service Fund has gone up. Look at the percent that it is today." Well, the math says it has to, and if it doesn't, you won't be able to fund build-out in rural areas. You won't be able to fund schools and making sure they're connected. You won't be able to make sure that everybody has access.

This is a pressing problem. This is a complex problem, and the interesting thing that was really about Commissioner Rosenworcel's response—I'm sitting here and I'm saying, "Boy, is the right person on point on this," because she talked about multiple solutions, not just the one that you keep hearing about.

Senator BOOKER. So if I can—I really want to talk about innovation and leading the globe in innovation—very, very grateful for Senator Ayotte, Senator Fischer, and Senator Schatz in leading, really, some of the innovation work that we're doing about the Internet of things. I'm really very excited about the fact that we are now looking at making sure we're focused on unlicensed. In fact, I definitely wanted to follow up—which I don't think I'm going to have time—about the progress of testing the 5 Gigahertz section.

But just while we're there, I just really want to, then, just jump into the issue of Lifeline, because it's something that I think is extraordinarily important. And I'd like to be able to submit for the record, without objection from the Chairman when he comes back, a letter that was signed by a group of broadband providers, public interest groups, really public-private groups, talking about the urgencies of the digital divide in our country. It's amazing to see it's signed by everybody from Comcast and AT&T to the National Hispanic Media Coalition. It's pretty extraordinary.

So just to stick with this for a second, because when it comes to the Lifeline program, I just want to know if we are getting a good return on our investment. What are the economic and social justifications for modernizing this program, really, and the urgency to

cover broadband?

So, Commissioner Rosenworcel, would you comment on that for me?

Commissioner Rosenworcel. Absolutely. Listen, today, it is absolutely necessary to have access to broadband to have a fair shot of prosperity in the digital age, and we have too many households that do not have access. That's important for emergency services, for healthcare, for getting and keeping a job, and what's especially important to me is that it's really critical for homework.

We have 5 million households in this country with school age kids who can't do their homework because they don't have broadband access. That's a homework gap that we can help use the Lifeline program to bridge, and I think we should be doing it with-

out any delay.

Senator BOOKER. And, Commissioner Clyburn, would you like to

add to that?

Commissioner CLYBURN. This is a 30-year-old program that in the beginning really worked hard and was successful in connecting those last few million people who could not afford access to a voiceonly product. We do not live in a voice-only world. The individuals that need this the most have cut the cord, the traditional cord, and have moved on to the mobile or wireless spectrum.

We need to modernize. We need to throw away the old and come up with a new construct, one that recognizes and addresses the needs of today, a program that is fiscally sound with all of the protocols in place to ensure that once and for all, whatever vulnerabilities we have are addressed, that the provider is no longer the one who is greenlighting individuals who are—the consumers who are certified or justified to be on the fund.

We need to get rid of as many vulnerabilities as we can in order to serve those who are vulnerable. We are poised to do that by the end of this month, and I'm looking forward to continued feedback and a successful program that will properly serve those who are on

the wrong side of the opportunity side.

Senator BOOKER. Real quick, I was going to talk about innovation.

Commissioner CLYBURN. Oh, I apologize.

Senator BOOKER. No worries. I just want to—for the 10 seconds I have left, could you just talk about the—we've made a lot of progress on the inmate calling, but now we're seeing some threats where the next frontier is, these video conference calls.

Commissioner Clyburn. Right.

Senator BOOKER. You're doing some really good work on that. Can you use my last second to talk about that for a second?

Commissioner CLYBURN. Well, we put forth a further notice that will look at what is called a video visitation model that many facilities have gone to. There are lots of people who cannot visit in person their loved one. They're going to a video model. We have heard reports that this is financially taxing on them. So we're going to look at that to see if this regime is as broken as the one which we are already poised to fix.

Senator BOOKER. Thank you, Commissioner. I wanted to submit this to the record earlier. The CHAIRMAN. Without objection. Thank you, Senator Booker. [The information referred to follows:]

March 1, 2016

Chairman Tom Wheeler, Commissioner Mignon Clyburn, Commissioner Michael O'Rielly, Commissioner Ajit Pai, Commissioner Jessica Rosenworcel, Federal Communications Commission, Washington, DC.

RE: WC DOCKET NO. 11–42, LIFELINE AND LINK UP REFORM AND MODERNIZATION Dear Chairman Wheeler and Commissioners Clyburn, O'Rielly, Pai, and Rosenworcel:

The undersigned parties—broadband Internet access providers and consumer and public interest organizations—share the Commission's goal of modernizing the Universal Service Lifeline program to help ensure that all Americans have access to modern communications services. We all agree that it is time that Lifeline eligible consumers have the opportunity to use their benefit to reduce the cost of subscribing to broadband Internet access service

In order for the addition of broadband Internet access to have the desired impact, however, we also believe that the Commission must make other critical changes to the program. First, eligibility and recertification functions currently performed by service providers must be promptly and completely handed over to a third-party verifier/administrator. This step will both strengthen the program and reduce the costs to providers of serving the Lifeline market. Second, the Commission should encourage broad provider participation in the new broadband Lifeline program. To do so, the Commission should centralize and streamline the process of authorizing providers to offer Lifeline-supported broadband Internet access service. The Commission has the legal authority to make this change and the policy rationale for doing so is compelling. All Lifeline-eligible consumers deserve broadband, and without widespread provider participation, eligible consumers may not have access to Lifeline-supported broadband Internet access service.

To fulfill the vital purpose of bringing broadband to those who otherwise cannot afford it, we want both the broadest participation possible and the flexibility to create innovative solutions. This requires a uniform national policy that, while preventing fraud and abuse, encourages maximum participation and encourages innovative ways to provide affordable broadband. Unfortunately, creating such a broadband Lifeline program is incompatible with the current process of approving authorized providers.

We look forward to continuing to work with the Commission on updating the Lifeline program and the creation of a new Lifeline program targeting broadband for the needs of today's consumers. Sincerely,

Access Humboldt American Library Association AT&T Benton Foundation 1 Center for Media Justice Center for Rural Strategies CenturyLink Comcast Common Cause Common Sense Kids Action Connected Nation, Inc. Cox Communications EveryoneOn Frontier Communications Media Mobilizing Project
Multicultural Media, Telecom and Internet Council
National Digital Inclusion Alliance
National Hispanic Media Coalition
OCA—Asian Pacific American Advocates Public Knowledge Schools, Health & Libraries Broadband Coalition The Greenlining Institute Verizon

Senator BOOKER. Thank you very much. The CHAIRMAN. Senator Fischer?

STATEMENT OF HON. DEB FISCHER, U.S. SENATOR FROM NEBRASKA

Senator FISCHER. Thank you, Mr. Chairman.

Chairman Wheeler, as you know, this past December, a group of seven Senators and myself wrote to you expressing our concerns about the FCC's recent actions in the area of municipal broadband. I believe that broadband services should be available to all Americans no matter where they live, in rural and urban areas alike. I'm concerned that the FCC seems to be picking winners and losers in the market, and that he municipal broadband networks that you are encouraging run the risk of over-building private sector networks and taking those limited Universal Service Funds away from companies that really do rely on them to provide that broadband to rural America.

Recognizing this, in Nebraska, we did pass a law that prohibits municipalities from providing broadband or telecommunications services. So, Mr. Chairman, in your response to our letter, you said that the Commission has not authorized any municipal broadband providers to receive rural broadband experiment support at this time.

It's interesting that you say that, given that last month, the FCC's Wireline Competition Bureau released an order that removed the Electric Power Board of Chattanooga from further participation in the rural broadband experiments program, the very

¹The Benton Foundation is a nonprofit organization dedicated to promoting communication in the public interest. These comments reflect the institutional view of the Foundation and, unless obvious from the text, are not intended to reflect the views of individual Foundation officers, directors, or advisors.

municipal broadband provider for whom the FCC recently preempted in Tennessee's state law. In that order, the bureau said that the Electric Power Board had been provisionally selected to receive \$710,000 in rural broadband experiments funding. Public notices from last year suggest that they are not the only ones.

So, Mr. Chairman, has the FCC authorized municipal broadband providers to receive funding through that rural broadband experiments program, whether provisionally or not, and if so, how much

money

Chairman WHEELER. Thank you, Senator. I recall the letter and specifically doing the research behind it. I will be happy to submit for the record the details. If there have been developments since then. I don't know them off the top of my head.

Senator FISCHER. So you don't know if the FCC has authorized that funding for municipal broadband providers through that rural

fund?

Chairman Wheeler. I'm sorry. Through the—

Senator FISCHER. You don't know if the FCC has authorized municipal broadband providers to receive funding through that fund?

Chairman Wheeler. Well, I just heard you say that that was done in Chattanooga. It was a bureau level decision, and I was either not aware or have forgotten.

Senator Fischer. If you could get back to us on that, I would appreciate it.

Chairman Wheeler. Be happy to, yes, ma'am.

Senator FISCHER. I think there are obviously some questions out there. Thank you, sir.

[The information referred to follows:]

FEDERAL COMMUNICATIONS COMMISSION
Washington, DC, March 14, 2016

Hon. DEB FISCHER, United States Senate, Washington, DC.

Dear Senator Fischer:

I am following up on your question from the March 2 hearing regarding broadband networks owned by municipal governments. You specifically asked whether or not the FCC has authorized municipal broadband providers to receive funding through the Rural Broadband Experiments Program. The direct answer to your question is that the FCC has not—and will not—authorize disbursement of Rural Broadband Experiment funds to any municipally-owned broadband provider for areas where a competitor has been providing service. I provide below the status of all such networks that have been involved in that program.

In July 2014, the Commission adopted rules for a limited program of rural

In July 2014, the Commission adopted rules for a limited program of rural broadband experiments and established a competitive bidding process to select projects from entities willing to deploy robust broadband to consumers in areas within price-cap telephone companies' territory where no competitor was providing broadband service. Bids were due on November 7, 2014. The Wireline Competition Bureau (Bureau) announced a first list of provisionally selected bidders on December 5, 2014, and announced additional provisionally selected bidders on March 4, 2015. As of June 2015, the Bureau announced that no additional rural broadband experiments bids would be selected. Four of the provisionally selected bidders could be characterized as providers owned by municipal governments.

In order to be authorized to receive funding, all provisionally selected bidders must meet several requirements: specifically, the Bureau must find each provisionally selected bidder is financially and technically qualified, has received eligible telecommunications carrier (ETC) designation by the state commission (or the FCC, if the state lacks jurisdiction), and has an acceptable irrevocable stand-by Letter of Credit. In each case, there are deadlines for submitting the requisite information,

and the Bureau must affirmatively find the submission to be satisfactory in order for the applicant to proceed. Only after all of those requirements are met will the Bureau authorize the disbursement of support. Prior to that time, there is no funding commitment under Federal law; the provisionally selected bidders merely are

applicants for support.

Of the four bidders noted above, one affirmatively withdrew its bid prior to the deadline to submit financial and technical information. Two more were removed by the Bureau for failing to comply with the requirements. The last of the four provisionally selected bidders—Lake County d/b/a Lake Connections in Minnesota-remains under consideration, but has not yet met all of the Commission's post-selec-

tion requirements.

Lake Connections was provisionally selected to apply for about \$3.5 million in support for a fiber-to-the-home project serving 7,000 locations in 847 census blocks. After a challenge process specifically designed to ensure that the areas in question were unserved by unsubsidized competitors, the Bureau determined that two of those 847 census blocks were served by a competitor. These blocks were removed from the project and the application for support was reduced accordingly to \$3.49 million. Lake Connections timely submitted the required financial and technical information and timely submitted a letter of credit commitment letter. Lake Connections has filed a petition for waiver of the deadline for submitting proof of its ETC designation; although it filed its ETC petition with the Minnesota Public Utilities Commission on January 29, 2015, it was not designated until December 2, 2015. The Bureau would need to grant Lake Connections' petition for waiver of the ETC filing deadline prior to finding it "ready to authorize." Were the Bureau to do so, Lake Connections would then have to produce a letter of credit prior to being authorized to begin receiving support.

I appreciate your interest in this matter. Please let me know if I can be of further

assistance.

TOM WHEELER

Senator FISCHER. Commissioner Pai, earlier in your career, you spent time working as an attorney with the Department of Justice, and as I'm sure you know, the states of North Carolina and Tennessee have filed legal challenges to the FCC's—I call it a troubling order, preempting laws in those states that do restrict the ability of municipalities to provide broadband services. And you probably know that the Department of Justice has declined to defend the FCC's order in court.

Can you tell me how rare an action that this is? And doesn't it suggest that the FCC overstepped its legal authority by preempting

these state laws?

Commissioner PAI. Thank you for the question, Senator. I think, indeed, it is exceptionally rare for the Department of Justice not to take the position of one of the agencies that it is charged, typi-

cally, with defending in court.

I think it speaks to the fact that this particular order had significant legal vulnerabilities, which is what I focused on in my own dissent, because I believe that under the Constitution and the laws of the United States and Supreme Court precedents like *Nixon* v. *Missouri Municipal League*, it's pretty clear that the agency could not find the requisite clear statement from Congress to support the preemption of state laws such as Nebraska's.

Senator FISCHER. I would hope this committee would take note of that and possibly look at legislation that will help the FCC in recognizing state laws in the future when we have these issues

come up.

Also, Mr. Chairman, I am concerned about what will happen to low-power television stations in Nebraska after this year's broadcast incentive auction. In Nebraska, we have a population of less than 2 million people, and many of those folks live in rural areas

where it's not possible to receive a signal from full-power stations in the state.

We have a number of low-power television stations, and they are valuable for ensuring that Nebraskans, especially those who would normally receive their broadcast content from Iowa or South Dakota—that they can receive that local content, not that we have anything against South Dakota, Mr. Chairman. Of course not.

You have consistently declined to say whether low-power television stations will be able to keep their spectrum after this incentive auction. Can you assure me that every reasonable effort will be made to find a channel for those low-power television stations so that they do not have to go off the air? They are providing a very worthwhile and valuable service.

Chairman Wheeler. Yes, ma'am. As you know, the statute does not establish any priority for low-power stations. So we've been trying to work our way through that. I think there are two things to bear in mind. One is we don't know—we'll start knowing in 26 days—but we don't know right now what the spectrum layout is

going to look like afterwards.

What we have done is to say to the low-power companies: "We will help you after the auction if, heaven forbid, there is a situation. We will help you find a new channel. We will help you share"—because the beauty of digital is you're now into channel sharing—"and you can maybe even get a little upgrade by sharing with a Class A, which gives you a little more ooomph in your market." So, yes, ma'am, we have laid out a plan to do that as soon as we know what the landscape looks like.

Senator FISCHER. Well, I really appreciate it, and if I can help in any way with that, I would like to—

Chairman WHEELER. Thank you.

Senator FISCHER.—because as people live around any border of their state, it is difficult to be able to get that local news, and I think that is very, very important. And as we address that need of these orphan counties out there, I think these low-powered stations really could be an answer for that. So I thank you.

The CHAIRMAN. Thank you, Senator Fischer. Senator Moran followed by Senator Johnson.

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

Senator MORAN. Mr. Chairman, thank you. Incidentally, to the Senator from Nebraska, I grew up with Nebraska on-the-border television and radio, and it wasn't that detrimental.

[Laughter.]

Senator MORAN. Mr. Chairman and Commissioners, thank you very much for your presence here. Let me start with the spectrum conversation. I'll forego kind of my editorial comments and see if I can get directly to this question and a few more on some other topics.

When do you anticipate—this is for you, Chairman Wheeler. When do you anticipate that the Spectrum Frontier proceeding will be complete?

Chairman WHEELER. This summer.

Senator MORAN. And do you anticipate that that completion of the Spectrum Frontier proceeding will lead to an auction in 2017,

or is that too early?

Chairman Wheeler. I don't know the answer to that, sir. I mean, one of the things that has yet to be worked out—and we're working through to get to that summer schedule—is how do you deal with existing incumbents, and how do you deal with their—and so I can't answer that question because we're not there yet.

Senator MORAN. So the consequences of this auction will determine the necessary steps in following auctions, or they'll learn

something from—

Chairman Wheeler. No, sir. No, sir. What I'm saying is that we've got the 600 Megahertz auction, which will begin later this month. And then insofar as the 5G spectrum, the millimeter wave band spectrum that Commissioner Rosenworcel talked about, we are in the process of working through how you deal with sharing and other issues for folks that are currently incumbents there. That will lead to the kind of resolution that we need to authorize use, which we will do this summer.

Senator MORAN. It's not an auction issue. It's a technology issue. Chairman WHEELER. It's a tech, and that, then, will lead to the

question of how do you dispose of that spectrum.

Senator MORAN. Given the nature of high-band spectrum, it seems to me we're not only going to need more spectrum, but we're going to need the support of infrastructure in its deployment at higher frequencies. Are you on track to complete the small cell proceedings before the end of the year?

Chairman Wheeler. Yes, sir.

Senator MORAN. Let me turn to the issue of the impending auction. One of the concerns I have is that the—my assumption is that the spectrum crunch is the greatest in the urban areas. And my concern is what does that mean to rural areas. So we have the \$175 billion cap. We have the 39-month timeframe.

What's the plan for clearing that spectrum compared to rural versus urban? Is there a distinction? And the reason I ask the question is I want to make certain that rural is not at the end of the line when it comes to reimbursement or at the end of the line when it comes to trying to find a contractor to build a tower.

Chairman WHEELER. It's a great question. The reality of when you go and run the spectrum auction is that auction is a daisy chain—or spectrum is a daisy chain, and how you set up spectrum in Chicago affects what happens in Kansas, for instance. So they are all interconnected, which means that there is not one higher ranking spectrum than other. If you haven't got it right in one area, it daisy chains up and screws up Chicago. So the answer to your question is we have to solve it on a broad base.

Senator MORAN. So I should not have the concerns that rural will take a back seat while spectrum is utilized someplace else, and then we have problems with accessing the fund or enough time to

get towers built?

Chairman Wheeler. Because of this daisy chain issue, if you can't clear it in Kansas, you may not be able to clear it in Chicago. Senator Moran. So if there was a bias, it's technically incapable

of being accomplished.

Chairman Wheeler. Yes, sir.

Senator MORAN. Good. And maybe this is to Commissioner O'Rielly or to you, Chairman Wheeler. On the issue of rural broadband—in fact, Chairman Wheeler, you and I had this conversation when you came seeking conversation regarding your nomination and confirmation.

Chairman Wheeler. Yes, sir.

Senator MORAN. You and the Commission have been attempting to reform the order of now several years ago in regard to an issue that is very important to me and to Kansans. The Universal Serv-

ice Fund is important to us, as you would guess.

My question is: As you make USF reforms to that reimbursement model, can you provide me an update first with when the carriers will see an actual order? And, secondly, can you assure me that there will be enough support not only to recover the cost of providing the service, but the significant previous investment that many carriers have made—Rural Utility Services loans, private loans?

I've expressed this concern for a long time, that the RUS and FCC seem to be at incompatible places in which your order suggests to me that there may be a Federal agency that will be owed significant amounts of money from companies who are no longer able to make the payments. Their payments and their debt serviceability was determined at a time in which the Universal Service Fund was different than it's going to be under your order.

Chairman WHEELER. Thank you very much, Senator. First point is I hope we will have this bipartisan product voted on soon. There are three votes for it today. That triggers what's called a must vote, which ends sometime later this month. We are very sensitive to the issue that you raised, and this is something we talked a lot about with the various industry groups and we believe that we will not

cross that threshold.

However—and I don't, Mike, mean to throw this to you in terms of now you get a question like this. But I really want to emphasize how this was a bipartisan effort, and I shouldn't be the only one speaking on behalf of it.

Commissioner O'RIELLY. I appreciate the opportunity. I should say I'm limited in what I can say since it's an item before us. I would be happy to change those rules, as I mentioned earlier.

Senator MORAN. You're good at making your point.

Chairman Wheeler. I take back my time.

[Laughter.]

Commissioner O'RIELLY. But to your point, we did spend extensive time to ensure that a number of things that go into the item that my colleagues are considering will have transition periods. We also think that the changes that are being asked of legacy carriers in terms of build-out and things that will improve the experience for Americans will not have a dire effect on their business plans or the loans that they've taken out.

We also have made clear—and I've promised—that if there are specific issues to any carrier that I'm willing and ready to deal with any type of situation brought to my attention, and that while we want to build a strong foundation, it is not cement, so we will

not consider if there are adverse impacts on any——

Senator MORAN. So there's a case-by-case opportunity. Commissioner O'RIELLY. It is to be sensitive to—that if the facts that are presented before us are such that a carrier would be dramatically impacted, we would want to be very sensitive to that.

Senator MORAN. Thank you.

The CHAIRMAN. Thank you, Senator Moran.

Senator Johnson?

STATEMENT OF HON. RON JOHNSON, U.S. SENATOR FROM WISCONSIN

Senator JOHNSON. Thank you, Mr. Chairman. It seems as others brought up sports broadcasting, I'm sure the Chairman would agree with me that every American ought to be able to have access to watching Packer games. And I appreciate-

Senator Klobuchar. The Chairman likes the Vikings games.

[Laughter.]

Senator Johnson. I would say you're probably not going to agree with me, Senator Klobuchar, that there are way too many people in Wisconsin in the western part of the state wearing Packer uniforms on game days.

So I just want to ask the Chairman—I sent you a letter making sure that you will expeditiously review any petition by a Wisconsin broadcaster to allow those games be broadcast over satellite, and I hope a broadcaster actually does so.

Chairman Wheeler. I'm sorry. I was coughing. This is-

Senator JOHNSON. I just wanted to make sure the FCC expeditiously, hopefully grants, the petition of a Wisconsin broadcaster to carry Packer games over satellite.

Chairman WHEELER. So what we're doing as a result of STELAR, as you know, is following through and looking at each of those. And

I understand as a-

Senator JOHNSON. Just a simple yes would be-

Chairman Wheeler. Yes.

Senator JOHNSON. Thank you. I appreciate it.

Chairman Wheeler. I don't get to talk about Ohio State?

[Laughter.]

Senator JOHNSON. I'm really concerned—and the Chairman is we're concerned about Packer games.

Chairman Wheeler, you are Chairman of an independent agency. The FCC is supposed to be an independent agency. Correct?

Chairman Wheeler. Yes, sir.

Senator Johnson. Accountable to—a creation of Congress. Correct?

Chairman Wheeler. Yes, sir.

Senator JOHNSON. Have you had a chance to read the report that we issued out of my Committee on Homeland Security and Governmental Affairs: Regulating the Internet, how the White House Bowled over FCC Independence?

Chairman Wheeler. No, sir. But I have read summaries of it. Senator JOHNSON. There are a number of troubling findings. I'd like to ask a couple of questions. First of all, were you aware that you had legal advisors in the FCC that are very troubled about the thin record to support the FCC rulemaking, potentially in violation

of the Administrative Procedures Act. Were you aware that within FCC—you were concerned about the thin record?

Chairman WHEELER. Boy, I hope so. I hope that the lawyers are constantly second guessing each other and me.

Senator JOHNSON. But you were aware of that during-

Chairman WHEELER. And that was what was going on. We were having—believe me, it was fulsome debate and discussion at that point.

Senator JOHNSON. So there was a proposal for a public notice and actually written up, but you did not go forward with the public notice to actually beef up that public record.

Chairman WHEELER. No, I—

Senator Johnson. Can you describe why that notice wasn't issued?

Chairman WHEELER. Thank you, Senator. I think what we did was that we hit pause, and I publicly announced that we were hitting pause, for the purpose of enriching the record, and I think I said at that point in time we know the big dogs are going to sue on this, and we want to make sure that we've got I's dotted and T's crossed.

Senator Johnson. Another concern was really the circumvention by the FCC of the *ex parte* communication requirement. In a 1992 Office of Legal Counsel opinion, they were obviously concerned about that independence of the agency, and they wrote, "White House staff members should avoid even the mere appearance of interest or influence, and the easiest way to do so is to avoid discussing matters pending before the independent regulatory agencies."

Now, there were a number of meetings that we uncovered in our investigation, e-mails going back and forth between yourself and members of the White House, where, clearly, this Open Internet ruling was being discussed, and yet there was never a record made of those *ex parte* communications. I find that very troubling.

Chairman WHEELER. Thank you, Senator. Knowing this was in your report, I did go check the rules, and the rules say, quote, "that only substantial significant"—that the only times that you need *ex parte* is when there is substantial significance and is clearly intended to affect the ultimate decision. And that applies to both communications with the White House and communications with Congress.

Senator JOHNSON. Well, when you go down the timeline in terms of the path you were going down in terms of the Open Internet ruling, and then President Obama coming out with his statement, and then the FCC turning on a dime, I would say those discussions were pretty significant.

Chairman Wheeler. So the President filed an *ex parte*, though, right? I mean, I just want to make sure we get the record straight here, that an *ex parte* was filed by the administration.

Senator JOHNSON. On one of those, but—

Chairman Wheeler. On——

Senator JOHNSON.—there were other ones, it reads in the report. You know, I was actually shocked at the Chairman's statement during his opening statement that the FCC was going to get out of the way and let innovation and competition reign.

Commissioner Pai, do you think regulating the Internet under Title II is getting out of the way and letting innovation and competition reign? Can you describe what's been happening in terms of innovation investment in broadband and Internet after this rul-

Commissioner PAI. Thank you for the question, Senator. I do not think it is getting out of the way of innovation investment, and the agency itself didn't think that until November 10, 2014. I think what we've seen in 2015 is the fact that among both major wireline broadband providers and small providers that investment in innovation is slowing. For example, we've heard from a number of small wireless ISPs, one of whom testified to Congress just last month that she is shelving plans to upgrade her network in rural Arkansas to serve her customers precisely because of the uncertainty and the burden posed by these regulations.

Among major providers, we have seen the first ever decline in broadband wireline investment in the Internet age, outside of the tech bubble bursting in 2001 and the great recession in 2008. Now, I think that it is telling that some of these major companies are now spending billions of dollars on companies like AOL or even putting their investments abroad, and that's because, presumably, they think the return on the investment is now greater in areas outside of the broadband infrastructure. That's an unfortunate

thing for the American consumer.

Senator JOHNSON. So, possibly, with a little bit more public notice, a more robust record, maybe we would not have gone down

what I think is a very harmful pathway.

Commissioner Pai. I think the internal documents in your report prove that. If you look at the report, e-mail after e-mail suggests the FCC career staff-and I once was one of them-said, "We do not believe that there's adequate notice for all of these separate areas." Nine separate aspects of the plan were thought to be lack-

ing in terms of the public input.

Chairman WHEELER. With all due respect to my colleague, what he has just portrayed as facts are not. Investment is up, and I can quote you from the statements that the companies themselves make when they are reporting to Wall Street, because I have it here. Fiber is up 13 percent over last year. Usage of the Internet is up, and that has driven what you want to be up, which is increased revenue per subscriber for the Internet companies in the last year since the Open Internet Order took place. So I would just suggest that the representations that we've heard are not necessary factual.

Commissioner Pal. But you're not challenging the assertion there were nine aspects of this rulemaking that had a thin record.

Chairman Wheeler. No. What I—— Commissioner Pal. Your own staff said that. You're not chal-

lenging that.

Chairman Wheeler. I'm challenging his assertion about the effects, and I'm saying insofar as the record is concerned, we worked with the staff, and the job of the staff is constantly to say, "Hey, there are issues you need to address." And one of the reasons that I pushed pause was to make sure we addressed all the issues.

Senator JOHNSON. I'm out of time.

Commissioner Pal. So, Senator—well——

Senator Johnson. Mr. Chairman, can Commissioner Pai re-

spond?

Commissioner PAI. With the indulgence of the Chairman, so it's telling that on one hand, we are saying that all this investment is up, infrastructure is booming. Yet on the other hand, just 1 month ago, the Chairman and a majority of the Commission said that broadband is not being reasonably and timely deployed pursuant to Section 706. Which is it? Is broadband infrastructure broken, or is it not? I submit to you—

Chairman Wheeler. Thirty-five million Americans that don't

have enough——

Commissioner PAI. I would submit to you that part of the reason why it is not, part of the reason why I agreed with the Chairman and my colleagues that broadband is not being reasonably deployed in a timely way, is precisely because the FCC's policies have failed. This administration's policies on broadband have failed, and that's part of the reason why we see this decline in broadband infrastructure investment.

There's a reason why Google, for example, has a greater market capitalization than every cable company in the United States combined. It's no accident that the regulatory infrastructure we have built is now depressing broadband investment.

built is now depressing broadband investment.

Chairman Wheeler. We are not seeing a decline in broadband infrastructure investment. You can say it and say it, but

it doesn't make it a fact.

Commissioner PAI. The facts speak for themselves, and I'd be happy to submit the sworn declarations from numerous ISPs for the record.

Chairman Wheeler. I'll be happy to submit the information that the companies provide under penalty of SEC to their investors about their investments.

Commissioner PAI. I'll simply say it's striking what CEOs with pending mergers before the SEC will say about the SEC's top priorities.

Chairman Wheeler. I'm talking about AT&T and Comcast and companies like that.

Commissioner PAI. Who are typically repeat players before an agency that regulates them highly.

Senator JOHNSON. Thank you, Mr. Chairman.

The CHAIRMAN. This is good stuff, Senator Johnson.

[Laughter.]

Senator JOHNSON. Appreciate it. Happy to oblige.

The CHAIRMAN. Let's bring it back to the Green Bay Packers.

Senator JOHNSON. I think I've done my work here.

The CHAIRMAN. All right. We have next up Senator Gardner.

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

Senator Gardner. Thank you, Mr. Chairman, and thank you to the witnesses. And if this were on Denver TV, I'd love for the four corners to have been able to—

[Laughter.]

Senator GARDNER. Got that one in. Again, thank you to all of you

for being here.

The Federal Government owns an extremely high number of valuable spectrum—a lot of extremely high valuable spectrum—but many of us have no idea what the exact commercial value of that spectrum is today. Some spectrum currently owned by the Federal Government may not be useful to them but could be extremely useful to the commercial market. Unfortunately, we just don't know the economic opportunity cost of that spectrum until it's valued by somebody.

Commissioner O'Rielly, would you be supportive of the NTIA in consultation with the FCC and OMB helping to determine the annual economic opportunity cost of spectrum in the Federal Government's possession and follow that up with, in essence, basically supporting finding the actual dollar value of spectrum if it were to

be used for commercial purposes?

Commissioner O'RIELLY. So some of that would require Congressional changes in law, and so I would leave that to your capable skills. But in terms of the theory and the concepts, I would. I have advocated to not only determine the opportunity cost, but we actually ought to put it onto the budget of the agencies, not on the private sector, but on the agencies themselves so they have an opportunity cost.

So it's both the carrot and the stick. My colleagues have favored good ideas on the carrot side. I want to be on the stick side as well. I think you need both parts to make it effective.

Senator GARDNER. Commissioner Pai?

Commissioner Pai. I agree completely with Commissioner O'Rielly on that.

Senator GARDNER. Thank you.

Commissioner Rosenworcel, as you may know, I, along with Senator Mark Warner from Virginia, have introduced a bill earlier this week that would create a 16-member Commission to study the encryption issue. There are many complex issues confronting our country today when it comes to encryption, namely, how do we ensure that our citizens' privacy is protected while ensuring that we don't create a safe harbor for terrorists and bad actors to communicate with one another?

Do you believe this is an area where we need to get bright minds together from law enforcement and the private sector to discuss how we move forward with encryption and technology and all the concerns that come along with it?

Commissioner ROSENWORCEL. Yes, I think it's a smart way forward.

Senator GARDNER. Thank you.

Chairman Wheeler?

Chairman Wheeler. Yes, sir. Commissioner O'RIELLY. Yes, sir.

Senator Gardner. Thank you. Chairman Wheeler, as you know, failed retransmission consent negotiations have resulted in temporary blackouts negatively impacting television viewers across the country. The FCC has undertaken a review of the totality of circumstances test for retransmission consent negotiations after Con-

gress directed your agency to do so in the 2014 STELAR legislation with the hope that we can reduce the amount of such blackouts.

Can you provide the Committee today with any indication of when the FCC plans to complete the current totality of circumstances proceedings?

Chairman WHEELER. Thank you, Senator. We're on course and speed to maintain—to achieve the date that you established in the

legislation.

Senator Gardener. Very good. When it comes to additional spectrum and spectrum pipeline issues, the last auction scheduled, obviously, is this year, and we all know it's not going to produce enough spectrum availability that will satisfy consumer needs. In fact, industry has said that mobile data traffic will be over 600

times greater next year than it was just 10 years ago.

Further, we are moving toward a 5G world that we've talked about today, where we'll be able to do things we never thought we had the possibility to do with speeds we never thought imaginable. We'll be enhancing the way kids learn, speeding up our financial transactions, taking telehealth to the next level. But we need more spectrum to achieve this, and I think we're all hoping that the FCC moves forward in a positive direction. So my questions are these.

Commissioner O'Rielly, what else can we be doing in Congress to free up more commercial spectrum? We've talked about some of the ideas. But if you'd like to outline some more, how do we create incentives for the Federal Government to give up their unused spec-

trum?

Commissioner O'RIELLY. So I talked about not only opportunity cost, estimating opportunity cost, but putting the burden on the budget as well. But there are a number of things that we have to do. We have to work smarter and get a better response from the Federal Government agencies. I know it has been difficult to deal with. I spent 20 years working with them.

It is a tough slog, but we need to have better direction from them. Part of the difficulty is that NTIA itself represents the agencies and not necessarily the best interests of spectrum policy, and I think we ought to think about changing that mission as well. And then in terms of things that will help on Federal lands, I know there are a number of things that the Committee is considering on siting facilities on Federal lands, and I think that would be extremely helpful.

Senator GARDNER. Very good. I know Senator Klobuchar and Senator Daines are working on—as I am as well as a sponsor of that—the One-Dig bill. After yesterday's Super Tuesday results, we may just want to have it called the Keep Digging bill. I don't know.

[Laughter.]

Chairman Wheeler. Can I add one thing? One dig, one climb, one siting. That's what we need, so that it's not just—you don't dig up the streets a lot. But you need to climb the pole once, and you need to have siting on this antenna once. And all those put together are things that I think we are all in violent agreement on here but could definitely use some legislative help on.

Senator GARDNER. Well, I dig it. So that's good. And I want to thank the broadcasters for working hard to find a solution to some of the problems we've had in southwestern Colorado, the four cor-

ners. I know they've been working hard to find a solution for La Plata and Montezuma Counties to this issue of whether or not southwestern Colorado can receive Colorado broadcasters.

The two counties did get the Broncos this year, which was incredibly important this season. But they did not have access to Colorado weather or news, and we've got to fix that. I know the FCC has adopted rules to allow counties to petition the FCC for state signals, and I thank you for that. But what more can you be doing to ensure that all Coloradoans get Colorado broadcasts?

Chairman Wheeler. Are you addressing that to me?
Senator Garden. Yes, please.
Chairman Wheeler. Moving with dispatch. We were frequently up here—and Commissioner Rosenworcel was a real champion on this issue. We were frequently up here saying, "But wait a minute. There's a hole in the law." You fixed the hole in the law. You passed the ball to us, to keep the football analogy going. You passed the ball to us. It's up to us to move with dispatch.

Senator Gardner. If anybody else would like to comment on

that, feel free.

Commissioner Rosenworcel. I might be the only person here who's been to La Plata and Montezuma Counties.

Senator Gardner. Thank you for that.

Commissioner Rosenworčel. So I'm just going to point that out. And I spoke with people there who said in 15 years, they never saw the Governor of their state on their television one time.

Senator Gardner. They may regret that if it changes. I don't

know.

[Laughter.]

Commissioner Rosenworcel. Well, I think the point stands that they deserve to have access to local news, Colorado football games, and generally feel like they're part of the state. So we should work with this market modification process that you made available to us in the Stellar Reauthorization Act to try to make that happen.

Senator GARDNER. Thank you, and thank you for being there as

Anybody else? I know I'm out of time, Mr. Chairman.

[No verbal response.]

Senator GARDNER. Well, thank you.

The CHAIRMAN. All right. Thanks, Senator Gardner.

Senator Daines and then Senator Peters.

STATEMENT OF HON. STEVE DAINES, U.S. SENATOR FROM MONTANA

Senator Daines. Thank you, Mr. Chairman.

Thank you all for being here today. It's exciting to hear you all talk about the new technologies and how the U.S. can truly remain a leader in innovation. I know we chatted a little about over-building, about efficiencies, and so forth, and thanks for the support, too, on the Dig-Once amendment. I think that's a step forward, and, Chairman Wheeler, your enhancement of that is something we ought to be looking at as well, to expand that.

Chairman Wheeler, you've often talked about the need to make sure that the Universal Service programs are well managed and they're efficient. I certainly agree. But then I see the Commission awarding money to entities and areas that already have access to fiber, perhaps some over-building, some redundancies, insisting we upgrade speeds in urban areas, while certainly for many of us who are looking and representing rural areas, we are underserved.

Can you really say that that is an efficient use of Universal Service Funds? And should the Commission be focusing on areas that have no connectivity, like many areas in Montana, and for mem-

bers here in this committee?

Chairman WHEELER. No and yes. So no, it is not an efficient use of funds to subsidize competition, and that's not something that should be going on. Can we do something about it? Yes, and I believe we are.

Now, just one of the issues that I know you and I have talked about and other members of the Committee is the Mobility Fund, and we're going to come out with a new proposal for how we fill—what did you call those—the high-fat doughnut holes or something?

Commissioner Pai. Unhealthy.

Chairman Wheeler. Unhealthy doughnut holes. But we've got to do that in a way that does not subsidize the doughnut where there is competition, because we've got, for instance, at least four licensees who are not covering that doughnut hole. We want to make sure that we support one of them, one, to fill the hole, but not to take that money and compete with the others around, and that's going to be an art form. But that's something that we're hard at work at.

Senator DAINES. And that's important for rural states where we are depending on—our small businesses are truly the backbone. I had that experience myself in the software business in Montana. A lot of the Commission's recent proposals from Net Neutrality rules to the set-top box proposal seem to disproportionately impact small businesses who do not have hallways full of compliance staff.

In fact, I hear more than anything else from small business owners about the compliance burdens that they routinely face. And I want to thank, by the way, four of the Commissioners here who have been to Montana, I think, in the last 6 months. I think we could put you on the payroll for the Montana Chamber of Commerce. So you get the quality of life draw and how that's an important part of how we can drive this economy.

Commissioner O'Rielly, you visited Montana, and you had the opportunity to see firsthand how small business owners contribute to the state. Many of these businesses only have a handful of employees and do not have armies of lawyers to wade through the thousands of pages of regulations. Do you agree to a reasonable—to exempt small businesses from some of these regulatory burdens such

as the enhanced transparency rules?

Commissioner O'RIELLY. Absolutely, and I know you have legislation on this front. I know there was legislation considered in the House on this front. My colleague, Commissioner Pai, and I have articulated a viewpoint that this should have been addressed by the Commission. It wasn't sufficiently, in our opinion. This should be something we can do, and your legislation would adequately and properly address this.

Senator DAINES. Commissioner Pai, is that common sense, to try to kind of stratify this to a certain degree in terms of—I mean, it's

an overused term in DC about one size doesn't always fit all. But I think that makes sense for these small businesses.

Commissioner PAI. Particularly on this issue, Senator. Both the Obama administration, the Small Business Administration, and literally every person who submitted a comment or a reply comment in our record suggested this burden was undue and that the agency should relieve them of that.

Senator Daines. Commissioner Rosenworcel?

Commissioner ROSENWORCEL. I agree with my colleagues here to the right. This is something we can do at the agency. We have exempted small businesses from the enhanced transparency rule for the next year. But I think it would be useful if the agency contemplated a longer or permanent exemption.

Senator DAINES. It's regulations and uncertainty. That's the one-two punch. So thanks for that added piece on trying to provide

some certainty here for our small businesses.

I want to pivot over to broadcast. Chairman Wheeler, you've clearly prioritized unlicensed spectrum in the upcoming incentive auction. Under the current proposal, it's not clear that some low-power stations and translators will even be able to stay on the air. This is a big, big deal, certainly, back home.

What assurances can you give to these small businesses who may be forced off the air and to the Montana communities who rely on translators to receive the broadcast signals, including the Denver

Broncos?

Chairman Wheeler. Thank you, Senator. As I indicated before, we don't really know what the auction is going to produce. I think that the impact in areas like Montana will be different than the impact in other parts of the country, and that's a saving grace for you.

But what we have done is to say that for low-power television, we will make special efforts, even though it was never addressed in the statute, and, specifically, there was no priority or dealing with the low-power challenge. We said we will help them find new channels. We will help them share, and, in fact, that sharing may even end up with Class A status.

I mean, this is something—we've heard you loud and clear. I know that it is a matter of angst, because people don't know until they know. But when we all know, we are ready to spring to action.

Senator Daines. Thank you. Angst is a good word. Scared to death also describes it back home in Montana. Thanks for your concern for that, Chairman Wheeler. I appreciate it.

The CHAIRMAN. Thank you, Senator Daines.

Senator Peters?

STATEMENT OF HON. GARY PETERS, U.S. SENATOR FROM MICHIGAN

Senator Peters. Thank you, Mr. Chairman, and thank you to each of the Commissioners for being here today and for your tremendous leadership each and every day.

Chairman Wheeler, I certainly enjoyed our recent discussion in my office regarding the testing plan which the FCC is leading with the Department of Transportation, the NTIA, to determine whether the 5.9 Gigahertz band can be opened for shared Wi-Fi use, and, as you commissioners have heard me say, how important this is for our auto industry, in particular, for saving lives, where we know that these applications will save tens of thousands of lives, and we're on the cusp of having some real cutting edge technology in

So we want to make sure we do it right and certainly move forward with due speed but also with an understanding of how important this technology is as a lifesaving technology. So I look forward to continuing to work with you as we ensure that the three-part testing plan is executed both completely and on schedule as well.

But I want to talk today a little bit about some of the challenges that Michigan faces, in particular, northern Michigan and our upper peninsula, when it comes to rural broadband access. I hear from constituents who have great skills to contribute to that part of our state. They are working in tech industries. They are in the automotive advanced manufacturing fields. But they'd love to go up to God's country in northern Michigan and our upper peninsula because of the incredible quality of life there, but they can't because their livelihood depends on having reliable broadband access.

So I was pleased that AT&T, Frontier, and Century Link have accepted over \$60 million annually to expand service to some of the most rural parts of my state as part of the Connect America Fund, Phase I. But I think we are all aware that the work is far from over. I think it's critical that the FCC support mobile broadband as part of the Connect America Fund, Phase II, and should strive to be technology-neutral when making awards so we have a better

shot at innovating our way out of this problem.

But perhaps as a threshold matter, we need to ensure that the FCC has the best available data to base its multimillion dollar funding decisions. I was pleased to join a number of my colleagues yesterday in a letter led by Senator Manchin and Senator Gardner that asks the FCC to work with the FCC and industry to address the shortcomings in the existing coverage data. If we continue to rely on a map that overstates coverage, we're not going to close the rural gap, and we're going to waste an awful lot of money while trying to do that.

A nonprofit in my state, Connect Michigan, initially received Broadband Technology Opportunities Program, the BTOP, funds under the Recovery Act to develop an accurate and up-to-date statewide broadband map that served as an invaluable resource for residents wanting to know the speed, price, and technology base of the broadband service available to them, but also to serve the provider industry when looking to determine what those coverage gaps

Connect Michigan then supplied that information to the Federal Government for inclusion in the national broadband map. But those funds have now dried up, and Connect Michigan is piecing together funding and attempting to forge new partnerships to keep their critical operations going.

So my question to you, Chairman Wheeler, is that I realize that some states where BTOP-supported broadband data collection and mapping efforts may have been more successful than others. But I am concerned about the sufficiency of solely using data supplied

by carriers to fill in the national broadband map rather than a more granule state-collected data that we have used in the past.

I know the FCC is doing work now to collect Form 477 data to prepare it for inclusion in the national broadband map. Do you think the Form 477 data will prove to be more accurate than previous data collection efforts by states and independent third parties?

Chairman Wheeler. Thank you very much, Senator. The answer, in one word, is yes, but we need to think about this through a step-wise process. The first cut at coverage was one of the coverage maps that the carriers use, that we see in their advertising. That didn't work, because that's an optimal. That's our franchise. That's our license area.

Second, then, we went out and had folks do drive tests, and that worked in areas where there were roads, or, at least, main roads, but didn't work in rural areas. Now, what we're trying to gather is information out of the Form 477 that is much more granular in that regard. The reports I'm getting is that we are.

Now, there's one big problem, however. We have been denied funds for the national broadband map for the last two fiscal years. So we can't—there is no national broadband map that is up to date. We've requested it, and the appropriators have axed it. We are looking for other solutions, but that's kind of the reality we find

ourselves in.

Senator Peters. Well, to try to get more data, one suggestion with broad support was for Federal agencies to work together to create an accessible open inventory of assets as well to bring in more data.

Chairman WHEELER. Yes. Right.

Senator Peters. And I want to commend Chairman Thune for including in his MOBILE NOW legislation language that would create a Federal infrastructure asset data base. But I think it's important that the Committee also consider the value of further incentivizing states and local governments to participate in that database. In fact, I have sponsored an amendment to the MOBILE NOW bill that would ask agencies involved to complete a report on this issue, and then report back to this committee within a year.

Chairman, do you agree that we would achieve a more comprehensive and accurate understanding of where our broadband infrastructure assets are in the United States if such a database not only included Federal assets but also those owned by state and

local governments?

Chairman WHEELER. You cannot manage it if you cannot measure it, sir. I am for all the more data we can possibly get.

Senator PETERS. And a strong supporter of that amendment. Thank you so much.

The CHAIRMAN. Thank you, Senator Peters.

I think up next, we have agreement here for Senator Klobuchar to go next.

STATEMENT OF HON. AMY KLOBUCHAR, U.S. SENATOR FROM MINNESOTA

Senator Klobuchar. Well, thank you. I'm just going to do just 2 minutes, and I appreciate Senator Sullivan letting me go ahead.

I understand the Commission is close to finalizing action on an order to address a standalone broadband issue, and Chairman Thune and I have advocated for this, and I want to thank you for that.

Just really quickly, Chairman Wheeler, how do you expect standalone broadband support to drive rural broadband development?

Chairman WHEELER. I'd like to say through the roof. I think that it is going to be very significant, because one of the things that we all three agreed on is that we have to make sure that the money is not just going into the market, but it is going to the broadband holes in the market and it is filling those areas that today aren't served with broadband.

Senator Klobuchar. Very good. And as you know, I've been a strong proponent of dig-once. We're trying to work something out with this committee. Do you think that dig-once policies are a sensible way to try to facilitate broadband deployment? Does anyone want to take that?

Chairman WHEELER. Yes, ma'am. Can I use the line that I used while you were out? We need dig-once, climb-once, site-once.

Senator KLOBUCHAR. Very good. All right. The other questions I'll put on the record. One is on the Charter-TWC merger and just concerns Senator Lee and I have raised from the content viewpoint. I know you can't comment, and I appreciated the Commissioner bringing up the bill that we have on the 911 system that Senator Fischer and I have introduced with some other Senators as well.

And I always appreciate the Commissioners' work on the dropped-call issue and the rest of you as well. That continues to concern us in Minnesota. So I really appreciate it.

Senator Sullivan, your indulgence—thank you very much.

The CHAIRMAN. Thank you, Senator Klobuchar. You did that in under 2 minutes. Very impressive. It can be done.

Senator Sullivan?

STATEMENT OF HON. DAN SULLIVAN, U.S. SENATOR FROM ALASKA

Senator Sullivan. A good example of bipartisanship on the Commerce Committee here.

Well, thank you. I appreciate the Commissioners coming and testifying today. As you have heard, there has been a lot of discussion focusing on the challenges of rural states. I think Senator Daines' point, the effect of regulations on small businessesses in states is a big one issue that you're all aware of. I think you all know that in Alaska, those issues are magnified because a lot of our communities don't even have roads that connect each other, let alone telecommunications. So I appreciate the focus of all the Commissioners on these issues.

Mr. Chairman, Commissioner Rosenworcel, I know that you've been up. Have the other commissioners been to Alaska? Can I get just a——

[Show of hands.]

Senator Sullivan. Great. Good. Well, we'd love to have you back. I really appreciate—seriously, you can talk about, you know, distance. Senator Wicker was going through the list of rural states in

his questions. He forgot us, and I was kind of thinking that we have boroughs in Alaska that are bigger than Mississippi.

[Laughter.]

Senator Sullivan. No offense to Senator Wicker. Anyway, let me follow up on a couple of Alaska-specific questions, and then I want

to try and, address a couple of national issues.

Mr. Chairman, your visit spurred our wireline and wireless carriers to work together with the FCC to address some of the unique challenges that we have in Alaska. And, as you know, these carriers are making progress on expanded wired and wireless broadband capabilities, but they need certainty to continue these very costly deployments. As you know, some of these deployments

are very costly.

As you and I have talked about recently, I am disappointed that you're not considering the comprehensive universal service plan proposed by Alaska's carriers, to what we're now referring to as the Alaska Plan, at the same time as the national rate of return order. Can you assure me today—and I'd like this from all the Commissioners, if possible—that the Commission will act on the Alaska Plan for rural wireline and wireless services within 60 days of adopting the national rate of return order, just so we have some certainty on that issue?

Chairman Wheeler. Thank you, Senator. I've got it on the schedule for the second quarter. I hope that we adopt the rate of return order yet this month. I'm trying to do quick math—that moves us into early second quarter. It may be more like mid second quarter, but I intend to have this before my colleagues in the sec-

ond quarter.

Senator Sullivan. So no later than second quarter?

Chairman Wheeler. Yes, sir.

Senator Sullivan. Can I get that from all the Commissioners?

It's a very important issue for my constituents.

Commissioner ROSENWORCEL. Yes, and I'll also point out that in the current rate of return decision we have before us, I've actually asked for the Alaska issues to be addressed right now.

Senator Sullivan. Well, I appreciate that.

Commissioner ROSENWORCEL. Recognizing there's rural and then

rural Alaska, which are two different things.

Senator Sullivan. Well, that would be ideal. But if we can—and you and I have talked about it, Mr. Chairman-that would be the best kind of second order effect, if we can get a no-kidding, second quarter, you know, drop-dead date in terms of certainty is very important.

Chairman Wheeler. No kidding, yes, sir.

Senator Sullivan. Right. Can I get that from all the other Commissioners? Just a yes or no on that, as to your commitment.

Commissioner Pal. Yes.

Commissioner O'RIELLY. Yes, absolutely.

Commissioner Clyburn. Absolutely.

Senator Sullivan. Great. Thank you. Going back to certainty again, Senator Peters talked about the Connect America Fund, Phase II. And, again, although that deployment started for Phase II last September, the FCC has yet to publish an order for Alaska's price cap carrier who submitted a detailed plan over a year ago for using CAF 09II support to deploy broadband to the thousands of unserved Alaskan households there.

Can you provide me a timeline when you think the Commission is going to complete its work setting up the terms of a CAF Phase II for the Alaska price cap carrier?

Chairman WHEELER. Yes, sir. In my thinking, the two are rolled

together, and these are both second quarter.

Senator SULLIVAN. Is that—again, I don't need to get it from everybody, but if the Chairman agrees that that's a timeline, I think that's important.

Commissioner Rosenworcel. Yes.

Commissioner Pai. Yes.

Commissioner O'RIELLY. Yes.

Senator Sullivan. Great. Let me ask just a—this is kind of broadening out.

Commissioner O'Rielly, I know you've been focused on a couple of the issues. I just want to ask in a final question—but, really, any of the Commissioners can mention it.

Commissioner Rosenworcel, you mentioned this, actually, in your testimony.

But the issue of streamlining the infrastructure permitting process clearly impacts Alaska, particularly on Federal lands, of which we have—you know, over 60 percent of our lands are Federal. But it's really important, as you know, to encourage and deploy new technologies, to not burden them.

Can you give us a sense—first of all, is there consensus on the Commission that this is something that we need to do? It seems to me it's kind of a no-brainer, and yet the challenges of this broader infrastructure deployment issue—we would be very, very interested in your suggestions on how to streamline the permitting process so we can make sure that—you mentioned earlier in your testimony, that the infrastructure on the ground gets built in time so the technology is not moving way past it.

So I welcome any thoughts that you might have on this broader issue, which I think is not just an issue for Alaska. I think it's an issue for the whole country, particularly for rural states, who are represented on this committee, and have a lot of Federal land as well.

Commissioner O'RIELLY. Yes, Senator. So I have put forward a number of different ideas I think will be helpful to facilitate infrastructure building and deployment going forward. I will just highlight with you a number of things we can do at the Commission and are doing, and we are pushing the envelope and the legislation that this Congress has approved in the past.

But I would suggest to you that the flip side of this is it may require more legislation and it may require more preemption, which I know is not a great word to use for folks in the Senate. But it is something that is probably going to be necessary. When you're talking about small cells identification, it is work that's going to be necessary.

And we've had localities—I referenced one in the speech in Florida—where they put up a monopole, and a couple of weeks later they made the company pull the monopole down. So, I mean, either you want broadband or you don't. We all agree that we want it, so

we're going to have to figure out to get the infrastructure out there, and that sometimes displaces locality decisions.

Senator Sullivan. Commissioner Rosenworcel, on the issue of

Federal lands, you mentioned-

Commissioner Rosenworcel. Yes, Federal lands are one-third of our national real estate, and they are some of the slowest places to deploy broadband. I know in the Middle Class Tax Relief and Job Creation Act, this committee had a section that required Federal authorities to have a master contract for deploying infrastructure on Federal facilities.

I think the next step, if I could ask this committee to take it, would be to actually require Federal authorities to use that contract. It's the missing piece. And were we able to do that, we would be able to harmonize those contracts on one-third of our national real estate.

Senator Sullivan. Then you don't have the preemption issue, obviously.

Commissioner Rosenworcel. Exactly.

Senator Sullivan. Thank you.

Thank you, Mr. Chairman.
The Chairman. Thank you, Senator Sullivan.

Senator Blumenthal?

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

Senator Blumenthal. Thank you, Mr. Chairman.

Everybody on this panel has provided very distinguished service to our country. Thank you for that service and for being here today. All of you, I know, are familiar with the abuse of cramming, which is the unscrupulous practice of wireless carriers allowing third parties to add charges on monthly bills without authorization or even consent or knowledge sometimes of consumers.

Commissioner Rosenworcel, I want to thank you for your visits to Connecticut, your native state, and Hartford to join me several times to discuss this abuse and to announce refunds that are going back to consumers as a result of the Commission's good work.

At the FCC hearing about a year ago, I raised the mobile cramming issue and asked several of you if you would commit to initiating an FCC rulemaking to apply the conditions of these consent decrees to the whole market, which I think are very important to protecting consumers long after the consent decrees expire. The consent decrees are good, but all carriers should be required to protect consumers from deceitful practices and stop anyone from profiting from them.

So I'd like to ask each of you again to open a rulemaking on wireless cramming and ask whether you will commit individually to that rulemaking.

Commissioner Clyburn?

Commissioner CLYBURN. Yes, I would be open to any framework that will allow customers to gain control and for us to have more tools at our disposal to protect them. It's a very serious issue, as you mentioned. So ves.

Commissioner O'RIELLY. I am in favor of more specific rules on cramming rather than relying on other provisions in the act, and I've raised that in a number of different items. I believe it's very important to have—we've had the opportunity and just haven't done it.

Commissioner PAI. Senator, to be clear, the power to initiate the rulemaking resides first and foremost with the Chairman. So if and when he presents a proposal for us, I'll certainly give it the careful

scrutiny that it deserves. This is a critical issue.

Commissioner ROSENWORCEL. Yes. Thank you for giving me the opportunity to appear with you to discuss this back in my home state. Cramming is fraud. It's digital age pick-pocketing, and it's good that we've had consent decrees with carriers that have allowed it to occur. But it would be a lot better to prevent it from occurring in the first place.

Senator Blumenthal. Mr. Chairman?

Chairman WHEELER. Yes.

Senator Blumenthal. If I may ask you, Chairman Wheeler, is there a factor that's holding back the beginning of rulemaking?

Chairman Wheeler. Not really, sir. I mean, this is, frankly, a resources and timing issue. I would point out, as I know you are well aware, you know, that we took an enforcement action on this against four major carriers for about a quarter of a billion dollars, most of which went into consumers' pockets, not into any treasury anyplace. So we are vigilant on the issue.

And the interesting thing is that you can do that absent a rule because the statute is clear. But if there is a need for rules as well,

then we ought to have them.

Senator Blumenthal. And I'm well aware of those enforcement actions and commend you for that. That was the reason for the various meetings that Commissioner Rosenworcel and I had, simply to make consumers aware that they need to claim the refund.

In the short time I have left, I want to talk about the Enforcement Bureau, which I think is a critical part of the FCC. As a former prosecutor, I know that folks caught breaking the law aren't always happy about it, and they make various claims, like lack of due process, so I'm not surprised to see that happening in objections to the Enforcement Bureau catching people who break the law. I think in many instances it's really that simple.

I hear from constituents all the time about unexpected increases in their monthly cable bills to never-ending robo-calls that harass them, even thought they're on the Do-Not-Call list, to all kinds of other abuses and violations of law that the Enforcement Bureau

pursues.

So I want to commend the Enforcement Bureau for its good work and say to you—just ask you what may appear to be a rhetorical question. But, just for the record, in terms of due process, the Enforcement Bureau now provides for companies to respond or challenge a forfeiture, does it not?

Chairman WHEELER. Yes, sir.

Senator Blumenthal. And there are opportunities for companies to appeal a Commission decision to the Federal court system, are there not?

Chairman WHEELER. Yes, sir.

Senator BLUMENTHAL. And companies frequently and abundantly take advantage of that right.

Chairman Wheeler. Yes, sir.

Senator Blumenthal. And in terms of resources, could the Enforcement Bureau benefit from additional resources?

Chairman Wheeler. Yes, sir.

Senator Blumenthal. Thank you.

Chairman Wheeler. Can I just add one thing, though?

Senator Blumenthal. Of course.

Chairman Wheeler. Everybody thinks about enforcement in terms of penalties. The fact of the matter is that if you have done something wrong, there should be logical consequences. But we're also protecting those who do things right. The most anti-competitive activity that exists in the market today is when your competition cheats.

So this is not just that you need to have a logical consequence for your bad actions. This is how do we make sure that the good guys aren't being penalized by the actions of the bad guys. So en-

forcement is a very important pro-competitive tool.

Senator Blumenthal. And I think you have just made one of the central points about consumer protection, because the good guys are the vast, vast majority of businesses. What these rules do laws, regulations, rules—is essentially protect good guys in business from the unfair competition of people who break the law to try to cut corners and, thereby, cut costs and undercut their competition.

So in a certain sense—and I made this point about antitrust enforcement, about consumer protection enforcement. It is in a longterm sense pro-business, pro-jobs, because it enables people who play by the rules to have a level playing field. And I think that, of course, wise enforcement depends on wise enforcers and the Enforcement Bureau having enough resources to make good decisions about how to enforce the law. But I think your central point is very well taken. Thank you.

The CHAIRMAN. Thank you, Senator Blumenthal.

I think Senator Nelson has a question.

Senator Nelson. Just a quick question. Given the fact that the most important call that a person may make is 911, tell me what your plan is on the next generation of 911 and what you think we should do.

Chairman Wheeler. Thank you, Senator. I think we have taken the 911 issue about as far as our authority takes us, and it now comes to this Congress. We have just sent to this committee the recommendations of a year-long task force on next-generation 911. It is my understanding that the 911 providers themselves are in the process of specifically turning that into here's what is needed in terms of specific legislation.

But I fear that this is something—I was involved in the 1999 "911 Act" that made it a national number. I think it's going to take

once again Congress stepping up with a national policy on 911.

The CHAIRMAN. Thank you, Senator Nelson.

The only thing standing between you all now and a restroom break is Senator Markey and myself.

So, Senator Markey, do you have some followup questions? Senator MARKEY. I like the sequencing, and then it's just you. The CHAIRMAN. That's right.

Senator Markey. So I like that.

[Laughter.]

Senator Markey. Thank you, Mr. Chairman.

On February 26 of last year, we opened the next chapter in the history of American innovation, and that's because on February 26, what will always be known as Internet Freedom day, the FCC stood up for Net Neutrality and reclassified broadband service under Title II of the Communications Act. It was a major victory for consumers, for our economy, and for democracy, because that day was a day when the FCC stood up for the best ideas, not merely the best funded ideas, and we thank you for being on the right side of history.

So what happened in 2015, then, in the United States as the FCC promulgated those Net Neutrality rules? Well, nearly 68 percent of all venture capital funds invested in the United States went toward Internet-specific and software companies in 2015. So con-

gratulations, FCC.

You created this engine of innovation and capital flow into these new companies, the smart companies, the innovative companies, and it's clear that the FCC got this right. There's a lot of other places you can put venture capital money, but when 68 percent of it, following your decision, goes toward that sector, then we've got what young people in colleges and graduate schools all across America want to do. They want to continue to innovate, and what you have done is make it a lot easier for them to do so.

So what I'd like to do, then, Mr. Chairman, if I could, is just ask you a couple of questions. The first is: Is it unusual for an inde-

pendent agency to communicate with the White House?

Chairman Wheeler. No, sir.

Senator Markey. Is it typical for an independent agency to communicate with the White House?

Chairman Wheeler. Communicate with the White House, Congress, and everybody.

Senator Markey. Have other presidents weighed in on FCC rule-making since the FCC's founding in 1934?

Chairman Wheeler. Yes, sir.

Senator MARKEY. Do you have any lists of those that come to your mind that you think might have acted during that time?

Chairman WHEELER. Well, I happen to remember one time when President Reagan called Chairman Fowler to the Oval Office, and I remember that story, because I happened to be around at that point in time.

Senator Markey. I remember that story very well, and I don't begrudge President Reagan wanting to do that. But I do remember that extremely well. I didn't agree with Chairman Fowler on much, but I did appreciate the fact that the president can talk to someone serving during his administration.

Did the FCC follow the process used by both Democrat and Republican Commissions when crafting the Open Internet Order?

Chairman WHEELER. The process has remained unchanged, Senator.

Senator Markey. So I want to make clear the FCC has done precisely what Congress intended the Commission to do, classify broadband Internet access service according to its best under-

standing of the technology of that day and how consumers use that technology. I am confident that that is how you are proceeding, and

I thank you for that. I thank the Commission for that.

I'm also pleased with the recent steps that the FCC has taken to increase consumer privacy protections. As part of the Commission's correct decision last year to reclassify broadband under Title II, the Commission wisely chose to apply Section 222 to broadband, extending the duty to protect the privacy of information that Internet service providers collect about their customers because of the unique carrier-customer relationship. I believe an ISP has a duty to protect the privacy of consumers who use the company's wired and wireless infrastructure to connect to the world.

Senators Booker and Blumenthal and I have written to the Commission urging the Commission to initiate a rulemaking to protect the privacy of consumers who use the broadband. And I do believe you should have a comprehensive definition of customer proprietary network information, ensure transparency, require consumer consent if the information is going to be reused so their privacy is protected, and protect consumers' information by requiring ISPs to

implement strong data security measures.

Ĉan you give us some idea, Mr. Chairman, when you plan on

moving forward on rulemaking on broadband privacy?

Chairman Wheeler. I hope it's very soon, and that includes this month.

Senator Markey. That includes this month. Excellent. I also sent you with other Senators a letter on the proposed acquisition of Time Warner Cable and Bright House Networks by Charter Communications. My hope would be that the Commission would look at it, ensuring that the guiding principles are competition, competition, competition, as you have said repeatedly, Mr. Chairman, and that you ensure that it gets the kind of review that ensures that the proper protections are in place for the competitive marketplace, which we need.

Chairman Wheeler. Thank you, Senator. Senator Markey. Thank you, Mr. Chairman. The Chairman. Thank you, Senator Markey.

I have just a couple of final points I'd like to make. One is I want to say, as I mentioned earlier, that this committee will be marking up the bipartisan MOBILE NOW Act tomorrow, which will help advance wireless innovation and deployment. A key provision of Ranking Member Nelson's and my bill focuses on the high frequency millimeter wave bands that are going to be critical for next-generation 5G wireless services.

So our legislation intentionally builds upon the good work that the Commission is doing in its Spectrum Frontiers proceeding. So I was glad to hear earlier today that Chairman Wheeler expects

this order by summer.

Chairman Wheeler, you've been quoted as saying that in the year that you have left in this job, every time that you appear before the Congress, the number one item that you will talk about is the absolute necessity of Congress dealing with the issues in next-generation 911. That's a quote. And, actually, that was your prepared testimony. I think it follows up on that intent.

Chairman Wheeler. Yes, sir.

The CHAIRMAN. We've also recently seen an increase in organized stakeholder advocacy on this issue, which echoes your concerns. Will you be receiving—let me rephrase that. You will be receiving questions from the Commerce Committee in the coming days as we look more deeply into this issue. So the question is: Do I have your commitment that you will cooperate with this committee by responding fully and in a timely manner?

Chairman Wheeler. You bet. Yes, sir. The Chairman. Very good. Thank you.

Senator Cantwell was on her way, racing back over here. But I don't think she's going to make it.

So thank you all very much for your time today. I know it's been a lengthy hearing, but a lot of our members, as you can see, have

great interest in the issues before the Commission.

Because the Committee may take up legislation to reauthorize the Commission in the very near future, the hearing record will remain open through close of business this Friday. During this time, Senators are asked to submit any questions for the record. Upon receipt, the witnesses are requested to submit their written answers to the Committee by Friday, March 11.

swers to the Committee by Friday, March 11.

This concludes the hearing. Thank you all. We're adjourned.

[Whereupon, at 12:42 p.m., the hearing was adjourned.]

APPENDIX

RESPONSE TO WRITTEN QUESTION SUBMITTED BY HON. JOHN THUNE TO HON. TOM WHEELER

Question 1. Following the reclassification of broadband Internet access service as a Title II public utility, Chairman Wheeler indicated that the FCC will propose new privacy regulations. The Federal Trade Commission (FTC) already has extensive experience in protecting consumer privacy, and consumers and business already have experience in applying the FTC's privacy rules and precedents; the Commission has virtually no such experience beyond the very narrow confines of rules implementing Sec. 222. Why would the Commission create a new, likely inconsistent set of rules rather than adopting the FTC's privacy protections? Given that the Commission's rules will only apply to BIAS providers, isn't there a significant likelihood that functionally inconsistent set of the commission's rules will only apply to BIAS providers, isn't there a significant likelihood that functions are significant likelihood that functions are significant set of the commission o tionally identical activities on a smartphone will be governed by completely different

rules based upon who is providing the service?

Answer. The Federal Communications Commission (Commission) has a long history of protecting the privacy of consumers when using communications networks. Throughout the 1980s and 1990s, the Commission set guidelines concerning incumbent telephone companies' use and sharing of customer information. Then, in 1996, Congress enacted Section 222 of the Communications Act providing statutory protections to the privacy of the data that telecommunications carriers collect from their customers.² The Commission adopted implementing rules for Section 222 and as industry practices and consumer expectations have changed it has updated those rules. Today, the Commission is tasked by Congress with protecting the private information collected by telecommunications, cable, and satellite companies in Sections 222,3 631,4 and 3385 of the Communications Act. Consequently, the Commission has significant experience in protecting the privacy of consumers

When reclassifying broadband as a telecommunications service, the Commission chose not to forbear from Section 222. This decision was made in recognition of the need to ensure broadband customers have privacy protections. The Notice of Proposed Rulemaking (NPRM) that I circulated begins the process of adopting rules

under Section 222 for broadband customers.

The NPRM focuses on transparency, choice, and data security. This approach is consistent with the Commission's history of protecting privacy, the FTC's guidance on privacy best practices as well as its law-enforcement work, and various sector-specific statutory approaches. The NPRM is tailored to the particular circumstances that consumers face when they use broadband networks and with an understanding

of the particular nature and technologies underlying those networks.

The FTC has jurisdiction over edge providers. The NPRM, however, is focused solely on broadband networks, which are not the same as edge providers in all relevant respects. For example, consumers can move instantaneously to a different website, search engine, or app, but once they sign up for broadband service, con-

¹See Amendment of Section 64.702 of the Commission's Rules and Regulations, Final Order, 77 FCC 2d 384 (1980) (Computer II), recon., 84 FCC 2d 50 (1980), further recon., 88 FCC 2d 512 (1981), aff'd sub nom. Computer and Commc'n Indus. Ass'n v. FCC, 693 F.2d 198 (D.C. Cir. 1982), cert. denied, 461 U.S. 938 (1983); Amendment of Section 64.702 of the Commission's Rules and Regulations, Phase I, 104 FCC 2d 958 (1986); Application of Open Network Architecture and Nondiscrimination Safeguards to GTE Corp., Report and Order, 9 FCC Rcd 4922, 4944–45, para. 45 (1994); Application of Open Network Architecture and Nondiscrimination Safeguards to GTE Corp., Memorandum Opinion and Order, 11 FCC Rcd 1388, 1419–25, paras. 73–86 (1995); Furnishing of Customer Premises Equipment by Bell Operating Telephone Companies and the Independent Telephone Companies, Report and Order, 2 FCC Rcd 143 (1987), recon. on other grounds, 3 FCC Rcd 22 (1987); aff'd, Ill. Bell Tel. Co. v. FCC, 883 F.2d 104 (D.C. Cir. 1989).

^{989).} ² 47 U.S.C. § 222. ³ 47 U.S.C. § 222. ⁴ 47 U.S.C. § 551. ⁵ 47 U.S.C. § 338(i).

sumers can scarcely avoid the network for which they are paying a monthly fee. As the FTC has explained, Internet service providers are "in a position to develop highly detailed and comprehensive profiles of their customers—and to do so in a manner that may be completely invisible." 6 Broadband providers thus have the ability to capture a breadth of data that an individual streaming video provider, search engine, or e-commerce site does not.

As the expert agency on communications policy issues, the Commission is well positioned to ensure consumers have the right level of control over the information they share with their broadband provider. But, we also recognize that we have complementary authority to the FTC in this space and the Commission is determined to continue its close working relationship with the FTC. In fact, the Commission and the FTC recently entered into an updated consumer protection Memorandum of Understanding (MOU). In the MOU each agency recognizes the others' expertise and agreed to coordinate and consult on areas of mutual interest.7

Question 2. I understand that you are close to finalizing action on an order that would address the standalone broadband issue that many in Congress have written to you about over the past several years and also adopt some new limits and other measures related to universal service support for rate of return providers. Do you commit to work quickly and collaboratively with this committee and with affected stakeholders to the extent any adverse or unintended consequences arise out of the reforms?

Answer. Last year, I pledged to you and other Members of this Committee that we would bring forth a solution for the next phase of universal service moderniza-tion: reforming support for "rate-of-return" carriers. As the result of months of collaborative efforts by Commissioners Clyburn and O'Rielly and their staffs, we recently adopted a bipartisan Order to fulfill that promise.

The Order sets forth a package of reforms to address rate-of-return issues that are fundamentally intertwined—the need to modernize the program to provide support for stand-alone broadband service; the need to improve incentives for broadband investment to connect unserved rural Americans; and the need to strengthen the rate-of-return system to provide certainty and stability for years to come. The Order will help to ensure that Federal universal service funds are spent wisely, and for their intended purpose, and takes concrete steps to bring broadband This bipartisan effort was aided by the rate-of-return carriers themselves. Work-

ing through their trade associations, they engaged with Commissioner Clyburn, Commissioner O'Rielly and me in a productive manner. We are pleased that NTCA and USTA have supported the result. I look forward to working with you, the Committee staff, and all stakeholders as we implement these reforms and continue modernizing the universal service high-cost program—as well as other components of the Universal Service Fund-to ensure that all Americans have access to robust voice and broadband services.

Question 3. Ensuring that rural and urban consumers have access to reasonably comparable services at reasonably comparable rates is a fundamental statutory principle of universal service. Are you confident that the standalone broadband solution you are poised to adopt will do that-specifically, will it allow rural consumers to get standalone broadband at rates reasonably comparable to their urban counterparts? If not, what more do you think the FCC will need do to ensure such com-

Answer. In the April 2014 Connect America FNPRM, the Commission unanimously articulated four general principles for reform to address the stand alone broadband issue. Specifically, these four principles were that new rules should (1) provide support within the established budget for areas served by rate-of-return carriers; (2) distribute support equitably and efficiently, so that all rate-of-return carriers have the opportunity to extend broadband service where it is cost-effective to do so; (3) support broadband-capable networks in a manner that is forward looking; and (4) ensure no double-recovery of costs. I believe the package of reforms in the recently adopted Order will resolve the stand-alone broadband issue and update the rate-of-return program consistent with those principles.

⁶Federal Trade Commission, Protecting Consumer Privacy in an Era of Rapid Change: Recommendations for Businesses and Policymakers at 56 (2012), https://www.ftc.gov/sites/default/files/documents/reports/federal-trade-commission-report-protecting-consumer-privacy-era-rapid-change-recommendations/120326privacy-report.pdf (2012 FTC Privacy Report).

⁷See FCC-FTC Consumer Protection Memorandum of Understanding (2015), https://apps.fcc.gov/edocs_public/attachmatch/DOC-336405A1.pdf.

Question 4. I have heard concerns that the methodology used in the 2014 order to determine the local rate floor for voice service has led to rates in some rural areas, including parts of South Dakota, that are not reasonably comparable to those services provided in urban areas. Given this concern, when do you plan to act on the petition for reconsideration filed by several rural associations regarding the rate floor methodology? Do any other Commissioners have thoughts regarding this mat-

Answer. In the 2011 USF/ICC Transformation Order, the Commission unanimously adopted reforms to make universal service a fairer system for all consumers and businesses. The Order includes a phase-out of excessive subsidies for basic phone service, which allowed some phone companies to charge their customers as little as \$5 a month while average urban, suburban, and even some other rural consumers, were paying over three times that amount. The Commission determined it sumers, were paying over three times that amount. The Commission determined it was inappropriate to use limited Federal high-cost support to subsidize local rates beyond what is necessary to ensure reasonable comparability between urban and suburban rates and rural rates, as required by Congress. The reforms gradually eliminate these excessive subsidies to level the playing field for all consumers and contain the cost of the program, which is funded by universal service fees paid by consumers. Commission staff is currently reviewing the record in response to the Application for Review you reference.

Question 5. Last July, the FCC released an omnibus declaratory ruling on the Telephone Consumer Protection Act (TCPA). TCPA litigation has increased dramatically in the last decade. What considerations did the Commission give to the impact its ruling would have on businesses, both large and small, that need to reach their

Customers for legitimate business purposes?

Answer. The Commission gave full consideration to the impact its ruling would have on all petitioners, including businesses of all sizes. Consistent with our rules, the Commission sought public comment on all of the petitions addressed in the June 2015 Declaratory Ruling. Based on this record, the Commission granted relief to some businesses, including a petitioner who provided time-sensitive healthcare robocall alerts. Where the Commission was compelled by the statute and its own precedent to deny relief, the ruling nevertheless provided clarity and a roadmap for compliance.

Question 6. Many small businesses seek to improve their efficiency and customer relationships by providing information to their customers through the use of modern dialing technologies. The FCC's recent interpretation of the term "autodialer" in the TCPA declaratory ruling, however, could sweep in any number of modern dialing technologies. Other than using a rotary phone, what other technologies can small businesses feel comfortable using without exposing themselves to TCPA litigation

Answer. The Commission's June 2015 Declaratory Ruling provides a roadmap for small businesses who wish to comply with the TCPA.

The June 2015 Declaratory Ruling did not offer a new interpretation of the term

"autodialer." Instead, the ruling merely applied existing precedent regarding the TCPA's autodialer definition to address specific requests for clarification. Moreover, while the Commission was not asked to address specific types of equipment, the Commission provided additional clarity regarding relevant factors in determining what equipment constitutes an autodialer, including the amount of effort it would take to modify a piece of equipment to have the capability to dial random or sequen-

Question 7. By establishing liability after a mere one-call exception, the Commission's ruling creates a perverse incentive for incorrectly-called parties to allow or even encourage incorrect calls to continue, rather than notify the calling party of the error. These continuing incorrect calls thus become potential violations and the basis for monetary penalties sought through litigation. What will you do to repair

this perverse incentive?

Aswer. The Commission does allow robocallers an opportunity to remain free of TCPA liability in the event of an incorrectly-called party. Specifically, the June 2015 Declaratory Ruling affords robocallers an opportunity to discover a reassignment after one incorrect call if best practices, including checking reassigned-numbers databases, do not reveal a reassignment. The Commission's decision on this point provides callers greater protection from liability than some Federal courts have held, which is that all robocalls to a consumer other than the subscriber are subject to TCPA liability under the statute as written by Congress. Moreover, as the Commission stated in its declaratory ruling, the TCPA requires that robocallers obtain the subscriber's consent and places no obligation on consumers who may have inherited a phone number to notify the robocaller of the reassignment.

Question 8. Has the Commission considered providing a safe harbor for a calling party that reasonably relies on available customer phone number records to verify the accuracy of a customer's phone number?

Answer. The Commission recently considered providing such a safe harbor, but ultimately declined to adopt one. Specifically, the Commission concluded that, in light of the TCPA's statutory language as drafted by Congress and relevant Federal case law, robocallers must obtain the subscriber's consent and a robocaller cannot avoid liability for calling the wrong consumer by arguing they intended to call someone else. As the Commission noted in its ruling, several tools exist for robocallers to detect when a number changes hands. In addition, our ruling grants robocallers a onecall further opportunity to discover a reassignment in the event of an incorrectlycalled party. The Commission will continue to encourage further development of best practices so that businesses trying to reach their customers do not make unwanted robocalls.

Question 9. The pay TV set-top box NPRM proposes to expand the scope of the term "navigation device" to include "software or hardware performing the functions traditionally performed in hardware navigation devices." On what theory does the Commission base this interpretation and expansion of the statutory term's scope to include software? Does software that is not integral to the operation of a navigation

device fall within the scope of Section 629?

Answer. The Commission's interpretation of "navigation device" is based upon a number of sound legal theories. As explained in the NPRM, "[w]e believe that when Congress adopted Section 629, it intended the term to include software because setcongress adopted section 629, it intended the term to include software because section boxes have run software since before 1996." NPRM at n.65. The NPRM also notes that "Congress recognized this in the STELAR, which called for a study of downloadable software approaches to security issues previously performed in hardware." NPRM at para. 22. Moreover, as I stated in the hearing, everything in the world is moving toward software, and in a software world, we cannot consider the kind of equipment that the statute talks about and not consider software. Finally, we are in the process of developing a record on this and other issues, and I look forward to the record that develops in response to this issue.

Question 10. How does the NPRM propose or contemplate preventing third party devices or applications from adding unapproved or additional advertising alongside MVPD service content? How does the NPRM propose to protect and secure interactive MVPD programming and services when accessed through third party devices or applications? How does the NPRM propose to enforce such protection and security measures?

Answer. Today, the Commission is not aware that such ads are a problem on third party devices, such as TiVo, Smart TVs, or when you access Netflix on a tablet. Nor do we have rules governing the contracts that advertisers enter into with these parties. Nevertheless, we seek comment on these issues and any actions we can take to mitigate such concerns, including through the proposed certification process as well as the extent to which copyright law may protect against these concerns.

As for protecting secure interactive programming and services, the new proposed rules would create a framework for providing device manufacturers, software developers and others the information they need to introduce innovative new technologies, while at the same time maintaining strong security, copyright and consumer protections. Our NPRM proposes to let MVPDs choose the security system or systems that they wish to use to protect content. The content protection and security that the MVPD chooses would be enforced just as they are today—in the private marketplace consistent with contracts, copyright law, and the MVPD's power to revoke a compromised device's ability to receive service. The proposal, which is based on the way that content protection is administered today, states that to license the content protection that is necessary to decrypt multichannel video programming from a MVPD, the third party must certify that it will honor copy protection limits and prevent theft of service.

RESPONSE TO WRITTEN QUESTIONS SUBMITTED BY HON. ROGER F. WICKER TO HON. TOM WHEELER

Question 1. Chairman Wheeler, I have heard from some of my constituents who are competitive carriers that changes in the Universal Service Fund have harmed the competitive landscape. Can you please provide me with an update on the implementation of the USF high-cost program/Connect America Fund?

Answer. In 2011, the Commission voted unanimously to expand rural broadband access by modernizing the Universal Service Fund. The Commission took an inefficient program for delivering telephone service and created the Connect America

Fund (CAF) to support expanded broadband connectivity in rural America. These reforms have already delivered significant benefits. Over the next five years, CAF is poised to invest \$9 billion and leverage private investment to deliver broadband to 7.3 million rural Americans. In addition, universal service reforms have dramatically reduced waste within the program. Furthermore, last September, I circulated an Order for the consideration of my fellow Commissioners that would address the framework for the CAF Phase II competitive bidding process. In December, I circulated an updated draft Order that addressed concerns raised by other Commissioners' offices.

Last year, I pledged to the Members of the Committee that we would bring forth a solution for the next phase of universal service modernization: reforming support for "rate-of-return" carriers. As the result of months of collaborative efforts by Commissioners Clyburn and O'Rielly and their staffs, the Commission recently adopted a bipartisan Order to fulfill that promise. The Order sets forth a package of reforms to address rate-of-return issues that are fundamentally intertwined—the need to modernize the program to provide support for stand-alone broadband service; the need to improve incentives for broadband investment to connect unserved rural Americans; and the need to strengthen the rate-of-return system to provide certainty and stability for years to come. The Order will help to ensure that Federal universal service funds are spent wisely, for their intended purpose, and takes concrete steps to bring broadband to the rural Americans who remain unserved today. In addition, a Further Notice included with the Order seeks comment on additional reforms that would further guard against waste.

Notably, underlying all of these reforms to the high-cost program is the shared

principle that we should limit the use of ratepayer funds to support service in an area that is served by an unsubsidized voice and broadband provider. Prior to making the Phase II offer of model-based support to the price cap carriers, the Commission conducted a robust challenge process to refine the Commission's data on which areas of the country were already served by voice and broadband, and removed those areas from eligibility. Similarly, the rate-of-return reform order adopts a process to determine which rate of return areas are served by an unsubsidized competess to determine which rate-of-return areas are served by an unsubsidized compet-

itor and reduce support for those areas.

Question 1a. Have you done any studies on the impact of competition in unserved and underserved areas related to changes in the USF?

Answer. Twice a year, the Commission collects deployment and subscription data from all broadband providers through its Form 477. This data informs both our universal service policies as well as our statutory mandate to regularly determine whether advanced telecommunications capability is being deployed to all Americans in a reasonable and timely fashion.

Question 1b. Are there any other proceedings currently at the FCC which relate

to promoting competition in rural areas?

Answer. As mentioned above, I have circulated an Order that would address the framework for the CAF Phase II competitive bidding process. As currently drafted, this item would establish a process for companies to compete for funding to serve high-cost areas that lack broadband. Simply put, competition between providers means that finite universal service funding will be used efficiently to deliver the best possible solutions.

Question 2. In your judgment, is existing wireless coverage at risk of being stalled or even reduced without continued USF support?

Do you support a Mobility Fund Phase II that provides support for BOTH preserving existing service where it is not otherwise economically feasible as well as expanding mobile broadband to areas that are unserved?

Answer. Wireless providers continue to build-out networks and expand coverage. However, unserved and underserved communities also continue to exist across the Nation. USF provides an important role in expanding wireless networks to those areas of the country.

In 2011, the Commission proposed to provide ongoing financial support to promote mobile broadband and high quality voice services in areas where such services cannot be sustained or extended absent Federal support. In 2014, the Commission sought comment on how universal service funds should be targeted. This inquiry was in light of the substantial roll-out of 4G LTE by many of the country's mobile networks. The Commission proposed to retarget Mobility Fund Phase II support to preserve mobile service where it only exists today due to support from the Universal Service Fund and to extend 4G LTE service to areas where it does not exist.

Commission staff is currently reviewing the record on this inquiry to consider possible next steps for a Mobility Fund Phase II.

RESPONSE TO WRITTEN QUESTION SUBMITTED BY HON. ROY BLUNT TO HON. TOM WHEELER

Question. Thank you for your immediate response following the hearing regarding my concerns with the timeliness of replies from the Commission to Members of the Senate, and your commitment to improve response times.

In addition to timeliness of responses, what steps can you take to better account for the concerns raised by Members of the Senate regarding the policies pursued at the Commission?

Answer. I support an open and transparent process at the Commission and I have encouraged my staff to work cooperatively to address the concerns of Members of the Senate regarding the FCC's policy decisions. I recognize that there will always be disagreements concerning the outcome of Commission votes with regard to various policy-based decisions. That is one reason why we add all comments from members of Congress to our hearing records—to ensure that we have adequately considered this information as we engage in the administrative rulemaking process.

We also strictly adhere to the Administrative Procedure Act to make certain that all parties have an equal opportunity to comment as we engage in rulemakings. I am always available to members of this committee to personally discuss our work here, and I routinely take phone calls and answer a broad number of letters related to the Commission's work. I also have directed the Commission's staff to provide routine briefings and technical support to members and their staff.

RESPONSE TO WRITTEN QUESTIONS SUBMITTED BY HON. KELLY AYOTTE TO HON. TOM WHEELER

Question 1. I am a strong supporter of the upcoming incentive auction and hope for the successful outcome that we all intended in passing the Spectrum Act. However, after speaking with broadcasters from New Hampshire, I have heard concerns that the broadcast relocation fund could ultimately prove insufficient to reimburse local TV stations the costs they incur as part of the repacking process.

Do you have a plan in place should the \$1.75 billion relocation fund fall short? Understandably, we will not precisely know the final numbers until the auction is complete, but how do you foresee the Commission responding if the funds prove to be insufficient?

Answer. At this point, we have no reason to believe that the \$1.75 billion Broad-caster Relocation Fund will be insufficient to cover broadcasters' relocation costs. In order to ensure the sufficiency of the fund, we will optimize the final broadcaster channel assignments to minimize relocation costs. This optimization will: (1) maximize the number of stations assigned to their pre-auction channels; and (2) minimize reassignments of stations with high anticipated relocation costs, based on the most accurate information available. These steps, taken together, will help to ensure that the \$1.75 billion Reimbursement Fund is sufficient to cover broadcasters' relocation costs and that the Fund is disbursed as fairly and efficiently as possible.

Should the \$1.75 billion be insufficient, I will notify Congress as soon as this becomes clear. The amount was set by the Spectrum Act and Congress would need to take action to change it.

Question 2. While I look forward to the broadcast incentive auction that begins on March 29, I would like to further explore reimbursement concerns. I have a constituent who has built a wireless microphone business from the ground up. His business plays an important role in the vitality of his local community—whether it is for plays at the University of New Hampshire, productions at the Rochester Opera House, or even a speech by the President. This local business has established itself as a source for dependable wireless microphone equipment for nearly 20 years and is relied upon for its services in New Hampshire.

My constituent's business was nearly bankrupted during the 2010 auction of the 700 megahertz band, which necessitated replacing half of its equipment—costing approximately \$30,000. After purchasing brand new equipment, he also has found that he is able to use it well after its life expectancy. Despite this investment, he faces the same dilemma again with the forthcoming auction.

Has the Commission considered a solution that fairly reimburses wireless microphone providers and looks to replace equipment displaced from the band as an unintended consequence of the 600 megahertz auction?

What can be done to ensure small businesses, such as those in the wireless microphone community, do not have to shutter their doors as a result of the spectrum auction?

Answer. The Commission understands that wireless microphone operators provide an important service that many consumers rely upon. While the Spectrum Act does not provide the Commission with authority or funding to reimburse wireless microphone operators for the cost of any changes in equipment as a result of the auction, the Commission has adopted several orders to accommodate both licensed and unlicensed wireless microphones after the auction. In the 2014 Incentive Auction Report and Order, the Commission provided additional opportunities for wireless microphone operations in the spectrum that will continue to be allocated for broadcast television service after the auction and promised to explore additional opportunities that would accommodate wireless microphone operations over the long term. Last summer the Commission adopted rules to provide wireless microphones with access to the future 600 MHz guard bands and duplex gap (including exclusive access to a 4 megahertz portion for licensed use), enable greater use of the VHF channels, and provide for new opportunities for licensed wireless microphones to operate on a secondary basis in three additional bands outside of the TV bands.

The Commission also has provided for a multi-year period, after the end of the auction, to help smooth the transition as wireless microphone operators obtain new equipment and move out of the repurposed 600 MHz band to other spectrum. These operators may continue to use the 600 MHz Band spectrum on a secondary basis until the end of the 39-month transition period. Together, these rules and policies establish clear protections and opportunities for wireless microphone operators to

continue to provide their important service to consumers.

Response to Written Question Submitted by Hon. Ted Cruz to Hon. Tom Wheeler

Question. In the Open Internet Order, the Federal Communications Commission (FCC) revised the definition of "public switched network" to mean "the network that . . . use[s] the North American Numbering Plan, or public IP addresses, in connection with the provision of switched services" (See para. 391 (emphasis added)). Although the FCC disclaimed any intent to "assert" jurisdiction over the assignment or management of IP addresses by the Internet Numbers Registry System (see id. at note 1116), the FCC's decision to equate telephone numbers with IP addresses nonetheless gives the FCC statutory jurisdiction over IP addresses as a matter of law. Over 20 years ago the FCC concluded that Section 201 of the Communications Act gave it plenary jurisdiction over telephone numbers, because "telephone numbers are an indispensable part" of the duties that section 201 imposes on common carriers (See Administration of the North American Numbering Plan, Notice of Proposed Rulemaking, FCC 94–79, ¶8 (1994)). IP addresses are likewise an indispensable part of the duties the FCC imposed on ISPs under section 201, including the duty to connect to "all or substantially all Internet endpoints."

How can the FCC uphold the public interest requirements in section 201 of the Act if it refuses to assert its statutory authority over an indispensable part of the

public switched network?

If the FCC believes regulation of IP numbers used to connect end points on the public switched telephone network is unnecessary, why hasn't it forborne from the

regulation of telephone numbers?

Answer. In the Open Internet Order, the Commission changed its own definition of the term "public switched network" in the context of Section 332 of the Communications Act, to include IP addresses as well as telephone numbers. The Commission concluded that "[r]evising the definition of public switched network to include networks that use standardized addressing identifiers other than NANP numbers for routing of packets recognizes that today's broadband Internet access networks use their own unique addressing identifier, IP addresses . . ." (Emphasis added) (See para. 391), but did not suggest that the Commission asserted authority over IP addresses, either pursuant to Section 201(a) or pursuant to Section 251(e) (the source of Commission authority over numbering issues pursuant to the Telecommunications Act of 1996). In fact, the Commission forebore from Section 251(e)—the provision that gives the Commission authority over telephone numbers. IP addressing—in contrast to telephone numbers—is already governed by IANA, (the Internet Assigned Numbers Authority), a department of ICANN, that is responsible for the global coordination of IP addressing, among other coordination functions.

RESPONSE TO WRITTEN QUESTIONS SUBMITTED BY HON. JERRY MORAN TO HON. TOM WHEELER

Question 1. The FCC's FY17 budget request says an increase in auction funding is necessary "to implement the requirements mandated by Congress in the Spectrum Pipeline Act of 2015." However, except for asking for a single report to Congress three years after enactment, the Spectrum Pipeline Act does not require any specific action of the FCC before 2022. Given that senior Commission staff have suggested that the Broadcast Incentive Auction will be complete by the end of the current Fiscal Year and you testified before the Committee on March 2 that it was unlikely that an auction emanating from the Spectrum Frontiers NPRM could be scheduled in 2017, why is increased FY17 funding necessary for the Commission's spectrum auction activities?

Answer. Before 2013, our annual auction spending had been capped at \$85 million for nine years. This amount allowed for no inflationary adjustments, no funds for improving the operational efficiencies or resiliency of our IT systems, and no money

to study new projects to support auctions programming.

The infusion of additional funds since 2013 has enabled us to raise over \$42 billion for the Treasury in two major auctions, the H Block auction and the AWS-3 auction. These funds have also supported our efforts to develop and prepare for the first-ever Incentive Auction, which is slated to launch this month. The development and implementation of the Incentive Auction has required highly-skilled and technologically savvy FTEs and contractors with expertise across multiple disciplines, including cutting-edge economics and engineering. It also has involved the development of essential and resilient new IT systems.

After the completion of the Incentive Auction, however, a significant post-auction

transition process will remain. To ensure preservation of service for broadcast viewers and timely network deployment, we have been focused on post-auction planning for over a year. We have released of the draft relocation reimbursement form and a reimbursement cost catalog for transitioning broadcast stations, and we have already begun to pivot and to accelerate our planning for the post-auction transition. Like the auction, the transition will be a complex effort spanning several years. Therefore, we will continue to incur costs associated with the Incentive Auction into the next Fiscal Year and beyond. The money spent in this effort will be as critical to the success of the auction as the money spent developing and implementing the auction itself and will yield important dividends—financially for the Treasury, and

The Bipartisan Budget Act of 2015 not only extended our auction authority but it mandated that we work with other agencies to identify and develop resources for a "spectrum pipeline." In addition to the Incentive Auction and several other auctions on our planning list, we will be expending resources to support the core goals of the new legislation. To do so, we need to upgrade our traditional and aging auction IT systems—the ones that were not upgraded during the pre-2013 years—for use into the next decade, and engage in a broad range of economic and engineering studies to ensure that the next generation of auctions are at least as successful as

Question 2. Could you please provide the specific plans and details on how the Commission intends to carry out and manage the repacking of broadcast television stations that will remain on the air? It is understood that these plans and details may vary depending on the amount of spectrum available, please explain how this will be taken into account and provide any studies or analysis undertaken

Answer. One of the Commission's primary goals is to allow stations sufficient time to move to their new channels in order to minimize disruptions of service to viewers. Commission staff is developing a transition schedule that will maximize the effi-ciency of this transition and minimize service disruptions. We have been working closely with broadcasters to get important input from the industry on planning a successful transition. We have also had discussions with representatives of the wireless industry, who obviously have a stake in an efficient transition process. We anticipate further interaction with all affected stakeholders as we develop and refine this transition plan.

The Commission is also committed to establishing fair and efficient process for reimbursing broadcasters' relocation costs. As part of that process, the FCC commissioned the Widelity Report to more fully understand the types of costs that would be required, and the magnitude of those costs, to help make efficient use of the Broadcaster Relocation Fund. The Commission's Media Bureau adopted a catalog of expenses as guidance, which will serve as a means of facilitating the process of being reimbursed by setting forth categories of expenses. The Commission is also planning on engaging a reimbursement administrator to facilitate the disbursement

of funds. It recently solicited proposals for this position and is currently evaluating those proposals.

Question 3. At the hearing, you indicated that you want to make certain that rural stations are not at the end of the line when it comes to reimbursement or when it comes to trying to find a contractor to build a tower. Does this mean that the Commission is concerned that there are not sufficient funds or time available for the repacking process? What plans and mechanisms does the Commission have

in place to deal with either of those circumstances?

Ånswer. At this point, we have no reason to believe that the \$1.75 billion Broad-caster Relocation Fund will be insufficient to cover broadcasters' relocation costs. In order to ensure the sufficiency of the fund, we will optimize the final broadcaster channel assignments to minimize relocation costs. This optimization will: (1) maximize the number of stations assigned to their pre-auction channel; and (2) minimize reassignments of stations with high anticipated relocation costs, based on the most accurate information available. These steps, taken together, will help to ensure that the \$1.75 billion Reimbursement Fund is sufficient to cover broadcasters' relocation costs and that the Fund is disbursed as fairly and efficiently as possible.

We believe that a 39-month transition period is sufficient for stations to apply for a construction permit (3 months) and move to their new channels (during the 36-month construction period), while also enabling forward auction winners to get access to their newly acquired spectrum as quickly as possible, thus ensuring a successful incentive auction. The Commission will, of course, take into account how many stations actually need to be repacked, and the specific characteristics of each, in determining the repacking schedule. Staff is developing a transition schedule that will maximize the efficiency of this transition and minimize service disruptions.

Question 4. It is my understanding that stations being repacked will be assigned specific dates by which they have to be operating on their new channels. How will dates be established? How will such dates take into account stations in adjacent markets to avoid interference to viewers that could occur if an adjacent market transitions at a different time, or the "daisy chain" as you referenced in your testimony?

Answer. The Commission decided that having the flexibility to consider a variety of actors in establishing construction deadlines is critical to the success of the transition. We recognize that many different variables are at play that will impact when an individual station can successfully transition, including weather and seasonal issues, daisy chains and interference issues, and availability of equipment and crews. The Commission has been working closely with broadcasters to get important input from the industry on planning a successful transition, taking into account all of those different variables. We have also had discussions with representatives of the wireless industry, who obviously have a stake in an efficient transition process. We anticipate further interaction with all affected stakeholders as we develop and refine this transition plan.

Question 5. What happens if a station through no fault of its own is delayed in making the change to its new repacked channel? Will the Commission delay the transition of stations in adjacent markets that could be impacted? How will the Commission keep stations informed of such delays? Will station costs associated

with such delays be compensated?

Answer. The Commission believes that a 39-month transition period is sufficient for stations to apply for a construction permit and move to their new channels. While we will, of course, take into account how many and which stations actually need to be repacked in determining the repacking schedule, we see no reason now to change or repeal the 39-month deadline. Adopting a longer transition period would delay access by forward auction bidders to the spectrum they won in the auction. That in turn would depress forward-auction participation or the amounts that forward auction participants are willing to bid for the spectrum. The auction would clear less spectrum, and the Commission would return less money to the U.S. Treasury.

The Commission has created a framework that gives stations every opportunity to remain on the air, even if time runs short due to unforeseen circumstances. To assist stations, the Commission will permit six-month extensions for stations that, for reasons beyond their control, cannot complete the modifications to their facilities during their construction period. Additionally, special temporary authority may be granted to operate on a new channel using a temporary facility while they complete their tower modifications. Eligible broadcasters can also request special temporary authority to operate on a channel in the TV band that is available because it was relinquished by a winning bidder in the auction. Furthermore, the Commission is

taking appropriate measures to disburse funds as fairly an efficiently as possible to ensure the sufficiency of the Relocation Fund.

Question 6. How will the Commission ensure that antennas, transmitters, and other equipment be available for those stations with the earliest conversion dates? If stations have to pay more for such equipment or for expedited delivery will those costs be covered?

Answer. Commission staff is working with interested parties, including tower companies, equipment manufacturers, wireless carriers, and broadcasters to identify resources and encourage early planning by broadcasters that may be repacked or will voluntarily move to a different channel.

Congress provided for \$1.75 billion dollars in the Spectrum Act. To help ensure the Broadcaster Relocation Fund is sufficient to cover broadcasters' relocation costs, the FCC commissioned the Widelity Report to more fully understand the types of costs that would be required, and the magnitude of those costs, to help make efficient use of the Broadcaster Relocation Fund. The Commission's Media Bureau adopted a catalog of expenses as guidance, which will serve as a means of facilitating the process of being reimbursed by setting forth categories of expenses.

Response to Written Questions Submitted by Hon. Ron Johnson to Hon. Tom Wheeler

Question 1. What is the purpose of the cybersecurity "assurance" meetings that the FCC plans to conduct with companies?

Answer. Effective cyber risk management procedures are crucial to maintain the reliability and resiliency of our networks. In 2014, following issuance of the NIST Cybersecurity Framework for assessing cyber risk management, the FCC challenged the communications industry to lead the way in creating a new framework to guide the relationship between the FCC and industry to best address cybersecurity challenges for this critical infrastructure sector, with the goal of individual companies proactively managing cyber risk. In response, a broad-based group of expert stakeholders, the Communications Security, Reliability and Interoperability Council (CSRIC), recommended a comprehensive plan for putting this new approach into action. One of the group's key recommendations was for individual companies to brief the FCC periodically on a voluntary and confidential basis about cyber risks and their approach to managing these risks. The Commission is now considering a Policy Statement, which, if adopted, would implement the CSRIC recommendation by outlining a process for holding these meetings.

a. What do you expect to get out of these meetings?

Answer. The voluntary meetings will enable the FCC to work with industry to identify best practices, especially among smaller companies that have fewer resources to devote to cyber defenses. These meetings will also help to identify relevant trends and challenges in this rapidly evolving environment that can further aid in cyber risk management.

b. Why aren't these meetings being conducted under the Department of Homeland Security's Protected Critical Infrastructure Program?

Answer. The Commission works closely with DHS to assess the preparedness of the telecommunications sector for a wide variety of contingencies. Under the Policy Statement under consideration, these meetings would be complementary to the DHS cybersecurity efforts. The Commission is working with DHS on an administrative arrangement to make use of the Protected Critical Infrastructure Information (PCII) program. In the interim, and in light of the importance of cybersecurity for this critical infrastructure sector of the Nation's economy, the Policy Statement under consideration describes the confidentiality and other protections that the Commission would apply to such meetings while the Commission continues to work with DHS to make use of the PCII program.

c. Are you planning to conduct in-depth cybersecurity audits of these companies? Answer. No. We intend these meetings to be a conversation on companies' cyber risk management practices; there is no "correct" or "minimum" standard against which companies will be measured. The Policy Statement under consideration makes clear that those companies that elect to participate in such meetings have discretion over what information they present about their cyber risk management practices and how they present it.

Question 2. I understand that in January 2014 the FCC budgeted \$3 million for telecommunications relay services (TRS) research and development, and that a portion of that funding was used to support a MITRE Corporation study on Internet Protocol Caption Telephone Service (IP CTS).

a. If that study is complete, will you provide a copy? Answer. The MITRE Corporation (MITRE) has performed studies to assess the accuracy, latency and associated usability of Internet Protocol Caption Telephone Service (IP CTS) devices and services, as well as alternative technologies that could augment IP CTS for people with hearing loss. In part, these studies are intended to determine the feasibility and effectiveness of handling calls through automated means, to reduce the need for third party communication assistants. Our goal is to develop methods of handling TRS calls that can result in savings to the TRS Fund while at the same time ensuring that such calls are functionally equivalent to voice telephone calls, as required by the Communications Act. Specifically, MITRE has submitted to the FCC preliminary test results assessing a sample of current and alternative speech recognition technologies and qualitative and quantitative measures for device and caption performance. MITRE also has provided preliminary results from controlled user assessments, and established a baseline of usability metrics based on MITRE's assessments of IP CTS devices and services. These activities provide qualitative and quantitative measures for device and caption performance.

The FCC is evaluating MITRE's results to ascertain the extent to which new advances in speech recognition technology technologies and processes can improve IP CTS so that these services become more functionally equivalent to telephone services used by hearing people without the need for human intervention during these

b. If it is not complete, when do you expect it to be done?

Answer. Phases 1 and 2 of the study have been substantially completed and the FCC is reviewing and analyzing the preliminary results thus far to determine whether additional studies are necessary.

c. Do you plan to put the study out for public comment or review?

Answer. It is the Commission's intention to make MITRE's final research results publicly available.

RESPONSE TO WRITTEN QUESTIONS SUBMITTED BY HON. DEAN HELLER TO HON. TOM WHEELER

Question 1. For years, I have believed that the way in which rules are processed at the Commission lacks transparency and is detrimental to the American public. My FCC Process Reform Act would address these transparency and accountability issues for the sake of consumers and the industries supporting innovation and our economy.

For example, the public has no idea the specific language of the rules the Commission is voting on until after they are passed. We saw that with the net neutrality rules that were pushed through this time last year, and we saw it a few weeks ago when the FCC voted on the proposal related to set-top boxes.

In fact, Chairman Wheeler said during that meeting on set-top boxes: "There have been lots of wild assertions about this proposal before anybody saw it." The problem is that the public doesn't know what to expect from the rule—there is no certainty for those on the outside.

Do you believe the public has a right to see the specific language of a rule before it is voted on by the Commission?

Answer. I absolutely believe that the public has the right to see a proposed rule and comment on it prior to being voted by the Commission. This concept is at the heart of the Administrative Procedure Act as well as the Commission's rules. Proposed rules are published well in advance of any final rulemaking, as part of an NPRM. Following publication of the NPRM, we maintain an open and transparent comment period consistent with our rules and the APA. By the time a draft text of a final rule is circulated to the Commissioners, there have been multiple opportunities for the public to comment—comments, reply comments, and generally a significant period for ex parte filings and meetings.

Question 2. As someone committed to protecting Americans' and Nevadans' privacy, especially related to personally identifiable information (PII), I have a questions regarding the recent set-top box Notice of Proposed Rulemaking.

Currently, pay-TV companies must follow strong privacy protections to ensure consumers' personal information is not collected, utilized, or shared for non-service related purposes. How does this NPRM contemplate applying and enforcing these same privacy to any new suppliers entering the set-top box market? Does the FCC have the legal authority to enforce Title 6 privacy standards on third parties? Answer. Cable providers abide by specific privacy obligations under Title VI of the Communications Act. In the NPRM, the Commission tentatively concludes that developers of third-party navigation devices should certify they are in compliance with the same privacy obligations in order to receive the three information flows from pay-TV providers that enable third parties to develop competitive solutions. The proposal asks a number of questions about how best to enforce such a requirement, including whether an independent entity should validate third-party developer's certifications, whether the Commission should maintain the certifications, and what the appropriate enforcement mechanism should be if there are any lapses

in compliance with any certification.

Additionally, the NPRM notes that today, competitive navigation devices must comply with a host of state and Federal privacy protections that include various remedies for consumers. All of these protections and remedies would continue to apply under the proposal in the NPRM.

RESPONSE TO WRITTEN QUESTIONS SUBMITTED BY HON. STEVE DAINES TO HON. TOM WHEELER

Question 1. Chairman Wheeler, businesses recognize the importance of complying with the TCPA. In fact, some businesses have opted to ensure their compliance with TCPA by implementing rigorous training, monitoring, and enforcement programs. These compliance programs, can be an extremely costly investment, but businesses pursue these because it is the right thing to do and because these programs work.

Does the FCC support the concept of a business voluntarily choosing to invest in compliance due diligence and verification programs? Why or why not?

Unfortunately, the promise of these voluntary compliance programs has been inhibited by a vague vicarious liability understanding that causes businesses to shy away from due diligence measures out of litigation fear—a perverse disincentive for businesses *not* to do the right thing. Should businesses be penalized for implementing programs with the goal on enhancing compliance? Why or why not?

The issue of a compliance measures was not addressed in the FCC's recent TCPA order. Would the FCC support a legislative proposal seeking to clarify this uncertainty by amending TCPA to potentially reward, as oppose to penalize, businesses that choose to the do the right thing by adopting comprehensive TCPA compliance

programs?

Answer. The Commission is committed to the TCPA's goal of protecting consumers from unwanted calls and texts, one of the largest categories of complaints that we receive. Compliance with the TCPA by businesses who make calls is, of course, a key component of ensuring that consumers do not receive unwanted calls and texts. Programs that involve training, monitoring, and enforcement regarding the TCPA's requirements can undoubtedly go a long way toward helping businesses make only calls that consumers value and avoid calls that they do not want to receive. We would be interested to learn more about the concerns that your constituent has raised about compliance programs, and would be happy to work with your staff to facilitate a meeting to discuss this subject in more detail.

Question 2. Chairman Wheeler, during your testimony, you said that copyright laws remain in place under your set-top box proposal. Under your proposal, would a programmer providing its copyrighted programming to an MVPD retain its exclusive right to decide whether or not it wanted to appear in a third-party app developed by a different party? What in the proposal protects a copyright owner's right

to decide whether, how and on what platforms to disseminate its content?

Answer. The new proposed rules would create a framework for providing device manufacturers, software developers and others the information they need to introduce innovative new technologies, while at the same time maintaining strong security, copyright and consumer protections. An important part of the proposal is parity, if a content owner has given the right to an MVPD to display the content on a different platform, the proposal seeks to allow others to develop options for that platform. The content protection and security that the MVPD chooses would be enforced just as they are today—in the private marketplace consistent with contracts, copyright law, and the MVPD's power to revoke a compromised device's ability to receive service. The proposal is clear—we are committed to ensuring the protection of content creators' copyright and not interfere with the business relationships or content agreements between MVPDs and their content providers or between MVPDs and their customers. The proposal, which is based on the way that content protection is administered today, states that to license the content protection that is necessary to decrypt multichannel video programming from a MVPD, the third party must certify that it will honor copy protection limits and prevent theft of service. Question 3. Chairman Wheeler, when you testified before the Commerce Committee last May, you said that universal access is at the core of the FCC's mission, including access for individuals living on tribal lands. Yet, the Commission has not even consistently asked for funding for tribal consultation, and, by all accounts, has no intention to move forward with the next phase of the tribal mobility fund. Can you explain how this is consistent with your claim that access on tribal lands is at the core of the FCC's mission?

Answer. Universal access to telecommunications services, including on tribal lands, is a core element of the FCC's mission. The Commission is currently planning five regional Tribal consultation and training workshops for 2016. The Commission has also invited USDA to participate. The first of these workshops will be held in late May or early June in Montana, with four more to follow in Oklahoma and in the Great Lakes, Southwest, and Pacific Northwest regions of Indian Country. The Commission is committed to working with our Tribal partners and with USDA to ensure that the 2016 Tribal consultation and training workshops, as well as those in future years, provide as comprehensive and coordinated an approach as possible.

in future years, provide as comprehensive and coordinated an approach as possible.

In addition, the proposal for an ongoing Tribal Mobility Fund remains under consideration as staff reviews the record regarding possible next steps for a Mobility

Fund Phase II.

Further, the Commission recently adopted an FNPRM that seeks comment on reforming high-cost universal service support to promote broadband deployment on Tribal lands, including through a Tribal Broadband Factor for rate-of-return carriers serving Tribal lands. I plan to take action on this issue in 2016.

Question 4. Chairman Wheeler, the FCC's exclusivity protections are a good way to avoid costly and unnecessarily litigation, especially for small businesses. Have you studied what kind of burden removing those non-intrusive protections could impose on small broadcasters who would then have to rely on expensive and time-consuming litigation with bigger companies to enforce their otherwise straightforward contractual rights?

Answer. While we did not do a study on the burden that could be imposed on small broadcasters, I strongly believe that there would be little, if any, need for broadcasters to resort to litigation. Specifically, the likelihood of litigation is low because under the proposal a distant station would have to grant its consent to be

imported into another station's market by an MVPD.

In addition, an elimination of the exclusivity rules is unlikely to have an immediate effect on programmers, broadcasters, cable companies, or consumers. This is because current broadcast program contracts and network affiliation agreements regularly contain their own exclusivity provisions prohibiting a program from being imported into a market if it is being shown on a local broadcast station. In these circumstances, retaining the exclusivity provisions may well be redundant and a Federal intrusion, without cause, into the marketplace. Faith in the free market would suggest that government get out of the way, absent an indication of harm. Since the rules appear redundant to existing contractual provisions based on the record, their elimination would not be the trigger for such harm.

Response to Written Questions Submitted by Hon. Maria Cantwell to Hon. Tom Wheeler

Question 1. Did the FCC rely on the record in the Open Internet rulemaking proceeding to reach the decision it ultimately adopted? Does the record in the open Internet rulemaking proceeding include legal arguments and opinions supporting the Title II approach the FCC ultimately adopted? If so how many or what percentage of the record supported a Title II approach? Does the record include a filing from the Office of President Obama? Does the record in the case show, contrary to the allegations in Senator Johnson's report "REGULATING THE INTERNET: HOW THE WHITE HOUSE BOWLED OVER FCC INDEPENDENCE", that the FCC engaged in a robust deliberative process and adopted a decision supported by the record as required by the Administrative Procedures Act? If so, please detail how the Commission complied with the APA in reaching this decision.

Answer. The 2015 Open Internet Order was the product of a rich rulemaking record and the Commission's extensive deliberations on that record.

The May 2014 Notice of Proposed Rulemaking (NPRM) was part of an ongoing public discussion about means by which the Commission could act to protect an open Internet. An extensive public record on this issue existed before we initiated the NPRM. In 2010, the Commission issued a Notice of Inquiry asking, among other things, whether and how to apply Title II to broadband services. The January 14, 2014, Verizon decision vacating portions of the 2010 Open Internet Order included

a lengthy discussion of the Commission's Title II "common carrier" authority. One of the key holdings in *Verizon* was that the Commission could not impose rules requiring broadband providers not to engage in "unjust and unreasonable discrimination" unless the Commission classified their services as telecommunications services under Title II. The Open Internet rulemaking we initiated in May 2014 was a di-

rect response to this remand.

The NPRM repeatedly sought public comment on the Commission's authority under Title II and commenters clearly understood that the Commission's authority under Title II would be considered as part of the rulemaking process to protect and promote the open Internet as evinced by the record. The record is replete with commenters supporting a Title II approach, ranging from industry parties (e.g., Cogent and COMPTEL) to public interest organizations (e.g., Consumers Union and the New America Foundation) to edge providers such as Etsy and Mozilla, to individual consumers. The Obama Administration filed an ex parte in the Open Internet docket on November 10, 2014, after President Obama issued a statement calling for the creation of "a new set of rules protecting net neutrality."

The Commission provided notice on multiple occasions of the approach that we adopted in the final order, in full compliance with our legal obligations under the Administrative Procedure Act (APA), and consistent with our practice and prece-

Question 2. It has come to my attention that the company Zillow, based in my home state, filed comments with your agency in support of a declaratory ruling clarifying the regulatory status of mobile messaging services (WT Docket No. 08-

Zillow is a popular real estate and rental platform with approximately 140 million monthly users that empowers consumers with data, and information about housing

and connects them with local professionals who can help.

Zillow uses texting to quickly and reliably notify agents of potential buyers' inquiries so they can provide a quick call or text message back to connect. To prevent spam listings on the website, Zillow requires users to validate their identity by receiving a text message on their cell phone.

In its filing with the FCC, Zillow expressed concerns with the reliability of message delivery under the carriers' current practices that block non-spam text messages. The result of this activity is any of the following poor customer experiences:

- Agents don't find out right away that a potential buyer wants to talk to them.
- Potential buyers are frustrated that they don't receive responses from agents.
- · Users can't verify their identity, so their listings don't get posted to our site.

What is the Commission doing to ensure that the critical text messages such as those that are sent between buyers and brokers using Zillow are delivered with cer-

tainty and reliability?

Answer. Twilio, which provides a platform that allows commercial entities to send text messages to end users, filed a petition in WT Docket No. 08-7 on August 28, 2015, asking the Commission to classify text messaging services as telecommunications services under Title II of the Communications Act. On October 13, 2015, the Wireless Telecommunications Bureau released a Public Notice seeking comments on Twilio's petition and the comment period for the petition closed on December 21, 2015. The Commission received substantial input in response to the Public Notice, including comments from Zillow, and Commission staff are carefully reviewing the technical and policy considerations raised in the record. The Commission staff also are currently meeting with stakeholders at their request to better understand these concerns in light of the developing record.

Question 3. My office has met with Twilio, which powers messaging for several Washington-based companies, including Zillow, Redfin, Peach and Nordstrom. Redfin uses text messaging for real estate reminders and has experienced filtering. Peach is a lunch delivery platform that uses text messages to facilitate orders and filed in support of Twilio's petition. Nordstrom uses text messaging through 10-digit numbers to reach customers, which is cited by customers as a preferred method of communication.

Twilio asserts that they've made good-faith efforts to resolve the blocking of wanted, non-SPAM messages with the carriers and CTIA—it's worth noting that Twilio CÉO Jeff Lawson serves on CTIA's board.

Given the lack of progress, shouldn't the FCC intervene to help the parties come

up with a solution?

If SPAM is truly a huge concern as the carriers have argued, does the FCC agree that only wireless carriers can solve it? I urge the FCC to look into the extent of the how bad is the SPAM problem: Where is it coming from? What are wireless carriers doing to solve the spam problem? From my understanding of the issue, all par-

ties should be involved in preventing spam, including the edge providers.

The current system of filtering messages in the name of SPAM prevention is conducted without transparency, unchecked at the carrier level. Is this the best approach? Should the FCC require more transparency from the carriers?

Answer. As noted in response to Question 2, the Commission is currently considering comments filed in response to a petition filed by Twilio on the regulatory treatment of text message services. The impact of different approaches for ensuring that consumers receive the text messages they want while protecting consumers from unwanted messages is among the issues raised in that proceeding. In the record, carriers have argued that the current system protects end users from unwanted text messages, but other parties have submitted comments indicating that carriers engage in blocking text messages desired by end users and do so without disclosing that they have blocked an edge provider's message.

The Commission is in the process of reviewing the record in response to Twilio's petition. In addition, the Commission is meeting with stakeholders at their request, and these meetings will continue to develop the record with regard this issue.

RESPONSE TO WRITTEN QUESTIONS SUBMITTED BY HON. CLAIRE McCaskill to HON. TOM WHEELER

Question 1. One of the best tools the Commission has in overseeing the Lifeline program is the ability to take aggressive enforcement against carriers violating the rules of the program, companies that are abusing both the consumers who use the program as well as the rate payers that fund it. That's why I applauded a flurry of announced enforcement activity from September 2013 through February 2014. During that time the FCC issued Notices of Apparent Liability (NALs) totaling more than \$94 million in proposed fines for 12 companies participating in the Lifeline program. Some of those notices are more than two-and-a-half years old yet not a penny of that money has yet been collected.

Will you press the Enforcement Bureau to either issue forfeiture orders, reach settlements, or dismiss these 12 NALs in an expeditious manner?

Answer. The Commission's Lifeline enforcement actions referenced in your question have been referred to the FCC's Office of Inspector General, which will handle resolution of those matters.

Question 2. To avoid this situation in the future, would you support a shot clock for resolution of NALs? If so, what do you believe would be an acceptable amount

Answer. The Enforcement Bureau already operates under tight time constraints. Section 503(b)(6) of the Communications Act requires the Commission to bring enforcement actions that seek to impose a monetary penalty within one year of the violation. This one-year statute of limitations holds true even if the Commission learns of the violation one week or one month before the one-year expiration. A "shot clock" that would impose an additional set timeline to resolve enforcement actions would likely limit the ability of the Enforcement Bureau to fully investigate the facts of cases or to pursue complex cases and cases involving exigent circumstances.

I should note that the Enforcement Bureau has made a concerted effort to bring enforcement actions to conclusion as quickly as possible, including by substantially reducing the time between an NAL and a Forfeiture Order. In recent years, the Bureau has made great strides to provide timely conclusions to cases. For example, NALs issued in 2011 took an average of 19 months to be resolved via Forfeiture Order, whereas NALs issued in 2014 took an average of eight months to be resolved via Forfeiture Order—a near 60 percent improvement in speed. However, these numbers are averages and reflect the typical case that was brought to resolution. While many enforcement actions are routine, others are also quite complex and can take substantial time and resources to resolve. A few examples of the kinds of issues that complicate the amount of time needed to conclude forfeiture adjudications are: investigations that involve targets in foreign countries; investigations that involve coordination with other government agencies; investigations in which the governing legal authorities have changed, are in the process of changing, or are subject to ongoing rulemakings or litigation; and investigations that uncover substantially new information or evidence subsequent to the NAL.

In addition, some enforcement actions are resolved through consent decrees after the NAL. Settlement negotiations take substantial amounts of time and staff resources. The Enforcement Bureau's settlements frequently result in consumer protections that are carefully negotiated to address the specifics of the case. These settlements provide certainty to the investigation targets as well as reduce litigation expenses for targets and the Commission, which can be quite substantial since regulatory appeals and subsequent Federal court litigation can take many years to con-

Question 3. The Bipartisan Budget Act of 2015 included an unwise and harmful provision to exempt debt collection calls on behalf of the Federal Government from Telephone Consumer Protection Act (TCPA) rules that prohibit robocalls to cell phones. Although the provision was ostensibly aimed at collecting student loan debt, the loophole was potentially widened even further by adoption of the Fixing America's Surface Transportation (FAST) Act in December, which requires the Internal Revenue Service to contract with private debt collectors to collect unpaid taxes. I have held hearings in this committee's Consumer Protection Subcommittee and at the Senate Aging Committee on robocalls. We should be making it harder—not easier—for this number one consumer complaint to continue, especially when there is no evidence that robocalls are an effective means of reaching consumers. Until we are successful in repealing this provision, the FCC is tasked with adopting rules to implement it.

Would you support rules that require companies collecting debt on behalf of the

Federal Government to register with the FCC in advance of doing so?

Would you support rules that limit calls from companies collecting debt on behalf

of the Federal Government to no more than one call per consumer per month?

Answer. I am committed to enforcing the TCPA, which is designed to protect consumers from unwanted calls and texts. Consumers value their privacy, regardless of whether unwanted efforts to reach them target their home landlines or wireless phones. As you note, Section 301 of the Bipartisan Budget Act of 2015, which amends the codified Telephone Consumer Protection Act, creates an exception to the TCPA's prior express consent requirement for automated calls to cellular or residential telephones for the purpose of collecting debts owed to or guaranteed by the United States.

Last month I circulated a draft Notice of Proposed Rulemaking (NPRM) that seeks comment on several of the concerns you raise, and presents proposals that remain faithful to Congress's mandate while shielding consumers from unwanted robocalls. The draft NPRM proposes strong pro-consumer restrictions on the type and number of calls a Federal creditor may place to recover a delinquent debt. In particular, the NPRM proposes:

- that only calls made after a debtor has become delinquent are covered by the
- · to limit the calls to creditors and those calling on their behalf, including debt
- that these robocalls can only be made to the debtor, so as to prevent unwanted robocalls to relatives, friends, and other acquaintances of debtors;
- to limit the number of calls to three per month per delinquency; and
- to empower consumers with the right to stop calls from a Federal creditor at any time and to require callers to inform debtors of this right.

The draft NPRM also makes clear that the new rules will not open a door for telemarketing calls. Congress specified that exempted calls must be "solely" a Federal debt, and the new rules will comply with that strict limitation.

Question 4. What impact do you believe this exemption will have on the ability of the Commission's Enforcement Bureau to differentiate between calls that are now exempt from TCPA and those that are not, particularly when exempt calls and nonexempt calls could be coming from the same call centers?

Answer. I do not anticipate that the exemption will materially impair the Commission's ability to differentiate between exempt and non-exempt calls. When the FCC investigates potential illegal robocalling campaigns, we issue a subpoena or Letter of Inquiry to the call center/person/entity responsible for the initiation of the call. Our subpoenas and inquiries require the target to produce evidence proving that the calls were made with the recipient's prior express consent (or prior express written consent, as applicable), or that show the calls were permissible under the limited exceptions granted in Section 227 of the Communications Act. Commission precedent has been very clear that any time a question or doubt arises about whether a consumer gave his or her prior express consent, the burden is on the caller to demonstrate that it obtained the proper prior express consent. The burden will continue to be on the target/caller to produce evidence that it made the call on behalf of the Federal Government in order to benefit from the new exemption.

Question 5. The Chairman recently received a letter from Senator Blunt and me regarding the upcoming reverse auction portion of Connect America Fund, Phase II

For CAF II in Missouri, there is approximately \$400 million available over the next 10 years to bring broadband to unserved parts of the state. Can you assure me that the money will be spent in Missouri and not be reallocated to other areas

of the country

Answer. The data used to calculate the CAF Phase II offer of support in Missouri and elsewhere in the country are outdated. Consistent with our overarching principle of not providing support in areas that are already served by unsubsidized competitors, we are in the process of updating our list of which areas will be subject to auction to reflect the current marketplace. We are committed to developing an auction framework that will ensure that providers in your state, as well as others, can compete to bring robust, scalable broadband service to unserved, high-cost areas, subject to the overall budget established for Phase II.

Question 6. As you consider the framework to govern the reverse auction to award the remaining dollars available in CAF II, how will you ensure that funded projects not only meet today's broadband definition, but are future proof and scalable to keep pace with ever-changing technology and increasing needs for higher speed broadband?

Answer. The Commission is focused on updating the universal service high-cost program to ensure that we are delivering the best possible voice and broadband experiences to rural areas not only for today, but in the future, all within the confines of the Connect America Fund's budget. One of the primary policy goals of the competitive bidding process is to ensure widespread participation from all providers that can deliver a high-quality service. As we move forward with finalizing the structure of the CAF Phase II reverse auction, we will be giving full attention to the best ways to ensure that rural communities, including those in Missouri, have access to robust and reliable broadband service both today and in the future.

Question 7. In 1993, through the Omnibus Budget Reconciliation Act of 1993, Congress directed the FCC to develop regulations governing the competitive bidding of spectrum. Included in the statutory instructions from Congress was a requirement that the Commission "ensure that small businesses, rural telephone companies, and businesses owned by members of minority groups and women are given the opportunity to participate in the provision of spectrum-based services." To meet this congressional mandate the FCC created the Designated Entity (DE) program. The program's worthy goal of providing a mechanism for legitimate small businesses to partner with larger ones in spectrum auctions has undoubtedly helped many small businesses win spectrum licenses over the past 20+ years. But it has also provided a blueprint for large, multinational, multi-billion-dollar corporations to game the system and receive discounts on their bids.

What assurances can you provide that the commission will do a better job of monitoring potential abuse of the DE program in the upcoming incentive auction than it did in the recent AWS-3 auction?

Answer. The Commission always carefully reviews all claims of eligibility for small business bidding credits in the course of its review of the licensing applications of auction winners. For example, in August 2015, the Commission denied over \$3 billion in credits in the recent AWS-3 Auction to two entities that it found were controlled by a large multi-billion dollar corporation and, therefore, ineligible for bidding credits. The Commission staff will also carefully review applications filed by winning forward auction bidders in the upcoming Incentive Auction, which review will be augmented by new rules adopted in July 2015.

Specifically, in July 2015, the Commission updated its competitive bidding rules in the Competitive Bidding Report & Order. This Order adopted new rules to reflect

the dramatic changes in the wireless marketplace since the Commission's competitive bidding rules were last updated in 2006. Particularly, the new rules better achieve the goals that Congress intended through its mandate while preventing the type of abuse you reference. As a result, the designated entity program will better serve small businesses and eligible rural providers by expanding their ability to adopt innovative and flexible business plans, and at the same time incorporate a number of measures to make sure that only bona fide small businesses and eligible

rural service providers benefit from bidding credits.

Simply put, the new rules will ensure that small businesses are not able to serve as a stalking horse for another party. The Report & Order established the first-ever cap on the total amount of bidding credits to minimize the incentive for major corporations to try to take advantage of the program. It also limits the amount of spectrum that a small business or rural service provider may lease to its disclosable,

non-controlling investors during the five-year unjust enrichment period. The revised rules also clarify that joint bidding agreements between designated entities (including small businesses and rural service providers) and nationwide service providers will not be permitted. Ultimately, the reforms adopted in the Report & Order will increase the economic opportunity for small and rural businesses, as well as ensure that the beneficiaries of our competitive bidding rules are those intended by Con-

Question 8. When Congress and the FCC were establishing the framework for spectrum auctions more than 20 years ago it probably made sense to ensure small businesses were able to compete. But a lot has changed. The cost of entering the incredibly expensive wireless infrastructure industry is far greater than it was in the early 1990s. A company that truly has revenues of \$40 million, \$15 million, or \$3 million—the thresholds set by the commission for the various levels of bidding credits-would be unlikely to enter the industry today. So is it time to look at sim-

ply eliminating the DE program to prevent future abuse?

Answer. The DE program is an important program that can help bring opportunity and competition to the wireless industry. The Commission is committed to ensuring that bona fide small businesses and eligible rural service providers have the opportunity to participate in our spectrum auctions and in the provision of spectrum-based services. For this reason, the Commission adopted the Competitive Bidding Report & Order last year. This Order updated our competitive bidding rules to reflect the dramatic changes in the wireless marketplace since they were last updated in 2006. In 2006, the top four national carriers served 82 percent of the market; today the top four national carriers serve 98 percent of all subscribers. Given these changes, the Commission acted to provide bona fide small businesses and eligible rural service providers a better on-ramp into the wireless industry, and provide small and eligible rural providers with flexibility to make businesses decisions with the goal creating more wireless choices for consumers. Under the Commission's new rules, the DE program will continue to provide small and rural businesses with the flexibility they need to gain experience in operations and investment.

RESPONSE TO WRITTEN QUESTIONS SUBMITTED BY HON. AMY KLOBUCHAR TO HON. TOM WHEELER

Question 1. Mr. Chairman, in our capacity as Chairman and Ranking Member of the Antitrust Subcommittee, Senator Lee and I sent you and Attorney General Loretta Lynch a letter on February 17, urging you to carefully consider how Charter's acquisition of Time Warner Cable and Bright House Networks will "hinder or promote the development of new alternatives for consumers to receive video content.' We urged you to consider whether the transaction would increase Charter's incentive and ability to interfere with over-the-top service providers. Interference could occur through discriminatory interconnection practices or by reducing the price Charter pays to include certain content in its cable package. Is this the type of con-

cern that the FCC would consider in a merger review?

Answer. Consistent with our rules, the Commission will evaluate whether these proposed transactions are in the public interest. As I indicated in my response to your letter, our analysis takes several factors into account, including the issues you raised in your letter. With regard to the issues you raise here and all issues relevant to the transaction, not only do we assess whether we can appropriately remedy any harms that may arise from the transaction, we also place great emphasis on the benefits that the transaction will confer on American consumers. Again, while I am unable to discuss the specific merits of this particular proceeding, I can assure you that the Commission will be conducting an open and transparent process as required by FCC rules and regulations. After developing a full and complete record, we hope to conclude our review as quickly as possible.

Question 2. In 2012, I worked to include an important policy in the FAA reauthorization to allow for priority review of construction permits in cold weather states. International Falls, Minnesota, is fortunate to be home to the coldest annual average temperature in the contiguous United States. The KPXM Tower in International Falls also happens to be the tallest structure in Minnesota. I can't imagine any of us would want to climb 1,505 feet to the top of it in February.

Chairman Wheeler, will you work with me to ensure that broadcasters in cold weather states have the resources and flexibility they need to be able to complete

the post-auction repacking process in a timely manner?

Answer. Yes. We will take into account how many stations actually need to be repacked, and the specific characteristics of each, in determining the repacking schedule. The Commission has been working closely with broadcasters to get important input from the industry on planning a successful transition. We have also had discussions with representatives of the wireless industry, who have an interest in an efficient transition process. We anticipate further interaction with all affected stakeholders as we develop and refine this transition plan.

RESPONSE TO WRITTEN QUESTIONS SUBMITTED BY HON. RICHARD BLUMENTHAL TO HON. TOM WHEELER

Question 1. Last year, I filed comments with the FCC urging the establishment of coordinated enrollment opportunities for low-income and homeless veterans to the Lifeline Program, which has provided critical telephone access to low-income Americans for over 30 years. As Ranking Member of the Senate Committee on Veterans' Affairs, I strongly believe that greater access to Lifeline benefits will provide support for veterans in need as they transition from the armed services to civilian employment and as they transition from homelessness into housing. What is the FCC doing to ensure that our most vulnerable populations, ranging from veterans to students, are aware of these essential programs?

Answer. I share your interest in ensuring that our most vulnerable populations, including veterans and students, are aware of these essential programs. As I indicated in my response to your letter last year on this issue, the Commission sought comment in the 2015 Lifeline FNPRM on whether to include Federal low-income assistance programs for veterans to qualify those individuals for Lifeline support. Recently, I circulated an Order for my colleagues' consideration to modernize the FCC's Lifeline program to efficiently and effectively meet a critical 21st Century need: making broadband more affordable for low-income consumers. The Order will

be considered at the FCC's March 31 Open Meeting.

The Order proposes to add Veterans Pension and Survivors Pension benefit programs to Lifeline's eligibility program. To qualify for the Veterans Pension benefit program, veterans must have at least 90 days of active duty, including one day during a wartime period, and meet other means-tested criteria such as low-income limits and net worth limitations established by Congress. In addition, any surviving spouse or dependent of a deceased eligible veteran can qualify for the Survivors Pensions benefit program. Many commenters supported this change and have demonstrated an established need for armed forces veterans to access affordable phone

More generally, by supporting broadband, Lifeline will bring connectivity into the homes of low-income Americans. We must modernize the Lifeline program to improve affordability and access to broadband—the critical communications technology of the 21st Century—for all low income Americans.

Question 2. What can policymakers do to help get more people connected and also

ensure that we can meet the growing demand?

Answer. While it is clear that broadband has become essential in today's society, affordability remains a major barrier to adoption by low-income consumers. The proposed Order I recently circulated for my colleagues' consideration takes a number of steps to address the broadband affordability gap. For the first time, low income consumers could apply the \$9.25 per month support to stand-alone broadband service, as well as bundled voice and data service packages. The Order would free up the Lifeline marketplace to encourage wide participation in the program by broadband providers, giving consumers competitive service options. Minimum service standards would ensure that supported services meet modern needs, and the establishment of a National Eligibility Verifier will further deter waste, fraud and abuse, while reducing provider burden. In addition, the Order proposes to set a budget of \$2.25 billion, indexed to inflation, to limit Lifeline's cost to ratepayers, but sufficient to allow for increased participation generated by support for broadband

Question 3. The FCC issued its Notice of Proposed Rulemaking on Special Access in 2005. Over a decade has now passed, yet there is still no final rule. I understand that the FCC needs to collect information from providers and users of special access services in order to conduct the necessary market analysis to proceed with this rule-

Do you now have the data necessary to finalize a rulemaking to ensure that special access lines are provided at reasonable rates and on reasonable terms and conditions?

At this point, are there any other factors blocking you from finalizing a rulemaking?

Answer. The resolution of the business data services (special access) proceeding is a high priority at the Commission and we are moving forward with all due diligence to conclude this proceeding as expeditiously as possible while ensuring full consideration of the record. We have collected data, and the comment and reply periods on the business data services rulemaking proceeding closed last month. Commission staff is reviewing the comments, including substantial economic analysis of the data by stakeholders' expert consultants. The analysis of the data, as well as other informed public input filed in this proceeding, will provide the Commission with the tools necessary to fully comprehend this marketplace and take action as appropriate.

Question 4. As you know, to address increasing demand for wireless broadband access, Congress directed the FCC to conduct an incentive auction, to encourage broadcast licensees to voluntarily relinquish their spectrum rights in exchange for a share of the proceeds in auctioning this spectrum to new licensees. In many parts of the country, contiguous spectrum will be freed up by "repacking" the channels to which remaining television broadcasters are currently assigned. Do you believe there is enough money in the TV Broadcaster Relocation Fund to cover repacking-related expenses incurred by broadcasters?

Answer. At this point, we have no reason to believe that the \$1.75 billion Broadcaster Relocation Fund will be insufficient to cover broadcasters' relocation costs. In order to ensure the sufficiency of the fund, we will optimize the final broadcaster channel assignments to minimize relocation costs. This optimization will: (1) maximize the number of stations assigned to their pre-auction channel; and (2) avoid reassignments of stations with high anticipated relocation costs, based on the most accurate information available. These steps, taken together, will help to ensure that the \$1.75 billion Reimbursement Fund is sufficient to cover broadcasters' relocation costs and that the Fund is disbursed as fairly and efficiently as possible.

Question 5. If the 39 month repack time-frame and the \$1.75 billion relocation fund are insufficient, does the FCC have the flexibility in the statute to ensure consumers and communities won't be negatively affected by signals going off the air?

Answer. The Commission's goal is for consumers to experience minimal disruption. To help ensure the Broadcaster Relocation Fund is sufficient to cover broadcasters' relocation costs, the FCC commissioned the Widelity Report to more fully understand the types of costs that would be required, and the magnitude of those costs, to help make efficient use of the Broadcaster Relocation Fund. The Commission's Media Bureau adopted a catalog of expenses as guidance, which will serve as a means of facilitating the process of being reimbursed by setting forth categories of expenses. The Commission is taking appropriate measures to disburse funds as fairly and efficiently as possible to ensure the sufficiency of the Reimbursement Fund.

Should the \$1.75 billion be insufficient, I will notify Congress as soon as this becomes clear. The amount was set by the Spectrum Act and Congress would need to take action to change it.

Question 6. If so, how can the FCC ensure that broadcasters have sufficient time to move without being forced off the air, if factors outside their control delay their

ability to reconfigure their facilities?

Answer. We believe that a 39-month transition period is sufficient for stations to apply for a construction permit (3 months) and move to their new channels (36-month Construction Period), while also enabling forward auction winners to get access to their newly acquired spectrum as quickly as possible, thus ensuring a successful incentive auction. I would also note that the appeals court unanimously upheld the 39-month transition period. The Commission has created a framework that gives stations every opportunity to remain on the air, even if time runs short due to unforeseen circumstances. To assist stations, the Commission will permit sixmonth extensions for stations that, for reasons beyond their control, cannot complete the modifications to their facilities during their construction period. Additionally, special temporary authority may be granted to operate on a new channel using a temporary facility while they complete their tower modifications. Eligible broadcasters can also request special temporary authority to operate on a channel in the TV band that is available because it was relinquished by a winning bidder in the auction.

Questions 7. Do you agree that no non-participating broadcaster should be forced off the air, or forced to cover the costs of transitioning their signal, to accommodate the repack?

Answer. Every broadcaster who is assigned to a new channel in the repacking process because they choose not to participate in the auction, or participate but are not selected, will be eligible for reimbursement of their reasonably incurred costs from the Relocation Fund. The Commission is taking appropriate measures to disburse funds as fairly an efficiently as possible to ensure the sufficiency of the Relo-

cation Fund. Non-participating broadcasters cannot and will not be forced off the air.

Question 8. More and more often, we see retransmission consent negotiations are turning into disputes that result in programming blackouts and it's the consumers that pay the price. The fact is, the more these blackouts occur, the more pressure mounts in Washington to change the law to ensure consumers get a more fair shake. As you know, Section 103(c) of the STELA Reauthorization Act of 2014 ("STELAR") directed the FCC to review the totality of the circumstances test for evaluating whether broadcast stations and MVPDs are negotiating for retransmission consent in good faith. In September 2015, the Commission initiated a rulemaking on this question.

Please provide a status update on MB Docket No. 15–216.

Answer. Comments and reply comments were due on December 1, 2015, and January 14, 2016, respectively. Staff is currently reviewing the record and preparing recommendations on the next steps for action on this proceeding.

Question 9. How does the Commission plan to delineate bad faith negotiation tactics from good faith tactics? When can consumers be confident there is a cop on the beat policing these negotiations to ensure bad faith negotiating tactics are not hold-

ing hostage the programming they paid for?

Answer. The Commission has a role pursuant to Section 325 of the Communications Act to ensure that retransmission negotiations are conducted in good faith. Rule 76.65 currently lays out the standards for what constitutes good faith negotiation. We currently have a pending Notice of Proposed Rule Making (Docket No. 15-216) that seeks comment on how we can strengthen these rules and help minimize service disruptions. Commission staff is currently reviewing the record in this pro-

Question 10. Last year, I wrote to the FCC regarding a news story in the Wall Street Journal that revealed that one in ten antenna sites around the country may not adhere to FCC guidelines for providing the appropriate level of awareness and control to occupational workers that may be exposed to radiofrequency (RF) radiation above the limits for the general population. This means thousands of innocent tradespeople—electricians, painters, HVAC technicians, roofers, firefighters, and others whose jobs require them to work in close proximity to RF-radiating wireless antennas—may be unknowingly exposed to harmful RF radiation.

An April 30, 2014, consent decree issued against Verizon for violating FCC radio

frequency exposure limits at a rooftop antenna site in Hartford, CT, required Verizon to implement a rigorous compliance plan to protect Verizon Wireless employees and contractors. However, it was unclear what steps Verizon must take to ensure the safety of third party workers. Please provide an update on Verizon's com-

pliance with this consent decree.

Answer. The Verizon consent decree resolved multiple investigations into the company's compliance with the FCC's rules governing radiofrequency exposure. The consent decree requires Verizon to check each of its antenna sites for compliance, and provides detailed measures for protecting the safety of Verizon workers and third parties who might be exposed to radiofrequency radiation at Verizon sites. In addition to training and other protections for Verizon workers and contractors, the compliance plan also requires Verizon to protect third parties by restricting access to sites, installing barriers where necessary, and erecting radiofrequency exposure warning signage. Pursuant to the agreement, Verizon must report on its compliance with the consent decree. According to the most recent report, Verizon has now performed compliance reviews of more than 6,900 antenna locations and conducted training for all Verizon employees and third party contractors with access to Verizon's sites. Verizon's final compliance report is due on October 30, 2016.

It is important to note that the Commission continues to enforce its rules and has taken action wherever warranted. The vast majority of sites we have reviewed are

in compliance with our rules.

Question 11. The FCC issued a Notice of Proposed Rule Making (NPRM) in 2013 regarding RF exposure at wireless sites. What is the status of this NPRM?

Answer. The FCC currently has rules that require compliance with the Commission's RF Exposure rules for all wireless transmission facilities and they are enforceable. The NPRM sought to clarify responsibilities and the process for determining compliance in situations where multiple transmission facilities are located close together, such as on a rooftop. The NPRM also sought to clarify the responsibilities for compliance with the RF exposure rules for today's wide variety of transmission facilities, including when barriers may be required to restrict access nearby an antenna, warning signs must be posted, when compliance with the limits for the general population are needed, and other issues. The underlying issues and analyses are quite complex and will require careful consideration and coordination with other Federal agencies such as the FDA and OSHA. The proceeding continues to be a pri-

Question 12. It is not clear that the proposed rule would require wireless service providers to extend the same level of RF radiation protection they provide to their own employees to third-party workers. What commitment can you make to address

Answer. The rules the Commission proposed were designed to protect all workers, as well as the general public. While I cannot prejudge the outcome of our pending

proceeding, I remain committed to this goal.

RESPONSE TO WRITTEN QUESTION SUBMITTED BY HON. EDWARD MARKEY TO HON. TOM WHEELER

Question. The rules governing the special access market need to be reformed so the businesses, competitive carriers, wireless service providers and others who rely on it can take full advantage of robust and competitive broadband services. Mr. Chairman, can you update the Committee on the status of the current proceeding?

Answer. The resolution of business data services (special access) proceeding is a high priority at the Commission and we are moving forward with all due diligence to conclude this proceeding as expeditiously as possible while ensuring full consideration of the record. We have collected data, and the comment and reply periods on the business data services rulemaking proceeding closed last month. Commission staff is reviewing the comments, including substantial economic analysis of the data by stakeholders' expert consultants. The analysis of the data, as well as other informed public input filed in this proceeding, will provide the Commission with the tools necessary to fully comprehend this marketplace and take action as appropriate.

RESPONSE TO WRITTEN QUESTIONS SUBMITTED BY HON. CORY BOOKER TO HON. TOM WHEELER

 $\label{lem:question 1} \textit{Question 1.} \ \text{As you know, commercial demand continues to outpace the Federal Government's reallocation of available electromagnetic spectrum. The Wi-Fi Innova$ tion Act (S. 424) aims to address the growing demand for spectrum by encouraging sharing for unlicensed Wi-Fi use in the 5 GHz band. This band shows promise in paving the way for further economic growth and innovation. Since the bill's introduction, Committee leadership has taken an active role in working to ensure that testing and coordination move forward at an appropriate pace. What progress has occurred in testing the 5 GHz band since January 1, 2016?

Answer. The Commission held a meeting with stakeholders in the 5 GHz band on March 23, 2016, as an essential step in moving ahead with this process. In addition, the Commission continues to work collaboratively with other government agencies (DOT/NTIA) to ensure thorough and complete tests in the 5 GHz band to mitigate the risk of harmful interference with Intelligent Transportation Systems (ITS). We developed a three-phased testing plan that would involve reviewing equipment in the Columbia Lab and testing sample/prototypes off-campus utilizing DOT facilities and procedures. The next steps are to refresh the record of this proceeding and solicit prototype devices for testing.

Question 2. What steps remain to be taken, and how will FCC implement them? Answer. We have a significant amount of work ahead of us, including initiating the testing process once appropriate prototypes are available. The stakeholder meeting was very useful in openly discussing some of the parameters for this process. We will need to review the record once comments are submitted, and we expect substantial input from stakeholders. We also will continue to meet with our agency counterparts and discuss ongoing work as we move toward reaching a mutually agreeable solution to this matter.

Question 3. As you know, licensed radio broadcasters in many areas of the country face recurring harmful interference from "pirate" broadcasters illicitly broadcasting on their assigned frequency. What steps is FCC taking to enforce the prohibition against illicit radio operations?

Answer. The FCC is committed to enforcement of the licensing requirements of the Communications Act, which the Commission has interpreted to prohibit unlicensed radio broadcasting. Last year, 20 percent of the Enforcement Bureau's activities were directed towards pirate radio. That's more than any other area of enforcement. During FY 2015, the Enforcement Bureau issued 130 enforcement actions for pirate operations. More than half of those actions were in the New York/New Jersey area

In addition to taking formal enforcement actions, the Commission is also addressing the issue by working more closely with broadcasters and raising public awareness about pirate radio. Commissioner O'Rielly has been a leader on this issue. I continue to be grateful for his guidance in keeping the Commission focused on all the ways that we can combat pirate radio. For example, earlier this month, the Commission issued an Enforcement Advisory about pirate radio and all five Commissioners signed letters addressed to local officials as well as groups that may provide support, intentionally or unintentionally, to pirate radio operations. The letters and accompanying Enforcement Advisory explain the harms caused by pirate radio and seek to enlist the assistance of local officials, landlords, and advertisers in identifying pirates and depriving them of financial support. The letters and Enforcement Advisory may be accessed on the Commission website at: https://www.fcc.gov/document/enforcement-advisory-unauthorized-radio-broadcasting

Response to Written Questions Submitted by Hon. Tom Udall to Hon. Tom Wheeler

Question 1. Chairman Wheeler, I have concerns about Windstream's decision to decline up to \$27 million in Connect America Fund Phase II (CAF II) support to improve broadband service in rural areas of New Mexico. The U.S. Census Bureau notes that roughly one third of New Mexicans households do not have Internet access at home. According to Federal Communications Commission data, only one in four New Mexicans living in rural areas has access to fast broadband speeds of 25 megabits per second (Mbps). When will the Commission begin its "reverse auction" process to direct support to those unserved areas of New Mexico that are impacted by Windstream's decision?

Answer. I share your interest in bridging the rural digital divide in our country. The universal service program is one of the most important tools at our disposal to ensure that consumers and businesses in rural America have the same opportunities as their urban and suburban counterparts to be active participants in the 21sl century economy. The Commission is focused on updating the universal service high-cost program to ensure that we are delivering the best possible voice and broadband experiences to rural areas while providing a climate for increased broadband expansion, all within the confines of the Connect America Fund's budget.

Last September, I circulated an Order for the consideration of my fellow Commissioners that would address the framework for the CAF Phase II competitive bidding process. In December, I circulated an updated draft Order that addressed concerns raised by other commissioner offices. I remain committed to completing the CAF Phase II auction framework as expeditiously as possible, and I will continue to work with my colleagues to resolve this important matter promptly.

Question 2. How will the Commission ensure there will be acceptable bids from broadband providers for the most difficult areas to serve?

Answer. One of the primary policy goals for this competitive bidding process is to ensure widespread participation from all providers that can deliver a high-quality service. Simply put, more competition between providers means that finite universal service funding will be used efficiently to deliver the best possible solutions. As the Commission moves forward with finalizing the structure of the CAF Phase II reverse auction, we will take into consideration the issues and concerns presented by all stakeholders and give full attention to the best ways to ensure that rural communities have access to robust and reliable broadband service.

Question 3. According to the Commission's 2016 Broadband Progress report, 1.6 million people living on Tribal lands lack access to broadband. Recognizing the challenge of bridging this digital divide, the Commission previously proposed a "Tribal coefficient" in its quantile regression analysis (QRA) for universal support for high cost areas. Last year, I sent you a letter asking you to consider a proposal for a "Tribal Broadband Factor" to help accelerate broadband deployment on tribal lands. Will you commit to completing by the second quarter of this year the Tribal Broadband Factor proceeding currently before the FCC?

Answer. The Commission recently adopted an Order to modernize universal support for rate-of-return carriers. A Further Notice included with the Order specifically seeks comment on additional reforms, including the Tribal Broadband Factor proposal referenced in your letter, to further promote broadband investment and deployment on unserved and underserved Tribal lands. As you and I have discussed, I will take action on this important issue before the end of 2016. I commit to con-

tinue working with you to bring technological opportunities to people living on Tribal lands lacking access to broadband services.

Question 4. The Commission's Tribal Mobility Fund provided \$50 million in wireless support to underserved Tribal areas. Of that total, over \$5 million in support helped bring mobile broadband service to Picuris Pueblo in Taos County and areas of the Navajo Nation, which spans New Mexico, Arizona, and Utah. When will the Commission complete a Tribal Mobility Fund Phase II?

Answer. I am committed to ensuring that underserved Tribal areas receive access

to mobile broadband services that are reasonably comparable to the services provided in the rest of this country. As you know, in 2011, the Commission proposed to provide \$500 million annually in ongoing financial support to promote mobile broadband and high quality voice services in areas where such services cannot be sustained or extended absent Federal support. Of that \$500 million annually, the Commission proposed providing up to \$100 million for Tribal areas. In the last half of 2014, the Commission received comment on a number of questions in a Further Notice of Proposed Rulemaking regarding how universal service funds should be targeted in a Mobility Fund Phase II. This inquiry was in light of the substantial rollout of 4G LTE by many of the country's mobile networks. The Commission proposed exists today due to support from the universal service fund and to extend 4G LTE service to areas where it does not exist. It also sought further comment on a Tribal Mobility Fund Phase II. The proposal for an ongoing Tribal Mobility Fund Phase II remains under consideration as Commission staff reviews the record regarding possible next steps for a Mobility Fund Phase II.

Question 5. Chairman Wheeler, the Federal agency overseeing broadband providers and Internet policy should be a flagship agency when it comes to using the best IT tools available. What are the most important IT systems at the Commission that need to be modernized? While I am aware that the FCC is an independent agency, how many of the FCC's IT investments are cloud-based services (Infrastructure). ture as a Service, Platform as a Service, Software as a Service, etc.)? What percentage of the department's overall IT investments are cloud-based services? How has this changed since 2011?

Answer. Like much of the Federal Government, the FCC has faced substantial challenges in modernizing legacy IT systems. During the past three years, flat budgets have limited modernization efforts, although the FCC has been able to make significant progress after receiving reprogramming permission from both Senate and House appropriators. We were saddled with over 200 legacy systems, many of which were antiquated.

This past September, the FCC undertook and completed the "server lift", moving our legacy servers to a secure, off-site hosting provider, leading to a cost avoidance of over \$10 million. In fact we were able to reduce O&M spend from 85 percent to <50 percent and lay the groundwork for a move to a cloud-first approach across the

In my recent testimony before the House Appropriations Financial Services and General Government Subcommittee, I noted that we are focused in the current Fiscal Year on modernizing systems that support essential services and public safety, such as the Universal Licensing System, the Network Outage Reporting Systems and the Disaster Reporting system. In fact, we are currently transitioning to a cloud platform to rewrite a backbone system of the FCC's Universal Licensing System, which contains over 22 separate licensing systems.

In Fiscal Year 2017, we plan to take another step toward completing our projected IT modernization efforts, shifting additional legacy applications to a resilient cloudbased platform. With sufficient resources, we will modernize and upgrade essential systems, including our Consolidated Database System and Equipment Authorization

System, and continue the modernization of our remaining systems.

Overall, we have been engaged in a multi-year top-to-bottom effort to modernize our systems. Some success stories include the Consumer Help Center system, built at one-sixth the initial estimated price and completed in less than half the estimated time. We also have built a new FCC.gov website, which has garnered positive feedback. Moreover, we reduced FISMA findings by over 50 percent through the increased resiliency of the FCC's ability to respond to cyber issues of concern.

RESPONSE TO WRITTEN QUESTION SUBMITTED BY HON. JOE MANCHIN TO HON. TOM WHEELER

Question. I commend you and your staff for getting the Connect America Fund (CAF) II up and running. I also commend your efforts to resolve the "stand alone broadband" issue for small, rural companies. I understand more than 89,000 locations in West Virginia will receive broadband as a result of the initial CAF II offer made last year; however, I remain concerned about the parts of West Virginia—more than 12,000 locations—that will still find themselves on the wrong side of the digital divide. I understand that the Federal Communications Commission's (FCC) next step is to conduct a competitive bidding process for these very high cost locations and move forward on the Remote Areas Fund. Can you give an update on these next steps for the very high cost locations and those otherwise not part of the current CAF II offer?

Answer. I share your interest in bridging the rural digital divide in our country, particularly in West Virginia. The universal service program is one of the most important tools at our disposal to ensure that consumers and businesses in rural America have the same opportunities as their urban and suburban counterparts to be active participants in the 21st century economy. The Commission is focused on updating the universal service high-cost program to ensure that we are delivering the best possible voice and broadband experiences to rural areas while providing a climate for increased broadband expansion, all within the confines of the Connect America Fund's budget

America Fund's budget.

As you may know, I have circulated an Order to my fellow Commissioners for their consideration that will address the framework for the Connect America Fund Phase II competitive bidding process. One of the primary policy goals for this competitive bidding process is to ensure widespread participation from all providers that can deliver a high-quality service. Simply put, more competition between providers means that limited universal service funding will be used efficiently to deliver the best possible solutions. At the same time, we also are actively considering how to implement the Remote Areas Fund so that we are prepared to act quickly in those areas that remain unserved after the Phase II competitive bidding process is complete. Our objective is to bring broadband to these unserved areas across the country as soon as possible.

RESPONSE TO WRITTEN QUESTIONS SUBMITTED BY HON. JOHN THUNE TO HON. JESSICA ROSENWORCEL

Question 1. Following the reclassification of broadband Internet access service as a Title II public utility, Chairman Wheeler indicated that the FCC will propose new privacy regulations. The Federal Trade Commission (FTC) already has extensive experience in protecting consumer privacy, and consumers and business already have experience in applying the FTC's privacy rules and precedents; the Commission has virtually no such experience beyond the very narrow confines of rules implementing Sec. 222. Why would the Commission create a new, likely inconsistent set of rules rather than adopting the FTC's privacy protections? Given that the Commission's rules will only apply to BIAS providers, isn't there a significant likelihood that functionally identical activities on a smartphone will be governed by completely different rules based upon who is providing the service?

Answer. The Commission is the Nation's expert agency with respect to communications technology. As such, I believe it has the capacity to develop policies to both protect consumers and provide broadband providers the certainty they need to develop their businesses without running afoul of the privacy provisions in the Communications Act—including Section 222, Section 338, and Section 631.

The Commission also has a long history of working cooperatively with other Federal agencies, including the Federal Trade Commission. In fact, the staff of both agencies recently signed a Memorandum of Understanding to institutionalize their cooperation. So as the Commission begins a proceeding to update its privacy policies, I am hopeful that our efforts will complement the work of the Federal Trade Commission in a meaningful way.

Finally, in the decision reclassifying broadband Internet access service, the Commission found that this service "whether provided by fixed or mobile providers, is a telecommunication service." Moreover, the Commission determined that the "application and enforcement of Section 222 to broadband Internet access services is in the public interest." As a result, both fixed and mobile providers of broadband Internet access service are subject to Section 222. However, because the agency has not yet adopted a notice to begin a proceeding on this subject, I cannot speculate about how future rules might apply to different activities on a smartphone. But as a general matter, I believe that the Commission should set straightforward and fair rules that protect consumers and foster competition.

Question 2. I understand that you are close to finalizing action on an order that would address the standalone broadband issue that many in Congress have written

to you about over the past several years and also adopt some new limits and other measures related to universal service support for rate of return providers. Do you commit to work quickly and collaboratively with this committee and with affected stakeholders to the extent any adverse or unintended consequences arise out of the reforms?

Answer. Yes.

Question 3. Ensuring that rural and urban consumers have access to reasonably comparable services at reasonably comparable rates is a fundamental statutory principle of universal service. Are you confident that the standalone broadband solution you are poised to adopt will do that-specifically, will it allow rural consumers to get standalone broadband at rates reasonably comparable to their urban counterparts? If not, what more do you think the FCC will need do to ensure such com-

Answer. I believe that we will need to monitor the impact of any prospective universal service reforms that enable support for standalone broadband service. If we find that the reforms are not working as intended or that they do not comport with the Communications Act, including the charge contained in section 254(b)(3) that there be reasonably comparable services at reasonably comparable rates, then the

Commission should be prepared to take additional action.

Question 4. I have heard concerns that the methodology used in the 2014 order to determine the local rate floor for voice service has led to rates in some rural areas, including parts of South Dakota, that are not reasonably comparable to those services provided in urban areas. Given this concern, when do you plan to act on the petition for reconsideration filed by several rural associations regarding the rate floor methodology? Do any other Commissioners have thoughts regarding this mat-

Answer. In the 2014 Connect America Fund Order in which it phased in the rate floor, the Commission described its reason for doing so as a matter of "fairness." Specifically, the agency concluded that it is not equitable for some consumers across the country to subsidize the cost of service for other consumers that pay local service rates that are substantially lower than the national average. I believe this approach is fundamentally correct. However, this is a situation that the Commission should continue to monitor in light of the petitions filed with the agency seeking reconsideration of this approach.

Question 5. Last July, the FCC released an omnibus declaratory ruling on the Telephone Consumer Protection Act (TCPA). TCPA litigation has increased dramatically in the last decade. What considerations did the Commission give to the impact its ruling would have on businesses, both large and small, that need to reach their

customers for legitimate business purposes?

Answer. In the June 2015 Declaratory Ruling and Order, the Commission ac-Answer. In the Julie 2013 Decraratory kulling and Order, the Commission acknowledged that "the number of [Telephone Consumper Protection Act] private right of action lawsuits is increasing," while also noting that "[Telephone Consumer Protection Act] complaints as a whole are the largest category of complaints [the Commission] receive[s]." From Dec. 29, 2014 through Mar. 7, 2016, the Commission received 62,826 complaints regarding robocalls and 139,752 complaints regarding telemarketing. Additionally, the Federal Trade Commission reported that "[b]y the fourth quarter of 2012, robocall complaints had peaked at more than 200,000 per month" month.

In implementing the Telephone Consumer Protection Act, the Commission seeks to strike a balance in "affirm[ing] the vital consumer protections of the [Telephone Consumer Protection Act] while at the same time encouraging pro-consumer uses of modern calling technology." The Commission does this by "[p]roviding and reiterating guidance regarding the [Telephone Consumer Protection Act] and our rules, empowering callers to mitigate litigation through compliance and dispose of litigation quickly where they have complied." Specifically, in the June 2015 Declaratory Ruling and Order, the Commission took into consideration the interests of businesses and other callers by "[c]larifying that 'on demand' text messages sent in response to a consumer request are not subject to [Telephone Consumer Protection Act] liability" and "[w]aiving [the Commission's] 2012 'prior express written consent' rule for certain parties for a limited period of time to allow them to obtain updated consent."

Question 6. Many small businesses seek to improve their efficiency and customer relationships by providing information to their customers through the use of modern dialing technologies. The FCC's recent interpretation of the term "autodialer" in the TCPA declaratory ruling, however, could sweep in any number of modern dialing technologies. Other than using a rotary phone, what other technologies can small businesses feel comfortable using without exposing themselves to TCPA litigation risk?

Answer. The Telephone Consumer Protection Act defines an "automatic telephone dialing system" as "equipment which has the capacity—(A) to store or produce telephone numbers to be called, using a random or sequential number generator; and (B) to dial such numbers." In the June 2015 Declaratory Ruling and Order, the Commission did not "address the exact countours of the 'autodialer' definition or seek to determine comprehensively each type of equipment that falls within that definition that would be administrable industry-wide." Rather, the 2015 Declaratory Ruling and Order maintained the Commission's conclusion in the 2003 Telephone Consumer Protection Act Report and Order that to be considered an "automatic telephone dialing system" the "equipment need only have the 'capacity to store or produce telephone numbers,'" as the statute dictates.

In any event, businesses are only prohibited from using an autodialer when a caller is using it to dial wireless numbers without prior express consent from the called party. In addition, businesses are permitted to use autodialers to call residential wireline numbers unless it is a prerecorded or artificial voice telemarketing call

which then would require prior express consent.

I recognize that this is complex and technology has changed considerably since passage of the Telephone Consumer Protection Act. If Congress chooses to revisit the Telephone Consumer Protection Act, updating the definition of autodialer could help provide greater certainty for businesses and limit related litigation.

Question 7. By establishing liability after a mere one-call exception, the Commisequestion 7. By establishing hability after a mere one-can exception, the Commission's ruling creates a perverse incentive for incorrectly-called parties to allow or even encourage incorrect calls to continue, rather than notify the calling party of the error. These continuing incorrect calls thus become potential violations and the basis for monetary penalties sought through litigation. What will you do to repair this perverse incentive?

Answer. As you note, the Telephone Consumer Protection Act has resulted in a system that, in some cases, can feature misaligned incentives. In particular, some parties may find an incentive to exploit the operation of the per violation monetary penalty contained in the law, which states that "a person or entity, if otherwise permitted by the laws or rules of court of a State, bring in appropriate court of that State—(Å) an action based on a violation of this subsection or the regulations prescribed under this subsection to enjoin such violation, (B) an action to recover for actual monetary loss from such a violation, or to receive \$500 in damages for each such violation, whichever is greater, or (C) both such actions."

In recognition of the challenges of learning of reassigned numbers and to provide callers with "an opportunity to avoid liability for the first call to a wireless number following reassignment," the June 2015 Declaratory Ruling and Order concluded that "giving callers an opportunity to avoid liability for the first call to a wireless number following reassignment strikes the appropriate balance.

While the per violation basis for monetary penalties is defined in the statute, I am committed to exploring additional ways to address issues associated with discovering reassigned numbers, including the possibility of industry-led fixes. In addition, this is an area where the Commission should welcome additional Congressional

Question 8. Has the Commission considered providing a safe harbor for a calling party that reasonably relies on available customer phone number records to verify

the accuracy of a customer's phone number?

Answer. Yes. A number of petitions addressed in the June 2015 Declaratory Ruling and Order proposed some form of a safe harbor for reassigned numbers. The Commission considered these proposals but instead found that a "one-call window provides a reasonable opportunity for the caller to learn of the reassignment, which is in effect a revocation of consent to be called at that number, in a number of ways." The Commission stated that "[o]ne call represents an appropriate balance between a caller's opportunity to learn of the reassignment and the privacy interests of the new subscriber to avoid a potentially large number of calls to which he or she never consented.

In the June 2015 Declaratory Ruling and Order, the Commission also identified a number of options that, over time, may permit callers to learn of reassigned num-

First, the Commission recognized that there is at least one database that can help determine whether a number has been reassigned.

Second, callers can ask consumers to notify them when they switch from a number for which they have given prior express consent.

Third, the Declaratory Ruling and Order made clear that there is "[n]othing in the [Telephone Consumer Protection Act] or our rules [that] prevents parties from creating, through a contract or other private agreement, an obligation for the person giving consent to notify the caller when the number has been relinquished."

Fourth and finally, the record in the proceeding suggests that callers seeking to find reassignments can "(1) include an interactive opt-out mechanism in all artificial or prerecorded-voice calls so that recipients may easily report a reassigned or wrong number; (2) implement procedures for recording wrong number reports received by customer service representatives placing outbound calls; (3) implement processes for allowing customer service agents to record new phone numbers when receiving calls from customers; (4) periodically send an e-mail or mail request to the consumer to update his or her contact information; (5) utilize an autodialer's and/or live caller's ability to recognize 'triple-tones' that identify and record disconnected numbers; (6) establish policies for determining whether a number has been reassigned if there has been no response to a 'two-way' call after a period of attempting to contact a consumer; and (7) enable customers to update contact information by responding to any text message they receive, which may increase a customer's likelihood of reporting phone number changes and reduce the likelihood of a caller dialing a reassigned number."

In sum, the Commission concluded that "the existence of phone number database tools combined with other best practices, along with one additional post-reassignment call, together make compliance [with the Telephone Consumer Protection Act] feasible."

Question 9. The pay TV set-top box NPRM proposes to expand the scope of the term "navigation device" to include "software or hardware performing the functions traditionally performed in hardware navigation devices." On what theory does the Commission base this interpretation and expansion of the statutory term's scope to include software? Does software that is not integral to the operation of a navigation device fall within the scope of Section 629?

Answer. In paragraphs 21–24 of its rulemaking, the Commission describes its legal authority to implement the proposed rules. In critical part, it notes that the Communications Act does not define the terms "navigation device" or "interactive communications equipment, and other equipment." However, it notes that Section 629 covers equipment used by consumers to access multichannel video programming and that software features have long been essential elements of such equipment.

The Commission has invited comment on this interpretation of its legal authority. I look forward to reviewing the record on this subject and, in particular, any additional legal analysis on the scope of the agency's authority.

Question 10. How does the NPRM propose or contemplate preventing third party devices or applications from adding unapproved or additional advertising alongside MVPD service content? How does the NPRM propose to protect and secure interactive MVPD programming and services when accessed through third party devices or applications? How does the NPRM propose to enforce such protection and security measures?

Answer. In paragraph 80 of its rulemaking, the Commission notes that it has not previously seen problems related to advertising, service presentation, and improper manipulation of content in the existing CableCARD regime. However, the Commission seeks comment on whether or not new rules are needed and asks if copyright law adequately protects against any concerns that may arise. In addition, in paragraphs 70 and 71 of its rulemaking, the Commission notes that licensing and certification will play an important role in ensuring that content is protected as intended. The Commission seeks comment on the role that licensing and certification can play, as well as comment on alternative approaches the Commission could take to address content security and protection.

RESPONSE TO WRITTEN QUESTION SUBMITTED BY HON. ROY BLUNT TO HON. JESSICA ROSENWORCEL

Question. The policy choices facing the Commission are complicated, and require bipartisanship to produce consensus that balance the various concerns of multiple stakeholders. In the past, analysts have illustrated that votes at the Commission tended to be unanimous, but there has been a stark increase in party-line votes under the current Chairman.¹

¹https://techpolicyinstitute.org/2016/02/16/the-partisan-fcc/

Will you commit to working with your fellow commissioners to forge bipartisan consensus for the remainder of 2016, or should the United States Senate expect to see continued party-line votes?

Answer. Yes.

RESPONSE TO WRITTEN QUESTIONS SUBMITTED BY HON. TED CRUZ TO HON. JESSICA ROSENWORCEL

Question 1. In the Open Internet Order, the Federal Communications Commission (FCC) revised the definition of "public switched network" to mean "the network that . . . use[s] the North American Numbering Plan, or public IP addresses, in connection with the provision of switched services" (See para. 391 (emphasis added)). Although the FCC disclaimed any intent to "assert" jurisdiction over the assignment or management of IP addresses by the Internet Numbers Registry System (see id. at note 1116), the FCC's decision to equate telephone numbers with IP addresses nonetheless gives the FCC statutory jurisdiction over IP addresses as a matter of law. Over 20 years ago the FCC concluded that Section 201 of the Communications Act gave it plenary jurisdiction over telephone numbers, because "telephone numbers are an indispensable part" of the duties that section 201 imposes on common carriers (See Administration of the North American Numbering Plan, Notice of Proposed Rulemaking, FCC 94–79, ¶ 8 (1994)). IP addresses are likewise an indispensable part of the duties the FCC imposed on ISPs under section 201, including the duty to connect to "all or substantially all Internet endpoints".

How can the FCC uphold the public interest requirements in section 201 of the Act if it refuses to assert its statutory authority over an indispensable part of the

public switched network?

Answer. I believe that the Commission's approach is consistent with the historic execution of its functions under the Communications Act. As you note, the Commission adjusted its interpretation of the term "public switched network" in order to better "reflect the current network landscape." Specifically, the Commission updated the definition of public switched network to mean "the network that includes any interexchange carriers, and mobile service providers, that use the North American Numbering Plan, or public IP addresses, in connection with the provision of switched services." This update reflects the fact that the "the term 'public switched network' should not be defined in a static way," and recognizes "that the network is continuously growing and changing because of new technology and increasing demand." Moreover, as the Commission made clear, "[t]his definitional change to our regulations in no way asserts Commission jurisdiction over the assignment and management of IP addresses by the Internet Numbers Registry System." In other words, the Commission updated its definition of public switched network to include the widespread use of IP addresses, but did not in any way assert jurisdiction over IP addresses

Question 1a. If the FCC believes regulation of IP numbers used to connect end points on the public switched telephone network is unnecessary, why hasn't it

forborne from the regulation of telephone numbers?

Answer. The Commission has plenary authority over numbering pursuant to the Communications Act. Section 251(e)(1) states that "[t]he Commission shall have exclusive jurisdiction over those portions of the North American Numbering Plan that pertain to the United States." Among other things, this explicit grant of authority has been the foundation for Commission policies that ensure that consumers can keep their existing phone number when switching to a new phone carrier, that prevent premature exhaust of numbers in an area code, and that enable providers to have access to numbering resources. To date, the Commission has not forborne from these policies and rules because they remain critical to the successful function of the public switched network.

RESPONSE TO WRITTEN QUESTION SUBMITTED BY HON. DEB FISCHER TO HON. JESSICA ROSENWORCEL

Question. Commissioner Rosenworcel, in discussing the FCC's recent proposal on set-top boxes, nearly everyone has said that they would like to see the marketplace continue to move away from set-top boxes and towards more innovative methods of allowing customers to access video content. New technologies have increased competition in the video market, and companies like Netflix, Hulu, Roku, as well as a wide variety of video applications are providing new options to consumers. Further, many cable and satellite companies are moving away from set top boxes and to-

wards application-based platforms. How do we continue to encourage innovation in the video marketplace while avoiding technology mandates and burdensome regulations?

Answer. Section 629 of the Communications Act directs the Commission to help develop a competitive market for navigation devices, or set-top boxes. Despite past efforts, a competitive market for these devices has not emerged. In fact, today 99 percent of customers rent their set-top boxes from their pay-television provider. This is a situation I believe the agency needs to address.

At the same time, I share your concerns about stifling innovation in the marketplace. There is a new generation of viewers who want nothing to do with a set-top box and are choosing to cut the cord. Plus, new service types are emerging fast faster than any rulemaking process at the agency. What new video models succeed, what degree of self-curated viewing they enable, and what prices consumers are willing to pay are still up for grabs.

willing to pay are still up for grabs.

As a result, I believe the Commission should be guided by the statutory charge to develop a competitive market but remain mindful that the ways we watch are changing.

Response to Written Questions Submitted by Hon. Dean Heller to Hon. Jessica Rosenworcel

Question 1. Commissioner Rosenworcel, in your testimony before the Senate Commerce Committee, you said "the unsung hero of the wireless revolution is infrastructure . . . because no amount of spectrum will lead to better wireless service without good infrastructure" and rightly pointed out that we should "take a comprehensive look at tower siting on Federal lands—which make up as much as one-third of our national real estate."

As you know, 85 percent of Nevada is Federal lands and many of my constituents who live, work, and visit those areas lack quality service. In 2009, the FCC adopted a shot clock for the municipal zoning process, which was later upheld by the Supreme Court and has significantly improved the deployment of wireless infrastructure

Since the FCC has no authority over Federal lands, there is no similar shot clock and as a result infrastructure requests can take many months or even years to get a response.

Do you support Congress legislating in this space and adopting a shot clock for Federal agencies—such as the 270-day limit included in the MOBILE NOW Act approved by the Committee—to respond to wireless infrastructure requests?

Answer. Yes.

Question 2. For years, I have believed that the way in which rules are processed at the Commission lacks transparency and is detrimental to the American public. My FCC Process Reform Act would address these transparency and accountability issues for the sake of consumers and the industries supporting innovation and our economy.

For example, the public has no idea the specific language of the rules the Commission is voting on until after they are passed. We saw that with the net neutrality rules that were pushed through this time last year, and we saw it a few weeks ago when the FCC voted on the proposal related to set-top boxes.

In fact, Chairman Wheeler said during that meeting on set-top boxes: "There have been lots of wild assertions about this proposal before anybody saw it." The problem is that the public doesn't know what to expect from the rule—there is no certainty for those on the outside.

Do you believe the public has a right to see the specific language of a rule before it is voted on by the Commission?

Answer. As a general matter, I believe that the Commission should make available proposed rule text in any Notice of Proposed Rulemaking when initiating a proceeding that could lead to significant changes to agency policy. This affords the public a right to comment in a fulsome way before action on final rules are taken.

Question 3. As someone committed to protecting Americans' and Nevadans' privacy, especially related to personally identifiable information (PII), I have a questions regarding the recent set-top box Notice of Proposed Rulemaking.

Currently, pay-TV companies must follow strong privacy protections to ensure consumers' personal information is not collected, utilized, or shared for non-service related purposes. How does this NPRM contemplate applying and enforcing these same privacy to any new suppliers entering the set-top box market? Does the FCC have the legal authority to enforce Title 6 privacy standards on third parties?

Answer. The Commission's rulemaking proposes that competitive device manufacturers certify that they will adhere to the same privacy protections imposed on multichannel video programming distributors. It also seeks comment on the best way to implement and enforce this certification process, as well as the scope of its legal authority to do so. In addition, the rulemaking asks about state privacy laws that restrict how personally identifiable information may be used and whether or not such laws provide a level of consumer privacy protection that is comparable to what is required under the Communications Act. This is an important issue and I look forward to record that develops in response to these questions.

RESPONSE TO WRITTEN QUESTION SUBMITTED BY HON. STEVE DAINES TO HON. JESSICA ROSENWORCEL

Question. Commissioner Rosenworcel, you said during your testimony that you agreed that small businesses should be exempted from some of the onerous regulatory burdens. Do you agree that small businesses should receive a permanent exemption from the Commission's Title II enhanced transparency rules?

Answer. Yes. I support exempting small providers of broadband Internet access services from the enhanced transparency rule. Therefore, I believe that the Commission should adopt a permanent exemption, or at a minimum, a further extension of the exemption from the enhanced transparency rule for these providers.

Response to Written Questions Submitted by Hon. Claire McCaskill to Hon. Jessica Rosenworcel

Question 1. One of the best tools the Commission has in overseeing the Lifeline program is the ability to take aggressive enforcement against carriers violating the rules of the program, companies that are abusing both the consumers who use the program as well as the rate payers that fund it. That's why I applauded a flurry of announced enforcement activity from September 2013 through February 2014. During that time the FCC issued Notices of Apparent Liability (NALs) totaling more than \$94 million in proposed fines for 12 companies participating in the Lifeline program. Some of those notices are more than two-and-a-half years old yet not a penny of that money has yet been collected. Will you press the Enforcement Bureau to either issue forfeiture orders, reach settlements, or dismiss these 12 NALs in an expeditious manner?

Answer. I agree with you that waste, fraud, and abuse cannot be tolerated in the Lifeline program. I understand that the matters you have identified have been referred to the Commission's Office of Inspector General. In light of the Office of Inspector General's independent nature, I believe it would be inappropriate for me to intervene on these matters.

Question 2. To avoid this situation in the future, would you support a shot clock for resolution of NALs? If so, what do you believe would be an acceptable amount of time?

Answer. Yes. Timely disposition of matters before the Commission, including law enforcement cases, is important. The precise time for resolution of Notices of Apparent Liability would need to both provide adequate time for law enforcement to investigate any additional facts and parties that are the subject of investigation to fully exercise their rights as a matter of due process.

Question 3. The Bipartisan Budget Act of 2015 included an unwise and harmful provision to exempt debt collection calls on behalf of the Federal Government from Telephone Consumer Protection Act (TCPA) rules that prohibit robocalls to cell phones. Although the provision was ostensibly aimed at collecting student loan debt, the loophole was potentially widened either further by adoption of the Fixing America's Surface Transportation (FAST) Act in December, which requires the Internal Revenue Service to contract with private debt collectors to collect unpaid taxes. I have held hearings in this committee's Consumer Protection Subcommittee and at the Senate Aging Committee on robocalls. We should be making it harder—not easier—for this number one consumer complaint to continue, especially when there is no evidence that robocalls are an effective means of reaching consumers. Until we are successful in repealing this provision, the FCC is tasked with adopting rules to implement it. Would you support rules that require companies collecting debt on behalf of the Federal Government to register with the FCC in advance of doing so?

Answer. While the Budget Act does not require the Commission to maintain a registry of companies that call to collect a debt on behalf of the United States, I believe this is an idea that could merit further exploration. However, before impos-

ing such a requirement, the Commission will need to explore the free speech implications of such a requirement, the agency's capacity to maintain an up-to-date registry, and whether or not there are comparable registries that have been maintained in other contexts.

Question 4. Would you support rules that limit calls from companies collecting debt on behalf of the Federal Government to no more than one call per consumer per month?

Answer. The Budget Act specifically provides that the Commission "may restrict or limit the number and duration of calls made to a telephone number assigned to a cellular telephone service to collect a debt owed to or guaranteed by the United States." Accordingly, I expect that the Commission will seek public comment on how to implement the law in this regard before adopting final rules.

Question 5. What impact do you believe this exemption will have on the ability of the commission's Enforcement Bureau to differentiate between calls that are now exempt from TCPA and those that are not, particularly when exempt calls and non-

exempt calls could be coming from the same call centers?

Answer. Because we are only beginning to implement the Budget Act, I believe it is too soon to tell how this exemption might impact the Commission's enforcement functions or the private right of action under the Telephone Consumer Protection Act. However, I believe this is a situation that will require monitoring going forward. At the very least, it may prove confusing for enforcement and it would be unfortunate if this situation resulted in more consumers receiving unwanted robocalls not subject to this exemption.

Question 6. The Chairman recently received a letter from Senator Blunt and me regarding the upcoming reverse auction portion of Connect America Fund, Phase II (CAF II).

For CAF II in Missouri, there is approximately \$400 million available over the next 10 years to bring broadband to unserved parts of the state. Can you assure me that the money will be spent in Missouri and not be reallocated to other areas of the country?

Answer. I agree that we should put a premium on making sure that states do not lose out where the price cap carrier turned down its offer of support. As you know, three of the four price cap carriers in Missouri accepted Connect America Fund Phase II funding totaling over \$93.7 million annually for broadband services in the state. However, one price cap carrier serving the state declined its offer of support. Going forward, I am hopeful that we can find a way to target funds to states where price cap carriers chose not to accept their offer of support while at the same time maximizing the overall impact of auction funding.

Question 7. As you consider the framework to govern the reverse auction to award the remaining dollars available in CAF II, how will you ensure that funded projects not only meet today's broadband definition, but are future proof and scalable to keep pace with ever-changing technology and increasing needs for higher speed broadband?

Answer. As we consider a framework to evaluate projects in the forthcoming CAF II auction, we will need to make sure that we provide consumers with meaningful broadband opportunities both today and in the future. Our framework should be nimble enough to evaluate capabilities from different project bid proposals, including how those project bids stack up today and keep pace with the obligations we set forth over time.

Question 8. In 1993, through the Omnibus Budget Reconciliation Act of 1993, Congress directed the FCC to develop regulations governing the competitive bidding of spectrum. Included in the statutory instructions from Congress was a requirement that the Commission "ensure that small businesses, rural telephone companies, and businesses owned by members of minority groups and women are given the opportunity to participate in the provision of spectrum-based services." To meet this congressional mandate the FCC created the Designated Entity (DE) program. The program's worthy goal of providing a mechanism for legitimate small businesses to partner with larger ones in spectrum auctions has undoubtedly helped many small businesses win spectrum licenses over the past 20+ years. But it has also provided a blueprint for large, multinational, multi-billion-dollar corporations to game the system and receive discounts on their bids. What assurances can you provide that the commission will do a better job of monitoring potential abuse of the DE program in the upcoming incentive auction than it did in the recent AWS-3 auction?

Answer. I agree that the Commission needs to do a better job of monitoring abuse in the designated entity program. In July 2015 the agency put in place a framework that will help do just that in the auctions ahead. In particular, the Commission capped the total value of bidding credits a designated entity can receive, strength-

ened attribution rules limiting the amount of spectrum an interest holder in a designated entity can use, and amended the joint bidding rules by generally prohibiting agreements involving a shared strategy for bidding at auction. Taken together these reforms are smart, balanced, and bound to protect against future abuse. However, I believe the Commission will need to continue to monitor the designated entity program to protect against any further misconduct.

Question 9. When Congress and the FCC were establishing the framework for spectrum auctions more than 20 years ago it probably made sense to ensure small businesses were able to compete. But a lot has changed. The cost of entering the incredibly expensive wireless infrastructure industry is far greater than it was in the early 1990s. A company that truly has revenues of \$40 million, \$15 million, or \$3 million—the thresholds set by the commission for the various levels of bidding credits—would be unlikely to enter the industry today. So is it time to look at simply eliminating the DE program to prevent future abuse?

Answer. In Section 309 of the Communications Act Congress charges the Commission with "promoting economic opportunity and competition" when developing the bidding methodologies that govern the auctions of our airwaves. Moreover, it tasks the Commission with ensuring "that small businesses, rural telephone companies and businesses owned by members of minority groups and women are given the opportunity to participate in the provision of spectrum-based services." I believe that the Commission has a duty to provide policies consistent with these provisions in the law. Should Congress choose to revise these provisions, the Commission will need to adjust its policies accordingly.

Response to Written Questions Submitted by Hon. Richard Blumenthal to Hon. Jessica Rosenworcel

Question 1. As you know, to address increasing demand for wireless broadband access, Congress directed the FCC to conduct an incentive auction, to encourage broadcast licensees to voluntarily relinquish their spectrum rights in exchange for a share of the proceeds in auctioning this spectrum to new licensees. In many parts of the country, contiguous spectrum will be freed up by "repacking" the channels to which remaining television broadcasters are currently assigned. Do you believe there is enough money in the TV Broadcaster Relocation Fund to cover repacking-related expenses incurred by broadcasters?

Answer. Yes. At this point in the auction process, I believe that the \$1.75 billion fund established by Congress will be sufficient to cover the reasonable costs and expenses associated with the relocation of stations following the incentive auction. I recognize, however, that there are estimates from the broadcasting community that suggest that the cost of relocation may be slightly greater than the amount in existing law. If in the future the current fund proves insufficient, the Commission should notify Congress and Congress may wish to take steps to provide additional support.

Question 2. If the 39 month repack time-frame and the \$1.75 billion relocation fund are insufficient, does the FCC have the flexibility in the statute to ensure consumers and communities won't be negatively affected by signals going off the air? Answer. Yes.

Question 3. If so, how can the FCC ensure that broadcasters have sufficient time to move without being forced off the air, if factors outside their control delay their ability to reconfigure their facilities?

Answer. The Commission has already adopted policies designed to facilitate a smooth transition for broadcasters and their viewers during the repacking process. For instance, in the Incentive Auction Report and Order, the Commission determined that stations required to repack following the auction will receive a construction period tailored to their specific circumstances. Stations also will have the opportunity to request a one-time, six-month extension of construction permits if they experience delays or unexpected challenges. In addition, the Commission will work with stations to help mitigate any service disruptions if construction of post-auction facilities is not completed prior to the 39-month deadline for all stations to cease operating on their pre-auction channels. I believe these policies will support an orderly transition during the 39-month period. But I also recognize that unexpected difficulties may arise, including pressures on the capacities of tower and transmission companies as well as regional weather events. I believe that the Commission must work with Congress to ensure that such difficulties do not jeopardize a smooth transition or harm viewer access to free, over-the-air television.

Questions 4. Do you agree that no non-participating broadcaster should be forced off the air, or forced to cover the costs of transitioning their signal, to accommodate the repack?

Answer. Yes. However, I recognize that our efforts will necessarily be bound by the law. Specifically, the Middle Class Tax Relief and Job Creation Act required the Commission to make "all reasonable efforts to preserve" the service areas of full-power and Class A television stations that do not choose to participate in the auction and set aside \$1.75 billion to cover any necessary transition.

RESPONSE TO WRITTEN QUESTION SUBMITTED BY HON. JOE MANCHIN TO HON. JESSICA ROSENWORCEL

Question. In your statement voting for adoption of the set-top box notice of proposed rulemaking (NPRM), you said this rulemaking is complicated. You also said that the most successful regulatory efforts are simple ones and more work needs to be done to streamline this proposal. Could you talk more about that?

Answer. Based on what we know at the start of this proceeding, there are difficult

Answer. Based on what we know at the start of this proceeding, there are difficult issues to consider, including copyright, privacy, and diversity. There are also technical challenges related to information streams, standards, and security. My hope is that the record we receive will guide the Commission to better understand the steps necessary to foster set-top box competition. I firmly believe that the simpler regulatory proposals are, the more likely they are to be successful in reaching their goals.

RESPONSE TO WRITTEN QUESTIONS SUBMITTED BY HON. JOHN THUNE TO HON. AJIT PAI

Question 1. Following the reclassification of broadband Internet access service as a Title II public utility, Chairman Wheeler indicated that the FCC will propose new privacy regulations. The Federal Trade Commission (FTC) already has extensive experience in protecting consumer privacy, and consumers and business already have experience in applying the FTC's privacy rules and precedents; the Commission has virtually no such experience beyond the very narrow confines of rules implementing Sec. 222. Why would the Commission create a new, likely inconsistent set of rules rather than adopting the FTC's privacy protections? Given that the Commission's rules will only apply to BIAS providers, isn't there a significant likelihood that functionally identical activities on a smartphone will be governed by completely different rules based upon who is providing the service?

Answer. I agree that adopting rules inconsistent with the FTC's rules would distort the marketplace to favor some service providers over others. Indeed, I agree with Chairman Wheeler's testimony to the House Energy and Commerce Committee that "there should be a uniform expectation of privacy" across the online ecosystem. That's why many are perplexed that the FCC seems reluctant to adopt the same privacy protections for ISPs that the FTC has long applied to edge providers.

Question 2. I understand that you are close to finalizing action on an order that would address the standalone broadband issue that many in Congress have written to you about over the past several years and also adopt some new limits and other measures related to universal service support for rate of return providers. Do you commit to work quickly and collaboratively with this committee and with affected stakeholders to the extent any adverse or unintended consequences arise out of the referred?

Answer. Yes. And to the extent that our efforts are intended to fulfill our commitment to this Committee, I believe the FCC should make the reforms public and allow you and the American public to provide feedback *before* the Commission votes.

Question 3. Ensuring that rural and urban consumers have access to reasonably comparable services at reasonably comparable rates is a fundamental statutory principle of universal service. Are you confident that the standalone broadband solution you are poised to adopt will do that—specifically, will it allow rural consumers to get standalone broadband at rates reasonably comparable to their urban counterparts? If not, what more do you think the FCC will need do to ensure such comparability?

Answer. I am still reviewing the draft order to determine whether it meets our universal service mandate. In the meantime, I have asked Chairman Wheeler to release it to the public so that all stakeholders can see the details and let their voices be heard before a vote. Commissioner O'Rielly has supported my request, but Chairman Wheeler has not yet responded to it.

Question 4. I have heard concerns that the methodology used in the 2014 order to determine the local rate floor for voice service has led to rates in some rural areas, including parts of South Dakota, that are not reasonably comparable to those services provided in urban areas. Given this concern, when do you plan to act on the petition for reconsideration filed by several rural associations regarding the rate floor methodology? Do any other Commissioners have thoughts regarding this matter?

Answer. I am not surprised that the rate floor will lead to unreasonable rates for your constituents—the whole purpose of the rule is to increase rates in rural America without saving the Universal Service Fund a single dime. That's why I do not support the rural rate floor and have repeatedly called for its repeal.

Question 5. Last July, the FCC released an omnibus declaratory ruling on the Telephone Consumer Protection Act (TCPA). TCPA litigation has increased dramatically in the last decade. What considerations did the Commission give to the impact its ruling would have on businesses, both large and small, that need to reach their customers for legitimate business purposes?

Answer. The Commission minimized, if not ignored altogether, the *Order's* impact on legitimate businesses. That's why I said in my dissent that the *Order* would make abuse of the TCPA much, much easier and that the primary beneficiaries

would be trial lawyers, not the American public.

The past is likely to be prologue. In my dissent, for instance, I highlighted the case of Rubio's, a West Coast restaurateur. Rubio's sends its quality-assurance team text messages about food safety issues, such as possible foodborne illnesses, to better ensure the health and safety of Rubio's customers. When one Rubio's employee lost his phone, his wireless carrier reassigned his number to someone else. Unaware of the reassignment, Rubio's kept sending texts to what it thought was an employee's phone number. The new subscriber never asked Rubio's to stop texting him—at least not until he sued Rubio's in court for nearly half a million dollars. The Commission's recent TCPA action will release the hounds of the trial bar upon many more small businesses in similar fashion.

Question 6. Many small businesses seek to improve their efficiency and customer relationships by providing information to their customers through the use of modern dialing technologies. The FCC's recent interpretation of the term "autodialer" in the TCPA declaratory ruling, however, could sweep in any number of modern dialing technologies. Other than using a rotary phone, what other technologies can small businesses feel comfortable using without exposing themselves to TCPA litigation risk?

Answer. If I were counsel to a small business, I would advise it to use only a rotary phone given the business-wrecking expense of a TCPA class-action suit. That's because the FCC's definition of "autodialer" appears to sweep in every other dialing technology currently in existence.

Question 7. By establishing liability after a mere one-call exception, the Commission's ruling creates a perverse incentive for incorrectly-called parties to allow or even encourage incorrect calls to continue, rather than notify the calling party of the error. These continuing incorrect calls thus become potential violations and the basis for monetary penalties sought through litigation. What will you do to repair this perverse incentive?

Answer. As I stated in my dissent, the *Order*'s strict liability approach leads to perverse incentives. Most significantly, it creates a trap for law-abiding companies by giving litigious individuals a reason not to inform callers about a wrong number. This will certainly help trial lawyers update their business model for the digital age. This isn't mere hypothesis as shown by the case of Rubio's discussed above

This isn't mere hypothesis, as shown by the case of Rubio's, discussed above.

I hope that the FCC or the courts will soon reject this reckless interpretation and replace it with the "expected-recipient" approach to incorrectly-called parties. Under this approach, TCPA liability would not apply if the calling party dialed a number reasonably expecting to reach Person A, even if Person B actually answered the phone.

Question 8. Has the Commission considered providing a safe harbor for a calling party that reasonably relies on available customer phone number records to verify the accuracy of a customer's phone number?

Answer. The Commission explicitly rejected that approach by adopting a strict liability standard. In my view, a safe harbor would be consistent with the Act. The Commission has long employed safe harbors for reasonable private conduct in other contexts, and there is no reason why it couldn't have done so here.

Question 9. The pay TV set-top box NPRM proposes to expand the scope of the term "navigation device" to include "software or hardware performing the functions traditionally performed in hardware navigation devices." On what theory does the

Commission base this interpretation and expansion of the statutory term's scope to include software? Does software that is not integral to the operation of a navigation device fall within the scope of Section 629?

Answer. I do not believe that such software falls within the scope of Section 629. I did not vote for the NPRM that proposed to expand the scope of the rules implementing Section 629 to include software, and I will leave it to those who supported the NPRM to explain their reasoning.

Question 10. How does the NPRM propose or contemplate preventing third party devices or applications from adding unapproved or additional advertising alongside MVPD service content? How does the NPRM propose to protect and secure interactive MVPD programming and services when accessed through third party devices or applications? How does the NPRM propose to enforce such protection and security measures?

Answer. The NPRM does not propose any rules to prohibit third party devices or applications from adding unapproved or additional advertising alongside MVPD service content. Neither does the NPRM propose any rules to prohibit third party devices or applications from removing the advertising provided by programmers and replacing it with their own advertising. In its own words, the NPRM proposes to leave "the treatment of advertising to marketplace forces." This is one of the principal reasons why I opposed the NPRM. I will leave it to those who supported the NPRM to explain how it proposes to protect and secure interactive MVPD programming and enforce such protection and security measures.

RESPONSE TO WRITTEN QUESTIONS SUBMITTED BY HON. TED CRUZ TO HON. AJIT PAI

Question 1. In the Open Internet Order, the Federal Communications Commission (FCC) revised the definition of "public switched network" to mean "the network that . . . use[s] the North American Numbering Plan, or public IP addresses, in connection with the provision of switched services" (See para. 391 (emphasis added)). Although the FCC disclaimed any intent to "assert" jurisdiction over the assignment or management of IP addresses by the Internet Numbers Registry System (see id. at note 1116), the FCC's decision to equate telephone numbers with IP addresses nonetheless gives the FCC statutory jurisdiction over IP addresses as a matter of law. Over 20 years ago the FCC concluded that Section 201 of the Communications Act gave it plenary jurisdiction over telephone numbers, because "telephone numbers are an indispensable part" of the duties that section 201 imposes on common carriers (See Administration of the North American Numbering Plan, Notice of Proposed Rulemaking, FCC 94–79, ¶8 (1994)). IP addresses are likewise an indispensable part of the duties the FCC imposed on ISPs under section 201, including the duty to connect to "all or substantially all Internet endpoints".

How can the FCC uphold the public interest requirements in section 201 of the Act if it refuses to assert its statutory authority over an indispensable part of the public switched network?

Answer. It cannot. I do not believe that Congress has given the FCC any role with respect to regulating the Internet—instead, Congress told us to leave the Internet "unfettered by Federal or State regulation." Communications Act §230(b)(2). And so under my view, the FCC has no statutory authority over IP addresses.

Question 1a. If the FCC believes regulation of IP numbers used to connect end points on the public switched telephone network is unnecessary, why hasn't it

points on the public switched telephone network is unnecessary, why hasn't it forborne from the regulation of telephone numbers?

Answer. As I stated in my dissent to the *Title II Order*, the FCC's approach to

Answer. As I stated in my dissent to the *Title II Order*, the FCC's approach to forbearance in this area has been scattershot and unprecedented. As such, I do not know why the agency did not forbear in this particular instance.

Response to Written Questions Submitted by Hon. Ron Johnson to Hon. Ajit Pai

Question 1. At the FCC Oversight hearing I asked Chairman Wheeler why the FCC decided not to release a public notice requesting more comment on places where the Chairman's office believed the record to be thin. Chairman Wheeler responded that he hit pause for the purpose of "enriching the record" because he knew "the Big Dogs are going to sue" and wanted to make sure "all the i's were dotted and the t's crossed." Because no public notice was ever issued, it appears that the FCC chose expediency over process. What effect does that have on the overall Open Internet Order?

Answer. In rubber-stamping President Obama's plan to regulate the Internet, the FCC violated the procedural requirements of the Administrative Procedure Act (APA). The FCC never proposed the rules being adopted, violating the APA's notice-and-comment requirement. In the *Notice*, the FCC proposed rules exclusively under section 706 of the Telecommunications Act. Every single proposal and every single tentative conclusion in the *Notice* was tailored to avoid reclassifying broadband as a Title II service. Yet that's exactly what the FCC did in the *Title II Order*. No one could have anticipated the number or nature of the hoops the Order would jump through to reclassify broadband. Nor could anyone have anticipated the Order separate forbearance decisions; its decision to subject interconnection to Title II as 'component" of broadband Internet access service; its decision to amend agency rules regarding mobile broadband; or its adoption of an omnivorous "Internet conduct" standard, the scope of which still remains uncertain.

In short, I agree that the agency chose political expediency over a public process, and I believe that leaves the *Title II Order* vulnerable to judicial review.

Question 2. Please provide examples of how investment has been hindered based on the FCC's Open Internet Order.

Answer. Last year, many small ISPs declared under penalty of perjury that they are cutting back on investments because of the FCC's decision. Here are a few ex-

- KWISP Internet serves 475 customers in rural northern Illinois. As a result of the regulatory uncertainty and costs created by the FCC's decision, KWISP plans to delay network upgrades that would have upgraded customers from 3 Mbps to 20 Mbps service, new tower construction that would have brought service to unserved areas, and capacity upgrades that would reduce congestion for existing customers—not to mention the jobs needed to make all of that happen. KWISP worries that even a frivolous lawsuit brought under the Order could force ownership to "close the business."
- Wisper ISP Inc. is an 11-year-old ISP that serves 8,000 customers around St. Louis, Missouri. Wisper estimates that compliance costs will constitute 10 percent of its operating revenue. As a result, it has already cut investment, resulting in "slower broadband speeds, less dense coverage, and absence of expansion into new areas." For example, prior to the FCC's decision, Wisper was planning to triple the number of new base stations it would deploy each month in order to provide broadband to customers in new areas. But as a result of the Order, Wisper has put those plans on hold.
- SCS Broadband serves 800 customers in rural Virginia. SCS Broadband has already stopped investing in new rural areas because of the FCC's decision, and it won't resume until it can "determine if the additional cost in legal fees warrant such investments." And investors have already told SCS Broadband that projects that were viable investments under the regime that existed before the Order will no longer provide the necessary returns to justify the investment.
- Joink LLC serves 2,500 customers in and around Terre Haute, Indiana. Although Joink was exploring a fiber-to-the-home project in its community, new-found regulatory uncertainty "will cause us to slow this investment, or not make it at all"—and so, consumers "will be left with slower broadband speeds."

 Joink also worries that "those with deeper pockets can use broadly applied subjective standards to drag entities such as Joink into litigation or to force us to forego profitable business practices that can benefit our customers to avoid potentially crippling litigation expenses.
- Aristotle Inc. serves nearly 800 customers in and around Little Rock, Arkansas. Aristotle has been committed to serving the unserved, and 60 percent of its customers wouldn't have any broadband option at all but for Aristotle's past investments. Because of the regulatory uncertainty created by the Order, Aristotle has dialed back its plans to "triple" its customer base and "expand our service into unserved areas of rural Arkansas." At this time, Aristotle plans to target just "three smaller communities that abut our existing network.
- Washington Broadband, Inc. serves 1.400 customers in Yakima County, Washington. Washington Broadband "has aggressively constructed new towers that cover small areas based on a return on investment model of light density return," but the Order has forced Washington Broadband to give up that business model. Instead, it "has decided to scale back expansion to new, unserved or underserved areas and focus on more urban/suburban areas.

I have also attached the sworn declarations that these six companies and two other small companies filed with the FCC on the impact of the Title II Order.

Question 3. This Commission seems to have difficulty identifying competition in the wireless market, as it has steadfastly refused to make a finding of effective competition in recent Wireless Competition Reports. For instance, in the latest Wireless Competition Report, released on December 23, 2015, without a vote by the full Commission, Chairman Wheeler's report states: "this [Report] does not reach an overall conclusion or formal finding regarding whether or not the CMRS marketplace was effectively competitive, but rather it provides an analysis and description of the CMRS industry's competitive metrics and trends. . . . This Report instead focuses on presenting the best data available on various aspects of competition throughout the mobile wireless ecosystem and highlights several key trends.

At the same time, the report states that more than 90 percent of Americans have access to four or more wireless service providers. And, more than 82 percent of Americans have access to four or more providers of advanced LTE service. In your view, is the Commission following Congress's directive to evaluate the competitiveness of the wireless market? When the Clark William Congress of the wireless market?

ness of the wireless market? Why does Chairman Wheeler's report not reach any conclusion in spite of the broad array of choices available to consumers?

Answer. No, the Commission is not following Congress's directive. The Commission should be making fact-based decisions that reflect marketplace realities. But design a consistently hear not beauth to FOC's hellmerk in recent years. The ties. But doing so consistently has not been the FCC's hallmark in recent years. The FCC's Wireless Competition Report is a salient example. Considering the facts you accurately recount above, the conclusion was obvious and the decision to make a decision shouldn't have been hard.

As I stated when the agency released the latest Report, this FCC will never find that there is effective competition in the wireless market, regardless of what the facts show. That's because doing so would undermine the agency's goal of expanding its authority to manipulate the wireless market—a goal it cannot accomplish if it deems that market healthy.

RESPONSE TO WRITTEN QUESTIONS SUBMITTED BY HON. DEAN HELLER TO Hon. Ajit Pai

Question 1. For years, I have believed that the way in which rules are processed at the Commission lacks transparency and is detrimental to the American public. My FCC Process Reform Act would address these transparency and accountability issues for the sake of consumers and the industries supporting innovation and our economy.

For example, the public has no idea the specific language of the rules the Commission is voting on until after they are passed. We saw that with the net neutrality rules that were pushed through this time last year, and we saw it a few weeks ago when the FCC voted on the proposal related to set-top boxes.

In fact, Chairman Wheeler said during that meeting on set-top boxes: "There have been lots of wild assertions about this proposal before anybody saw it." The problem is that the public doesn't know what to expect from the rule—there is no certainty for those on the outside.

Do you believe the public has a right to see the specific language of a rule before it is voted on by the Commission?

Answer. Yes. Both as a matter of law and good government, the FCC should not adopt regulations before allowing the public to see them.

Question 2. As someone committed to protecting Americans' and Nevadans' privacy, especially related to personally identifiable information (PII), I have a questions regarding the recent set-top box Notice of Proposed Rulemaking.

Currently, pay-TV companies must follow strong privacy protections to ensure consumers' personal information is not collected, utilized, or shared for non-service related purposes. How does this NPRM contemplate applying and enforcing these same privacy to any new suppliers entering the set-top box market? Does the FCC have the legal authority to enforce Title 6 privacy standards on third parties?

Answer. I do not believe that the FCC has the legal authority to enforce Title VI

privacy standards directly on third parties. To get around this problem, the NPRM attempts to do so indirectly. Specifically, it proposes to prohibit MVPDs from providing services to any navigation device unless the developer of that device certifies that it meets the privacy requirements set forth in Section 631 of the Act. However, this raises an obvious dilemma. What happens if a navigation device developer violates such privacy requirements after providing the certification contemplated by the NPRM? Who would have the legal authority to take enforcement action against that developer? What would be the remedy? I find it troubling that the answers to these important questions are not contained anywhere in the NPRM. RESPONSE TO WRITTEN QUESTIONS SUBMITTED BY HON. CLAIRE McCaskill to Hon. Ajit Pai

Question 1. One of the best tools the Commission has in overseeing the Lifeline program is the ability to take aggressive enforcement against carriers violating the rules of the program, companies that are abusing both the consumers who use the program as well as the rate payers that fund it. That's why I applauded a flurry of announced enforcement activity from September 2013 through February 2014. During that time the FCC issued Notices of Apparent Liability (NALs) totaling more than \$94 million in proposed fines for 12 companies participating in the Lifeline program. Some of those notices are more than two-and-a-half years old yet not a penny of that money has yet been collected. Will you press the Enforcement Bureau to either issue forfeiture orders, reach settlements, or dismiss these 12 NALs in an expeditious manner?

Answer. Yes. Indeed, I called on the Commission to take up-or-down votes on these forfeitures orders in a speech in the summer of 2014. See https://apps.fcc.gov/edocs_public/attachmatch/DOC-328469A1.pdf. Since then, I have continued to press the Enforcement Bureau on the status of these cases (as well as many others), but the Bureau has steadfastly refused to disclose its activities to sitting Commissioners.

Question 2. To avoid this situation in the future, would you support a shot clock for resolution of NALs? If so, what do you believe would be an acceptable amount of time?

Answer. Yes, I support a shot clock. This past December, I proposed that the FCC should speed up its resolution of enforcement cases by setting a meaningful deadline for final action. Specifically, I proposed that any forfeiture order be issued within one year of the issuance of an NAL. If no such forfeiture order is adopted within this timeframe, that NAL would be automatically nullified.

Question 3. The Bipartisan Budget Act of 2015 included an unwise and harmful provision to exempt debt collection calls on behalf of the Federal Government from Telephone Consumer Protection Act (TCPA) rules that prohibit robocalls to cell phones. Although the provision was ostensibly aimed at collecting student loan debt, the loophole was potentially widened either further by adoption of the Fixing America's Surface Transportation (FAST) Act in December, which requires the Internal Revenue Service to contract with private debt collectors to collect unpaid taxes. I have held hearings in this committee's Consumer Protection Subcommittee and at the Senate Aging Committee on robocalls. We should be making it harder—not easier—for this number one consumer complaint to continue, especially when there is no evidence that robocalls are an effective means of reaching consumers. Until we are successful in repealing this provision, the FCC is tasked with adopting rules to implement it. Would you support rules that require companies collecting debt on behalf of the Federal Government to register with the FCC in advance of doing so?

Answer. I agree with you that we should be making it harder, not easier, for companies to bombard consumers with robocalls that they do not want. As such, I do not support the Administration's push to exempt federal-government-debt collectors from the TCPA and will push for rules that constrain that exemption to the full extent the law allows.

Question 4. Would you support rules that limit calls from companies collecting debt on behalf of the Federal Government to no more than one call per consumer per month?

Answer. Because I do not support this new exemption to the TCPA, I will push for rules that limit such calls to the full extent the law allows.

Question 5. What impact do you believe this exemption will have on the ability of the commission's Enforcement Bureau to differentiate between calls that are now exempt from TCPA and those that are not, particularly when exempt calls and non-exempt calls could be coming from the same call centers?

Answer. I believe this exemption will make enforcement of the TCPA more difficult for the Commission's Enforcement Bureau. Unfortunately, the FCC's record is already poor on this front. From January through June of last year, for example, the Enforcement Bureau issued only a single citation to a potential violator of Federal Do-Not-Call rules—even though complaints about unwanted telemarketing calls make up about 40 percent of consumer complaints to the Commission. The FCC needs to start taking its charge to protect consumers much more seriously and step up its enforcement efforts in this area.

Question 6. The chairman recently received a letter from Senator Blunt and me regarding the upcoming reverse auction portion of Connect America Fund, Phase II (CAF II)

For CAF II in Missouri, there is approximately \$400 million available over the next 10 years to bring broadband to unserved parts of the state. Can you assure me that the money will be spent in Missouri and not be reallocated to other areas of the country?

Answer. The Chairman has proposed a framework for the CAF II Auction. Unfortunately, the FCC's rules limit my ability to discuss that proposal while it is still under consideration. But I can say that I am currently reviewing his proposal and hope to work with my colleagues to design an auction that will get the most broadband bang for our universal-service buck for the people of every state.

Question 7. As you consider the framework to govern the reverse auction to award the remaining dollars available in CAF II, how will you ensure that funded projects not only meet today's broadband definition, but are future proof and scalable to keep pace with ever-changing technology and increasing needs for higher speed broadband?

Answer. Given that the Chairman's proposal is under consideration, I can only say that I hope to work with my colleagues to design an auction that will let rural Americans keep pace with their urban counterparts when it comes to broadband access.

Question 8. In 1993, through the Omnibus Budget Reconciliation Act of 1993, Congress directed the FCC to develop regulations governing the competitive bidding of spectrum. Included in the statutory instructions from Congress was a requirement that the Commission "ensure that small businesses, rural telephone companies, and businesses owned by members of minority groups and women are given the opportunity to participate in the provision of spectrum-based services." To meet this congressional mandate the FCC created the Designated Entity (DE) program. The program's worthy goal of providing a mechanism for legitimate small businesses to partner with larger ones in spectrum auctions has undoubtedly helped many small businesses win spectrum licenses over the past 20+ years. But it has also provided a blueprint for large, multinational, multi-billion-dollar corporations to game the system and receive discounts on their bids. What assurances can you provide that the commission will do a better job of monitoring potential abuse of the DE program in the upcoming incentive auction than it did not be recent AWS-3 auction?

Answer. Since I am in the minority at the FCC, I cannot provide any assurances regarding the FCC's monitoring of potential abuse of the DE program in the upcoming incentive auction. I can assure you, however, that I take abuse of the DE program very seriously, and I will not hesitate to speak out if large corporate interests attempt to game the system again.

Unfortunately, the Commission has made it more difficult to police abuse of the DE program since the AWS-3 auction. In July 2015, the Commission decided on a party-line vote to reopen loopholes the agency closed on a bipartisan basis years ago—loopholes that led to widespread gamesmanship in past auctions. I fear that the agency's decision will invite further abuse of the DE program.

Question 9. When Congress and the FCC were establishing the framework for spectrum auctions more than 20 years ago it probably made sense to ensure small businesses were able to compete. But a lot has changed. The cost of entering the incredibly expensive wireless infrastructure industry is far greater than it was in the early 1990s. A company that truly has revenues of \$40 million, \$15 million, or \$3 million—the thresholds set by the commission for the various levels of bidding credits—would be unlikely to enter the industry today. So is it time to look at simply eliminating the DE program to prevent future abuse?

credits—would be unlikely to enter the industry today. So is it time to look at simply eliminating the DE program to prevent future abuse?

Answer. I think it would be appropriate for Congress to undertake a top-to-bottom review of the DE program. As implemented by the FCC, the DE program has been plagued by abuse. Large corporate interests routinely try to game the system at the expense of far smaller businesses. Congressional oversight is particularly warranted because, as noted above, the Commission recently voted 3–2 to reopen loopholes that the agency closed on a bipartisan basis years ago.

RESPONSE TO WRITTEN QUESTIONS SUBMITTED BY HON. RICHARD BLUMENTHAL TO HON. AJIT PAI

Question 1. As you know, to address increasing demand for wireless broadband access, Congress directed the FCC to conduct an incentive auction, to encourage broadcast licensees to voluntarily relinquish their spectrum rights in exchange for a share of the proceeds in auctioning this spectrum to new licensees. In many parts of the country, contiguous spectrum will be freed up by "repacking" the channels to which remaining television broadcasters are currently assigned. Do you believe

there is enough money in the TV Broadcaster Relocation Fund to cover repacking-

related expenses incurred by broadcasters?

Answer. I do not know at this time whether there will be enough money in the TV Broadcaster Relocation Fund to cover all repacking-related expenses incurred by broadcasters. Among other things, we do not yet know how many television stations will need to be repacked.

Question 2. If the 39 month repack time-frame and the \$1.75 billion relocation fund are insufficient, does the FCC have the flexibility in the statute to ensure consumers and communities won't be negatively affected by signals going off the air? Answer. The statute provides the FCC with the flexibility to adjust the 39-month

Answer. The statute provides the FCC with the flexibility to adjust the 39-month deadline for completing repacking. However, it does not provide the FCC with the flexibility to increase the size of the relocation fund above \$1.75 billion.

Question 3. If so, how can the FCC ensure that broadcasters have sufficient time to move without being forced off the air, if factors outside their control delay their ability to reconfigure their facilities?

Answer. If a broadcaster is unable to meet the 39-month repacking deadline due to factors outside of its control, the FCC could grant it a waiver of the deadline so that a station would not be forced off the air.

Questions 4. Do you agree that no non-participating broadcaster should be forced off the air, or forced to cover the costs of transitioning their signal, to accommodate the repack?

Answer. Yes, I agree that no non-participating broadcaster should be forced to cover transition costs. That is why I urged my colleagues to adopt a repacking budget of \$1.75 billion. I also agree that no non-participating television station should be forced off the air at the end of the 39-month deadline if it has been unable to move due to factors outside of its control.

Response to Written Questions Submitted by Hon. John Thune to Hon. Michael O'Rielly

Question 1. Following the reclassification of broadband Internet access service as a Title II public utility, Chairman Wheeler indicated that the FCC will propose new privacy regulations. The Federal Trade Commission (FTC) already has extensive experience in protecting consumer privacy, and consumers and business already have experience in applying the FTC's privacy rules and precedents; the Commission has virtually no such experience beyond the very narrow confines of rules implementing Sec. 222. Why would the Commission create a new, likely inconsistent set of rules rather than adopting the FTC's privacy protections? Given that the Commission's rules will only apply to BIAS providers, isn't there a significant likelihood that functionally identical activities on a smartphone will be governed by completely different rules based upon who is providing the service?

rules based upon who is providing the service?

Answer. As an initial matter, I do not believe the Commission has authority to regulate broadband privacy practices under section 222 or any other provision. Since Congress has not assigned this role to the FCC, the agency should not presume to act, especially in an area where it has very little experience or expertise. Moreover, there is a significant risk that any rules adopted by the FCC will supplant or conflict with well-established FTC privacy precedents that are currently serving fairly well as a predictable road map for businesses and consumers alike. As I have said before, the Internet is much too important to our economy to be saddled with experimental regulations from any and all interested agencies.

Question 2. I understand that you are close to finalizing action on an order that would address the standalone broadband issue that many in Congress have written to you about over the past several years and also adopt some new limits and other measures related to universal service support for rate of return providers. Do you commit to work quickly and collaboratively with this committee and with affected stakeholders to the extent any adverse or unintended consequences arise out of the reforms?

Answer. Yes, I commit to do so. I have also made the same commitment to providers and their associations. While the reforms are intended to provide much needed stability and certainty to enable companies to invest in broadband and deliver service to consumers, we also want to continue to work collaboratively to ensure that any legitimate issues that arise are quickly and appropriately addressed.

Question 3. Ensuring that rural and urban consumers have access to reasonably comparable services at reasonably comparable rates is a fundamental statutory principle of universal service. Are you confident that the standalone broadband solution you are poised to adopt will do that—specifically, will it allow rural consumers

to get standalone broadband at rates reasonably comparable to their urban counterparts? If not, what more do you think the FCC will need do to ensure such comparability?

Answer. Yes, our intent is to ensure that rates in rural America are reasonably comparable to those in urban areas, as required by the statute. Here again, if the reforms do not operate as envisioned, we would want to work with the providers and their associations to make any necessary adjustments.

Question 4. I have heard concerns that the methodology used in the 2014 order to determine the local rate floor for voice service has led to rates in some rural areas, including parts of South Dakota, that are not reasonably comparable to those services provided in urban areas. Given this concern, when do you plan to act on the petition for reconsideration filed by several rural associations regarding the rate floor methodology? Do any other Commissioners have thoughts regarding this matter?

Answer. I do not have any information on the timing of this particular petition. As I have said in other contexts, however, the Commission should act as promptly as possible on outstanding petitions. Too many times, petitions remain pending for multiple years and parties receive no indication as to when they might receive an answer, positive or negative.

Question 5. Last July, the FCC released an omnibus declaratory ruling on the Telephone Consumer Protection Act (TCPA). TCPA litigation has increased dramatically in the last decade. What considerations did the Commission give to the impact its ruling would have on businesses, both large and small, that need to reach their customers for legitimate business purposes?

customers for legitimate business purposes?

Answer. Unfortunately, the FCC gave very little consideration to legitimate companies acting in good faith to reach customers who expressed interest in being contacted. As I said at the time, the order painted nearly all businesses as bad actors and abused the statute in multiple ways, making it nearly impossible for companies to use modern technology to reach consumers without incurring substantial legal risk.

In my statement on the ruling, I provided many examples of the wide range of businesses and communications that would be negatively impacted by the order. In some cases, companies are left to choose between adhering to the ruling and compliance with regulations from other Federal and state agencies that require businesses to call consumers, sometimes multiple times. The FCC ignored all of these examples and arguments in reaching its decision and, therefore, it is not surprising that a number of companies have challenged the decision in court.

Question 6. Many small businesses seek to improve their efficiency and customer relationships by providing information to their customers through the use of modern dialing technologies. The FCC's recent interpretation of the term "autodialer" in the TCPA declaratory ruling, however, could sweep in any number of modern dialing technologies. Other than using a rotary phone, what other technologies can small businesses feel comfortable using without exposing themselves to TCPA litigation risk?

Answer. There is no good answer for businesses. The FCC's appallingly incorrect reading of the statutory definition of an automatic telephone dialing system (ATDS or autodialer) sweeps in any equipment that could be used or modified to function as an autodialer at some point in the future. According to the FCC, it does not matter how the equipment was configured or used at the time a call was actually made. As a result, companies cannot even rely on manual dialing as a last resort to reach consumers because even the equipment used to manually dial the calls could potentially be changed to function as an autodialer in the future.

Question 7. By establishing liability after a mere one-call exception, the Commission's ruling creates a perverse incentive for incorrectly-called parties to allow or even encourage incorrect calls to continue, rather than notify the calling party of the error. These continuing incorrect calls thus become potential violations and the basis for monetary penalties sought through litigation. What will you do to repair this perverse incentive?

Answer. I highlighted this concern when the FCC adopted the exception. The ruling sets a trap for legitimate businesses and places absolutely no responsibility on the consumer to notify a company that they reached the wrong person. This was already happening before the ruling, as I noted in my statement on the ruling, and the FCC's decision will only make a bad situation worse.

The FCC is currently defending this decision in court, so it is unlikely that the FCC will change the exception before the court rules on it.

Question 8. Has the Commission considered providing a safe harbor for a calling party that reasonably relies on available customer phone number records to verify the accuracy of a customer's phone number?

Answer. The FCC considered and rejected reasonable proposals by outside parties to establish a safe harbor for legitimate companies that follow a long list of best practices to avoid stray calls to the wrong people. I, too, argued that a safe harbor was warranted because there is no comprehensive way to confirm whether a number has been reassigned. These concerns were ignored.

Question 9. The pay TV set-top box NPRM proposes to expand the scope of the term "navigation device" to include "software or hardware performing the functions traditionally performed in hardware navigation devices." On what theory does the Commission base this interpretation and expansion of the statutory term's scope to include software? Does software that is not integral to the operation of a navigation device fall within the scope of Section 629?

Answer. I voted against the Commission's recent "Commercial Availability of Navigation Devices Notice of Proposed Rulemaking and Memorandum Opinion and Order" (commonly referred to as the set-top box item) because, in part, I strongly disagreed with the majority's interpretation of section 629 to apply to such software, including applications or apps. I hope that if the Commission attempts to conclude this item, this proposal never sees the light of day as it violates the specific wording of the law and the spirit of this provision.

Question 10. How does the NPRM propose or contemplate preventing third party devices or applications from adding unapproved or additional advertising alongside MVPD service content? How does the NPRM propose to protect and secure interactive MVPD programming and services when accessed through third party devices or applications? How does the NPRM propose to enforce such protection and security measures?

Answer. As you can see from the text of the item, the majority does not see any particular problem needing Commission attention regarding the possible replacement of such advertising. Instead, the item states that market forces will address any issue but fails to explain how this would work in practice. Being one that generally supports market forces, I do not know how this would be applied in this instance. In terms of protection and security of content, this question may be better suited to those Commissioners that support the item as I disagreed with the logic and the specific proposals designed to rely on third party contracts as a mechanism to enforce and maintain important policies.

Response to Written Question Submitted by Hon. Ted Cruz to Hon. Michael O'Rielly

Question. In the Open Internet Order, the Federal Communications Commission (FCC) revised the definition of "public switched network" to mean "the network that . . . use[s] the North American Numbering Plan, or public IP addresses, in connection with the provision of switched services" (See para. 391 (emphasis added)). Although the FCC disclaimed any intent to "assert" jurisdiction over the assignment or management of IP addresses by the Internet Numbers Registry System (see id. at note 1116), the FCC's decision to equate telephone numbers with IP addresses nonetheless gives the FCC statutory jurisdiction over IP addresses as a matter of law. Over 20 years ago the FCC concluded that Section 201 of the Communications Act gave it plenary jurisdiction over telephone numbers, because "telephone numbers are an indispensable part" of the duties that section 201 imposes on common carriers (See Administration of the North American Numbering Plan, Notice of Proposed Rulemaking, FCC 94–79, ¶ 8 (1994)). IP addresses are likewise an indispensable part of the duties the FCC imposed on ISPs under section 201, including the duty to connect to "all or substantially all Internet endpoints."

How can the FCC uphold the public interest requirements in section 201 of the Act if it refuses to assert its statutory authority over an indispensable part of the public switched network?

If the FCC believes regulation of IP numbers used to connect end points on the public switched telephone network is unnecessary, why hasn't it forborne from the regulation of telephone numbers?

Answer. In the Open Internet Order, the majority used an ends-justifies-themeans approach to change a long-standing definition so that mobile broadband could miraculously be redefined as a Title II service. Inconsistencies, such as those raised above, are one of the many unintended consequences of regulatory overreach and using outdated rules on modern technology. Hopefully, this change of definition, which was implemented without opportunity for public comment and is inconsistent with prior Commission precedent, will be struck down by the D.C. Circuit. As for why the Commission has not taken action to forbear from the regulation of telephone numbers, I leave it to the Chairman to respond.

Response to Written Questions Submitted by Hon. Deb Fischer to Hon. Michael O'Rielly

Question 1. Commissioner O'Rielly, as the FCC moves forward with reforms of the Lifeline program, I continue to have concerns about the potential for waste, fraud, and abuse. In Nebraska, there is little to no waste, fraud, or abuse mainly due to the diligence of the state's Public Service Commission in overseeing the program. The PSC thoroughly vets all companies before designating them as Eligible Telecommunications Carriers, and they have leverage through this process to police the quality of the services provided. We also have a system of verifying the eligibility of consumers applying to the program. I understand that some of the changes that you are considering would eliminate the important role that states like Nebraska play in overseeing and policing the Lifeline program. How would the FCC be able to replicate the work that states do to prevent waste, fraud, and abuse in the Lifeline program?

Answer. A draft item just circulated on March 8, so I am limited by FCC rules in what I can say about the contents of the item. However, I have made clear on multiple occasions that I am concerned about waste, fraud, and abuse in the program. I will carefully consider the points you raise in reviewing whether any of the reforms would magnify this ongoing problem.

Question 2. Commissioner O'Rielly, in discussing the FCC's recent proposal on settop boxes, nearly everyone has said, yourself included, that they would like to see the marketplace continue to move away from set-top boxes and towards more innovative methods of allowing customers to access video content. New technologies have increased competition in the video market, and companies like Netflix, Hulu, Roku, as well as a wide variety of video applications are providing new options to consumers. Further, many cable and satellite companies are moving away from set top boxes and towards application-based platforms. How do we continue to encourage innovation in the video marketplace while avoiding technology mandates and burdensome regulations?

Answer. Thankfully, the marketplace—driven by consumer demand—is heading in that direction without assistance or mandates by the Commission, as many video distributors are already moving to an app-centric world and away from the hardware limitations of a set-top box environment. Consumers are able to experience wide choices of digital video content that will only increase over time, absent unnecessary interference from the Commission. While I leave it to Congress' purview, I will suggest that there may be great benefits from removing unnecessary burdens contained in Title VI of the Communications Act. Additionally, it is important that new video offerings, such as over-the-top video, not be vacuumed into the existing video regulatory regime.

Response to Written Questions Submitted by Hon. Ron Johnson to Hon. Michael O'Rielly

Question 1. Commissioner O'Rielly, am I correct that you were not offered an opportunity to cast a vote on the latest Wireless Competition Report? When did you learn of the Report's release? Do you believe the process used to adopt the Report is consistent with Congress' statutory direction, and if not, what are your thoughts regarding congressional action to repeal or modify this annual requirement?

Answer. You are correct that I was not provided an opportunity to vote on the Wireless Competition Report, despite requests from Commissioner Pai and me to have it formally circulated to and voted by the entire Commission. The timeline of notification and release is as follows:

Dec. 21, 2015, 6:12 pm: Provided 48 hours notice that the report was to be released on delegated authority.

Dec. 22, 2015, 10:42 am: My office requested that the report be circulated to and voted on by the Commission.

Dec. 23, 2015, 2:23 pm: Informed that the Chairman would move forward with the release of the report on delegated authority.

Dec. 23, 2015, approx. 6:00 pm: Report released

Generally, the data contained in this report is used by the Commission as a foundation for regulatory decisions and, therefore, should contain input from and be ap-

proved by the Commissioners. More specifically, releasing the report on delegated authority fails to comply with the statute, which states that the Commission, not the Bureau, must report annually about the state of the mobile industry. Further, the report must contain an analysis of "whether or not there is effective competition." Even though more than 90 percent of Americans have a choice of four or more wireless providers, the report does not conclude, as directed by Congress, whether this industry is competitive. I leave it to Congress to decide the best course of action to rectify this situation and whether the annual report remains useful. But it may be helpful for Congress to reiterate, at a minimum, that any such report must be released by the Commission, as opposed to on delegated authority, and must conclude whether or not the wireless industry is competitive.

Question 2. Commissioner O'Rielly, in your testimony, you provided an example of an FCC enforcement action against First National Bank. Specifically, you said, "Before First National was ever notified about the citation, the Commission had already tried the case through the press, harming the company's reputation. Interestingly, the citation was dismissed two month later without similar fanfare." What,

if anything, can Congress do to help address this issue?

Answer. I have suggested that the Commission change its procedures so that citations are not publicized until after the target has had the opportunity to respond to the claimed violations, which occurs within 30 days of the issuance of the citation. I made clear that this change would not detract from the Enforcement Bureau's ability to pursue an investigation, or a fine if warranted. The company would still receive the citation and could face further enforcement action. Nor would it detract from the Commission's ability to use a citation as a deterrent for other companies because the citation (unless rescinded after discussions with the target) would still become public.

I can report that the Commission has not changed its procedures to date. I would

welcome any action by Congress to address this issue.

Response to Written Questions Submitted by Hon. Dean Heller to Hon. Michael O'Rielly

Question 1. For years, I have believed that the way in which rules are processed at the Commission lacks transparency and is detrimental to the American public. My FCC Process Reform Act would address these transparency and accountability issues for the sake of consumers and the industries supporting innovation and our

For example, the public has no idea the specific language of the rules the Commission is voting on until after they are passed. We saw that with the net neutrality rules that were pushed through this time last year, and we saw it a few weeks ago when the FCC voted on the proposal related to set-top boxes.

In fact, Chairman Wheeler said during that meeting on set-top boxes: "There have been lots of wild assertions about this proposal before anybody saw it." The problem is that the public doesn't know what to expect from the rule-there is no certainty for those on the outside.

Do you believe the public has a right to see the specific language of a rule before

it is voted on by the Commission?

Answer. This simple but powerful fix would benefit the American people, the functionality of the Commission and the transparency of our government. I appreciate all of your hard work to push this effort forward and am hopeful that it will become reality, either through changes made by the Commission itself or Congres-

Question 2. As someone committed to protecting Americans' and Nevadans' privacy, especially related to personally identifiable information (PII), I have a question

regarding the recent set-top box Notice of Proposed Rulemaking.

Currently, pay-TV companies must follow strong privacy protections to ensure consumers' personal information is not collected, utilized, or shared for non-service related purposes. How does this NPRM contemplate applying and enforcing these same privacy to any new suppliers entering the set-top box market? Does the FCC

have the legal authority to enforce Title 6 privacy standards on third parties?

Answer. You raise an important issue regarding the Commission's recent set top box item, from which I dissented. The item proposes to rely on the imposition of mandates on video distrubutors to include privacy requirements in any contract with a third party when sharing the so-called data streams. I do not see how Title VI can be read to provide the Commission with authority to govern the privacy of third party providers' use of this valuable information via the private contractual requirements of video distributors.

RESPONSE TO WRITTEN QUESTIONS SUBMITTED BY HON. CLAIRE MCCASKILL TO HON. MICHAEL O'RIELLY

Question 1. One of the best tools the Commission has in overseeing the Lifeline program is the ability to take aggressive enforcement against carriers violating the rules of the program, companies that are abusing both the consumers who use the program as well as the rate payers that fund it. That's why I applauded a flurry of announced enforcement activity from September 2013 through February 2014. During that time the FCC issued Notices of Apparent Liability (NALs) totaling more than \$94 million in proposed fines for 12 companies participating in the Lifeline program. Some of those notices are more than two-and-a-half years old yet not a penny of that money has yet been collected. Will you press the Enforcement Bureau to either issue forfeiture orders, reach settlements, or dismiss these 12 NALs in an expeditious manner?

Answer. While I don't have any involvement in setting the agenda of the Enforcement Bureau, I support the concept of it making timely decisions, especially as it relates to incidents of fraud, waste and abuse of the Lifeline program.

Question 2. To avoid this situation in the future, would you support a shot clock for resolution of NALs? If so, what do you believe would be an acceptable amount of time?

Answer. I have favored shot clocks in other settings and the use of one here may prove beneficial as well. Too many enforcement matters sit in holding patterns for too long, making the enforcement of our rules more difficult than is necessary. I would be open to seeking public comment on an appropriate time table for such a shot clock.

Question 3. The Bipartisan Budget Act of 2015 included an unwise and harmful provision to exempt debt collection calls on behalf of the Federal Government from Telephone Consumer Protection Act (TCPA) rules that prohibit robocalls to cell phones. Although the provision was ostensibly aimed at collecting student loan debt, the loophole was potentially widened either further by adoption of the Fixing America's Surface Transportation (FAST) Act in December, which requires the Internal Revenue Service to contract with private debt collectors to collect unpaid taxes. I have held hearings in this committee's Consumer Protection Subcommittee and at the Senate Aging Committee on robocalls. We should be making it harder—not easier—for this number one consumer complaint to continue, especially when there is no evidence that robocalls are an effective means of reaching consumers. Until we are successful in repealing this provision, the FCC is tasked with adopting rules to implement it. Would you support rules that require companies collecting debt on behalf of the Federal Government to register with the FCC in advance of doing so?

Answer. I am hesitant to comment too extensively on this matter given the Commission currently has a related matter before it. However, my first reaction is that this may be outside the statutory authority provided to the Commission. Substantively, I am not sure the Commission has any expertise in conducting or operating such a registration, or whether it would be effective. I will, of course, implement any changes enacted by Congress.

 $Question\ 4.$ Would you support rules that limit calls from companies collecting debt on behalf of the Federal Government to no more than one call per consumer per month?

Answer. Again, this is a matter presently before the Commission. While the FCC does have authority under the statute to set limits on the number and duration of such calls, this proposed limitation may run counter to other Federal agency call attempt requirements on those servicing or trying to collect a debt owed to or guaranteed by the United States.

Question 5. What impact do you believe this exemption will have on the ability of the commission's Enforcement Bureau to differentiate between calls that are now exempt from TCPA and those that are not, particularly when exempt calls and non-exempt calls could be coming from the same call centers?

Answer. I have generally refrained from critiquing changes in law approved by Congress and the Administration. In practice, implementation and enforcement of this change may not prove too difficult as it will hinge on whether the function of the call meets the statutory exemption, which should be a fact-based analysis.

Question 6. The chairman recently received a letter from Senator Blunt and me regarding the upcoming reverse auction portion of Connect America Fund, Phase II (CAF II).

For CAF II in Missouri, there is approximately \$400 million available over the next 10 years to bring broadband to unserved parts of the state. Can you assure

me that the money will be spent in Missouri and not be reallocated to other areas

of the country?
Answer. The election by the incumbent price cap carriers in Missouri to turn down CAF Phase II funding means that these areas will be designated for participation. tion in the post right-of-first-refusal reverse auction. A draft proposal to implement the reverse auction is currently before the Commission. Until such an item is adopted and executed, it is premature to predict its effects on the overall spending level for Missouri. For instance, it may be that the non-selected price cap areas can be sufficiently served at a reduced cost generated by the reverse auction process.

Question 7. As you consider the framework to govern the reverse auction to award the remaining dollars available in CAF II, how will you ensure that funded projects not only meet today's broadband definition, but are future proof and scalable to keep pace with ever-changing technology and increasing needs for higher speed broadband?

Answer. The Commission is currently considering the components for the reverse auction. I do support a structure that recognizes differences in service offerings while not favoring one technology over another so that the Commission can incentivize the private sector to provide broadband in these areas within the established budget.

Question 8. In 1993, through the Omnibus Budget Reconciliation Act of 1993, Congress directed the FCC to develop regulations governing the competitive bidding of spectrum. Included in the statutory instructions from Congress was a requirement that the Commission "ensure that small businesses, rural telephone companies, and businesses owned by members of minority groups and women are given the opportunity to participate in the provision of spectrum-based services." To meet this congressional mandate the FCC created the Designated Entity (DE) program. The program's worthy goal of providing a mechanism for legitimate small businesses to partner with larger ones in spectrum auctions has undoubtedly helped many small businesses win spectrum licenses over the past 20+ years. But it has also provided a blueprint for large, multinational, multi-billion-dollar corporations to game the system and receive discounts on their bids. What assurances can you provide that the commission will do a better job of monitoring potential abuse of the DE program in the upcoming incentive auction than it did in the recent AWS-3 auction?

Answer. Unfortunately, I am not confident that such abuse will not occur in the future, and it's why I dissented on the item adopting recent changes to the Commission's DE rules. In particular, I am not confident that the rule changes properly protect consumers from companies using the DE program as a mechanism to obtain and then sell wireless licenses for excessive profits at the expense of the American people.

Question 9. When Congress and the FCC were establishing the framework for spectrum auctions more than 20 years ago it probably made sense to ensure small businesses were able to compete. But a lot has changed. The cost of entering the incredibly expensive wireless infrastructure industry is far greater than it was in the early 1990s. A company that truly has revenues of \$40 million, \$15 million, or \$3 million—the thresholds set by the commission for the various levels of bidding credits—would be unlikely to enter the industry today. So is it time to look at simply eliminating the DE program to prevent future abuse?

Answer. There are legitimate concerns whether the Commission can operate an effective and abuse-free DE program while properly compensating the American people for use of spectrum. If it cannot be done, then the program should be immediately and indefinitely suspended and Congress notified of such.

RESPONSE TO WRITTEN QUESTIONS SUBMITTED BY HON. RICHARD BLUMENTHAL TO HON. MICHAEL O'RIELLY

Question 1. As you know, to address increasing demand for wireless broadband access, Congress directed the FCC to conduct an incentive auction, to encourage broadcast licensees to voluntarily relinquish their spectrum rights in exchange for a share of the proceeds in auctioning this spectrum to new licensees. In many parts of the country, contiguous spectrum will be freed up by "repacking" the channels to which remaining television broadcasters are currently assigned. Do you believe there is enough money in the TV Broadcaster Relocation Fund to cover repackingrelated expenses incurred by broadcasters?

Answer. I believe that it is premature to know whether the funding level established by Congress is sufficient. The broadcast incentive auction structure has many moving components that could alter the overall repacking costs. For instance, until

the band plan is adopted by the marketplace via the reverse and forward auctions, it is unclear to know how many stations will need to be repacked. While I am sympathetic to the concerns of the broadcasting community, it seems prudent to examine this issue after the auction concludes.

Question 2. If the 39 month repack time-frame and the \$1.75 billion relocation fund are insufficient, does the FCC have the flexibility in the statute to ensure consumers and communities won't be negatively affected by signals going off the air? Answer. If necessary, the Commission could extend the repacking timeframe, but

it must balance this against the interests of those winning licenses in the forward auction, assuming the incentive auction is able to close successfully. Once we have a clearer picture of how many stations will be repacked, it will be easier to determine whether the 39-month repack time-frame is achievable and the best way to proceed. It is also possible that individual waivers, rather than a blanket extension, may be the best course of action but it is unclear at the current time whether this will be necessary. At the same time, the Commission doesn't not have authority to increase the repacking budget of \$1.75 billion; only Congress can do that.

Question 3. If so, how can the FCC ensure that broadcasters have sufficient time to move without being forced off the air, if factors outside their control delay their ability to reconfigure their facilities?

Answer. The Commission should properly and closely monitoring the repacking process to ensure that any delays are the result of legitimate problems faced by broadcasters and not avoidable circumstances. Based on this information, the Commission could issue individual waivers of the repacking deadline or extend the deadline altogether, if necessary.

Questions 4. Do you agree that no non-participating broadcaster should be forced off the air, or forced to cover the costs of transitioning their signal, to accommodate the repack?

Answer. To the extent that any delays in repacking are the result of legitimate problems and not avoidable circumstances and its repacking costs fully meet the standards set by the Commission, then yes.

RESPONSE TO WRITTEN QUESTIONS SUBMITTED BY HON. JOHN THUNE TO HON. MIGNON L. CLYBURN

Question 1. Following the reclassification of broadband Internet access service as a Title II public utility, Chairman Wheeler indicated that the FCC will propose new privacy regulations. The Federal Trade Commission (FTC) already has extensive experience in protecting consumer privacy, and consumers and business already have experience in applying the FTC's privacy rules and precedents; the Commission has virtually no such experience beyond the very narrow confines of rules implementing Sec. 222. Why would the Commission create a new, likely inconsistent set of rules rather than adopting the FTC's privacy protections? Given that the Commission's rules will only apply to BIAS providers, isn't there a significant likelihood that functionally identical activities on a great heavy all he ground by completely different tionally identical activities on a smartphone will be governed by completely different rules based upon who is providing the service?

Answer. Thank you for the question. Both the Federal Trade Commission (FTC) and the Federal Communications Commission (FCC) share a long and valuable history of collaboration on issues when it comes to protecting American consumers and I am pleased to say that I do not see that spirit of cooperation ever changing. But Senator, I must respectfully disagree with the premise of the question that the FCC has virtually no experience in protecting consumer privacy. As you mentioned, Section 222 is an explicit grant of authority from Congress regarding privacy for telecommunications networks and carriers. In fact, the actual title of Section 222 is "Privacy of Consumer Information" and there outlined are the duties of carriers to protect confidentiality and proprietary information. Well before the *Open Internet* Order, the FCC has been the only agency with jurisdiction to ensure telecommunications carriers protect consumer privacy.

The Chairman just circulated a Notice of Proposed Rulemaking on Section 222 and privacy for broadband Internet access service (BIAS) providers and I am currently reviewing the item. As I review the draft and meet with interested parties, I am open to all proposals and options on how best to protect consumers' privacy consistent with the directives of Section 222. I believe we are all better suited when we have a robust record that will help determine how best to proceed.

Question 2. I understand that you are close to finalizing action on an order that would address the standalone broadband issue that many in Congress have written to you about over the past several years and also adopt some new limits and other measures related to universal service support for rate of return providers. Do you commit to work quickly and collaboratively with this committee and with affected stakeholders to the extent any adverse or unintended consequences arise out of the reforms?

Answer. Yes. I commit to work quickly and collaboratively with the Commission to address any adverse or unintended consequences.

Question 3. Ensuring that rural and urban consumers have access to reasonably comparable services at reasonably comparable rates is a fundamental statutory principle of universal service. Are you confident that the standalone broadband solution you are poised to adopt will do that—specifically, will it allow rural consumers to get standalone broadband at rates reasonably comparable to their urban counterparts? If not, what more do you think the FCC will need do to ensure such comparability?

Answer. I agree that the FCC has a duty to ensure that, consistent with the objectives of the statute, rates in rural and high cost areas are reasonably comparable to urban counterparts just as we have a duty to ensure that low income consumers have access to services reasonably comparable to services available urban areas. The FCC conducts an urban rate survey every year to help assess what rates consumers are paying in those areas. This survey will enable us to compare the urban survey reults to rates in rural and high cost areas and, if necessary, take action to ensure rates remain reasonably comparable.

rates remain reasonably comparable.

In addition, the FCC's high cost universal service fund is not designed to ensure that rates are affordable. Rather, the FCC's Lifeline program is the only means-tested program established to provide support to ensure that services are affordable for low-income consumers who need connectivity the most. Reforming the Lifeline program to ensure that those who qualify can apply for a Lifeline discount to broadband rather than just voice, is another pivotal measure to ensure that rates for advanced telecommunications services in rural and urban areas are ubiquitous and affordable.

Question 4. I have heard concerns that the methodology used in the 2014 order to determine the local rate floor for voice service has led to rates in some rural areas, including parts of South Dakota, that are not reasonably comparable to those services provided in urban areas. Given this concern, when do you plan to act on the petition for reconsideration filed by several rural associations regarding the rate floor methodology? Do any other Commissioners have thoughts regarding this matter?

Answer. In 2011, the FCC adopted the local rate floor to ensure that finite universal service resources are being used as efficiently as possible and not spent on subsidizing local rates that are artificially low. We need to ensure that support is sufficient but we should never provide any more support than is necessary. The rate floor reductions apply only to carriers that receive High Cost Loop Support or HCLS, which subidizes intrastate costs and reduces support only to the extent rates are below the rate floor. Thus, carriers that do not receive HCLS are not impacted and interstate common line support or ICLS is not impacted.

In 2014, the FCC revised the implementation of the rate floor as follows:

- Between January 2, 2015, and June 30, 2016, support is reduced only to the extent rates are below \$16;
- Between July 1, 2016, and June 30, 2017, support is reduced only for lines with rates under \$18 or the rate floor established by the 2016 rate survey, whichever is lower; and
- Between July 1, 2017, and June 30, 2018, support is limited only for lines with rates under \$20 or the 2017 rate floor, whichever is lower. Thus, the impact of this rule was phased in over a four-year period and Lifeline customers were excluded from these limitations.

In 2015, the FCC found, based on a survey of urban rates, that the 2015 rate floor for voice services is \$21.22, and the reasonable comparability benchmark for voice services is \$47.48. It is my understanding that last year, of the 116,000 lines served by rate of return carriers in South Dakota, only 41 lines, or 0.0003 percent, were below the \$16 rate floor. Thus, only carriers serving these 41 lines would see a reduction in HCLS support and only to the extent they are below \$16. Based on this data, coupled with the phased in reductions outlined above, the rate floor reductions are still well below average rates paid for by urban consumers. And, even after the phase-in, the rate floor will be based on urban rates which should ensure that rates in rural and high cost areas are reasonably comparable to urban areas.

In addition, rates for low-income consumers receiving Lifeline that are below the rate floor are not impacted and no support is reduced for these lines. Even so, I am

happy to meet with you and your staff to better understand your concern and determine if there are ways for the FCC to take action to address it.

Question 5. Last July, the FCC released an omnibus declaratory ruling on the Telephone Consumer Protection Act (TCPA). TCPA litigation has increased dramatically in the last decade. What considerations did the Commission give to the impact its ruling would have on businesses, both large and small, that need to reach their customers for legitimate business purposes?

customers for legitimate business purposes?

Answer. As I noted when the Commission adopted the declaratory ruling, the agency struck a difficult, but necessary balance with the item, maintaining the consumer protections that the TCPA intended, while taking into account the needs of businesses. I also noted that we would remain vigilant, monitoring consumer complaints not only when it comes to unwanted calls but also whether access to important and desired information is unintentionally lost.

Question 6. Many small businesses seek to improve their efficiency and customer relationships by providing information to their customers through the use of modern dialing technologies. The FCC's recent interpretation of the term "autodialer" in the TCPA declaratory ruling, however, could sweep in any number of modern dialing technologies. Other than using a rotary phone, what other technologies can small businesses feel comfortable using without exposing themselves to TCPA litigation risk?

Answer. As communications technologies change, so must our rules. The Commission's declaratory ruling took several steps to provide small businesses protection from TCPA litigation. First and foremost, any company can protect themselves by obtaining prior consent for their communication. Second, we provided some buffer for companies acting in good faith, by allowing them one call, post reassignment, in order to affirm any number reassignment.

Question 7. By establishing liability after a mere one-call exception, the Commission's ruling creates a perverse incentive for incorrectly-called parties to allow or even encourage incorrect calls to continue, rather than notify the calling party of the error. These continuing incorrect calls thus become potential violations and the basis for monetary penalties sought through litigation. What will you do to repair this perverse incentive?

Answer. The Commission receives overwhelming numbers of complaints from consumers about the robocalls and texts they receive. I voted for our declaratory ruling last year, including the one-call exception, because I believe we did what we could to provide clarity for good business actors in this space while protecting consumers from unwanted communications. I have also encouraged voluntary participation by all providers in some type of comprehensive database for reassigned numbers. This idea still has merit. But I look forward to reviewing any ideas to improve our implementation of the TCPA that the Chairman's Office proposes.

Question 8. Has the Commission considered providing a safe harbor for a calling party that reasonably relies on available customer phone number records to verify the accuracy of a customer's phone number?

Answer. As noted above, the Commission receives overwhelming numbers of complaints from consumers about the robocalls and texts they receive, and the declaratory ruling struck a difficult, but necessary balance between maintaining the consumer protections that the TCPA intended, while also taking into account the needs of businesses. The declaratory ruling did not adopt a safe harbor, but I am open to reviewing any ideas to improve our implementation of the TCPA that the Chairman's Office proposes.

Question 9. The pay TV set-top box NPRM proposes to expand the scope of the term "navigation device" to include "software or hardware performing the functions traditionally performed in hardware navigation devices." On what theory does the Commission base this interpretation and expansion of the statutory term's scope to include software? Does software that is not integral to the operation of a navigation device fall within the scope of Section 629?

Answer. As noted in the NPRM, the Communications Act does not define the term "navigation device," but we interpreted the term to be broader than hardware alone, as Section 629 is plainly written to cover any equipment used by consumers to access multichannel video programming and other services. Software features have long been essential elements of such equipment, including before adoption of Section 629.

Question 10. How does the NPRM propose or contemplate preventing third party devices or applications from adding unapproved or additional advertising alongside MVPD service content? How does the NPRM propose to protect and secure interactive MVPD programming and services when accessed through third party devices

or applications? How does the NPRM propose to enforce such protection and security measures?

Answer. We are committed to defending copyright protections afforded to content creators, and the proposal does not interfere with the agreements between the content companies and MVPDs. In fact, in order to be certified, a navigation device maker will need to show that they are in compliance with security measures in order to receive information from MVPDs.

Navigation device makers will be required to pass through all content, including advertisements. As for inserting additional advertisements, the marketplace may actually help discourage such a practice, as most consumers are not looking for a product that provides additional advertisements. But I look forward to continuing to engage on this issue, and I hope that the record of this proceeding will help inform this issue.

RESPONSE TO WRITTEN QUESTION SUBMITTED BY HON. TED CRUZ TO HON. MIGNON L. CLYBURN

Question. In the Open Internet Order, the Federal Communications Commission (FCC) revised the definition of "public switched network" to mean "the network that . . . use[s] the North American Numbering Plan, or public IP addresses, in connection with the provision of switched services" (See para. 391 (emphasis added)). Although the FCC disclaimed any intent to "assert" jurisdiction over the assignment or management of IP addresses by the Internet Numbers Registry System (see id. at note 1116), the FCC's decision to equate telephone numbers with IP addresses nonetheless gives the FCC statutory jurisdiction over IP addresses as a matter of law. Over 20 years ago the FCC concluded that Section 201 of the Communications Act gave it plenary jurisdiction over telephone numbers, because "telephone numbers are an indispensable part" of the duties that section 201 imposes on common carriers (See Administration of the North American Numbering Plan, Notice of Proposed Rulemaking, FCC 94–79, ¶8 (1994)). IP addresses are likewise an indispensable part of the duties the FCC imposed on ISPs under section 201, including the duty to connect to "all or substantially all Internet endpoints".

How can the FCC uphold the public interest requirements in section 201 of the

How can the FCC uphold the public interest requirements in section 201 of the Act if it refuses to assert its statutory authority over an indispensable part of the public switched network?

If the FCC believes regulation of IP numbers used to connect end points on the public switched telephone network is unnecessary, why hasn't it forborne from the regulation of telephone numbers?

Answer. Thank you for the question. Nothing in the Open Internet Order suggests that the Commission asserted authority over the assignment or management of IP addresses, either pursuant to Section 201(a) or pursuant to Section 251(e) (the source of Commission authority over numbering issues pursuant to the Telecommunications Act of 1996). In fact, the Commission forebore from Section 251(e)—the provision that gives the Commission authority over telecommunications numbering

IP addressing is governed by IANA, (the Internet Assigned Numbers Authority), a department of ICANN that is responsible for the global coordination of IP addressing, among other coordination functions. ARIN—the American Registry of Internet Numbers—is the regional administrator responsible for administering Internet numbers is the U.S. and certain nearby countries. The NTIA is the U.S. Government agency that contracts with ICANN to perform the IANA functions.

Response to Written Question Submitted by Hon. Deb Fischer to Hon. Mignon L. Clyburn

Question. Commissioner Clyburn, as the FCC moves forward with reforms of the Lifeline program, I continue to have concerns about the potential for waste, fraud, and abuse. In Nebraska, there is little to no waste, fraud, or abuse mainly due to the diligence of the state's Public Service Commission in overseeing the program. The PSC thoroughly vets all companies before designating them as Eligible Telecommunications Carriers, and they have leverage through this process to police the quality of the services provided. We also have a system of verifying the eligibility of consumers applying to the program. I understand that some of the changes that you are considering would eliminate the important role that states like Nebraska play in overseeing and policing the Lifeline program. How would the FCC be able to replicate the work that states do to prevent waste, fraud, and abuse in the Lifeline program?

Answer. Thank you for the question. As a former state commissioner, I respect and appreciate the significant role many states play and am always mindful of this in my capacity as an FCC Commissioner. As we reform Lifeline, my goal is to create a dignified program that creates more choice for consumers and eliminates the incentives for fraud. I have heard the current Lifeline program, including eligibility determination and participation, may deter some providers from participating, and I am open to ways to reduce barriers and increase choice for consumers. The Chairman just circulated an Order to achieve these goals and, if you have concerns, I am happy to meet with you to better understand how we can achieve our shared goals.

RESPONSE TO WRITTEN QUESTIONS SUBMITTED BY HON. DEAN HELLER TO HON. MIGNON L. CLYBURN

Question 1. For years, I have believed that the way in which rules are processed at the Commission lacks transparency and is detrimental to the American public. My FCC Process Reform Act would address these transparency and accountability issues for the sake of consumers and the industries supporting innovation and our economy.

For example, the public has no idea the specific language of the rules the Commission is voting on until after they are passed. We saw that with the net neutrality rules that were pushed through this time last year, and we saw it a few weeks ago when the FCC voted on the proposal related to set-top boxes.

In fact, Chairman Wheeler said during that meeting on set-top boxes: "There have been lots of wild assertions about this proposal before anybody saw it." The problem is that the public doesn't know what to expect from the rule—there is no certainty for those on the outside.

Do you believe the public has a right to see the specific language of a rule before

it is voted on by the Commission?

Answer. Thank you for the question. In my opinion, the Administrative Procedures Act, which governs all Federal agencies, has sufficient notice and comment requirements to give the public, including FCC licensees, adequate information about rules the Commission might adopt and sufficient opportunity to comment on any such proposed rules. To comply with the APA, the Commission typically discusses rule proposals in a Notice of Proposed Rulemaking. In some cases, it might be difficult to specify every detail of such proposed rules. Therefore, Commission should have flexibility, when those few instances present themselves, to not specify every detail of every proposed rule.

Question 2. As someone committed to protecting Americans' and Nevadans' privacy, especially related to personally identifiable information (PII), I have a questions regarding the recent set top box Notice of Proposed Bulomeking

vacy, especially related to personally identifiable information (11), I have a questions regarding the recent set-top box Notice of Proposed Rulemaking.

Currently, pay-TV companies must follow strong privacy protections to ensure consumers' personal information is not collected, utilized, or shared for non-service related purposes. How does this NPRM contemplate applying and enforcing these same privacy to any new suppliers entering the set-top box market? Does the FCC have the legal authority to enforce Title 6 privacy standards on third parties?

Answer. Thank you for the question. I share your concern about protecting consumer privacy. While device manufacturers are not subject to Title VI as cable pro-

Answer. Thank you for the question. I share your concern about protecting consumer privacy. While device manufacturers are not subject to Title VI as cable providers are, the NPRM proposes that in order to be certified, a navigation device maker will need to show that they are in compliance with privacy obligations in order to receive information from MVPDs.

In reality, this could mean that navigation device makers will comply with the more stringent European Union privacy regulations, in order to be able to market their products globally.

RESPONSE TO WRITTEN QUESTIONS SUBMITTED BY HON. CLAIRE McCaskill to Hon. Mignon L. Clyburn

Question 1. One of the best tools the Commission has in overseeing the Lifeline program is the ability to take aggressive enforcement against carriers violating the rules of the program, companies that are abusing both the consumers who use the program as well as the rate payers that fund it. That's why I applauded a flurry of announced enforcement activity from September 2013 through February 2014. During that time the FCC issued Notices of Apparent Liability (NALs) totaling more than \$94 million in proposed fines for 12 companies participating in the Lifeline program. Some of those notices are more than two-and-a-half years old yet not a penny of that money has yet been collected. Will you press the Enforcement Bureau to eight

ther issue forfeiture orders, reach settlements, or dismiss these 12 NALs in an expeditious manner?

Answer. Thank you for your questions. Yes, I agree it is appropriate to resolve all Notices of Apparent Liability in a timely manner. I also do not have any reason to believe that the Enforcement the Bureau is not actively working on pending matters in a manner that upholds, respects and balances the rights and responsibilities of both the consumer and the carrier.

Question 2. To avoid this situation in the future, would you support a shot clock for resolution of NALs? If so, what do you believe would be an acceptable amount of time?

Answer. While a shot clock could be useful to ensure that the agency remains on track when it comes to resolving outstanding issues, each situation is different. As a result, while generally supportive of a strict timeframe, I would need to learn more about the current Enforcement Bureau process and timelines when it comes to particular violation categories in order to provide a specific recommendation.

Question 3. The Bipartisan Budget Act of 2015 included an unwise and harmful provision to exempt debt collection calls on behalf of the Federal Government from Telephone Consumer Protection Act (TCPA) rules that prohibit robocalls to cell phones. Although the provision was ostensibly aimed at collecting student loan debt, the loophole was potentially widened either further by adoption of the Fixing America's Surface Transportation (FAST) Act in December, which requires the Internal Revenue Service to contract with private debt collectors to collect unpaid taxes. I have held hearings in this committee's Consumer Protection Subcommittee and at the Senate Aging Committee on robocalls. We should be making it harder—not easier—for this number one consumer complaint to continue, especially when there is no evidence that robocalls are an effective means of reaching consumers. Until we are successful in repealing this provision, the FCC is tasked with adopting rules to implement it. Would you support rules that require companies collecting debt on behalf of the Federal Government to register with the FCC in advance of doing so?

Answer. The Commission is currently considering a Notice of Proposed Rule-making that implements the Bipartisan Budget Act of 2015. I am carefully weighing the proposal in order to ensure that we maintain the consumer protections that the TCPA intended, and will take this proposal into consideration.

Question 4. Would you support rules that limit calls from companies collecting debt on behalf of the Federal Government to no more than one call per consumer per month?

Answer. The Commission is currently considering a Notice of Proposed Rule-making that implements the Bipartisan Budget Act of 2015. I am carefully weighing the proposal in order to ensure that we maintain the consumer protections that the TCPA intended, and agree that there should be a limit on the number of calls per month, as well as opt-out accommodations.

Question 5. What impact do you believe this exemption will have on the ability of the commission's Enforcement Bureau to differentiate between calls that are now exempt from TCPA and those that are not, particularly when exempt calls and non-exempt calls could be coming from the same call centers?

Answer. The Commission is currently considering a Notice of Proposed Rule-making that implements the Bipartisan Budget Act of 2015. I am carefully weighing the proposal in order to ensure that we maintain the consumer protections that the TCPA intended. Like all of our rulemakings, I agree that we need to take enforceability into account as we evaluate the item.

Question 6. The Chairman recently received a letter from Senator Blunt and me regarding the upcoming reverse auction portion of Connect America Fund, Phase II (CAF II).

For CAF II in Missouri, there is approximately \$400 million available over the next 10 years to bring broadband to unserved parts of the state. Can you assure me that the money will be spent in Missouri and not be reallocated to other areas of the country?

Answer. The Order adopting rules for the Connect America Fund Phase II auction is on circulation. I am still reviewing the proposed Order and evaluating the implications of various proposals, including how funding would be distributed. While I cannot reveal the substance of the item on circulation, I am happy to meet with you and your staff to hear how you would propose to ensure that funding would remain within a given state.

Question 7. As you consider the framework to govern the reverse auction to award the remaining dollars available in CAF II, how will you ensure that funded projects not only meet today's broadband definition, but are future proof and scalable to keep

pace with ever-changing technology and increasing needs for higher speed broadband?

Answer. As noted above, the Order adopting rules for the Connect America Fund Phase II auction is on circulation. I am still reviewing the proposed Order but certainly share the goal that we want to ensure we fund projects that are future-proof. At the same time, universal service support is limited so I want to ensure we have a framework to ensure that we enable all consumers to have access to broadband and voice services. If you have ideas on how best to achieve these goals, I would be interested in hearing them and would be happy to meet with you and your staff.

Question 8. In 1993, through the Omnibus Budget Reconciliation Act of 1993, Congress directed the FCC to develop regulations governing the competitive bidding of spectrum. Included in the statutory instructions from Congress was a requirement that the Commission "ensure that small businesses, rural telephone companies, and businesses owned by members of minority groups and women are given the opportunity to participate in the provision of spectrum-based services." To meet this congressional mandate the FCC created the Designated Entity (DE) program. The program's worthy goal of providing a mechanism for legitimate small businesses to partner with larger ones in spectrum auctions has undoubtedly helped many small businesses win spectrum licenses over the past 20+ years. But it has also provided a blueprint for large, multinational, multi-billion-dollar corporations to game the system and receive discounts on their bids. What assurances can you provide that the Commission will do a better job of monitoring potential abuse of the DE program in the upcoming incentive auction than it did in the recent AWS-3 auction?

Answer. In the 2015 Competitive Bidding Order, the Commission adopted a num-

Answer. In the 2015 Competitive Bidding Order, the Commission adopted a number of reforms to prevent abuse of the DE program. First, we prohibited joint bidding agreements that involve a shared strategy for bidding at auction. Second, we retained the existing five-year unjust enrichment period and graduated repayment schedule. But, we made clear that we are limiting the amount of spectrum that noncontrolling disclosable interest holders of a designated entity—such as investors—can use during the unjust enrichment period. Third, when evaluating designated entity applications, we adopted a totality-of-the-circumstances approach when examining whether an agreement or relationship between an entity and an alleged noncontrolling entity would warrant attributing the non-controlling interest's revenue to the designated entities. We issued guidance that some management, loan, and organizational documents—such as limited liability company agreements and other types of operational agreements—could raise concerns that warrant particular scrutiny as part of our application review.

Question 9. When Congress and the FCC were establishing the framework for spectrum auctions more than 20 years ago it probably made sense to ensure small businesses were able to compete. But a lot has changed. The cost of entering the incredibly expensive wireless infrastructure industry is far greater than it was in the early 1990s. A company that truly has revenues of \$40 million, \$15 million, or \$3 million—the thresholds set by the commission for the various levels of bidding credits—would be unlikely to enter the industry today. So is it time to look at simply eliminating the DE program to prevent future abuse?

Answer. I do not think we need to eliminate the Designated Entity (DE) program in order to prevent future abuse. More than 20 years ago, Congress realized that advanced telecommunications service and wireless technologies had the potential to create tremendous opportunities for all communities in our Nation. Though it may not have predicted smartphones, tablets, millions of mobile broadband apps, and the Internet of Things, Congress knew that in order for all communities to benefit from technological innovation, this Commission's obligation to allocate spectrum in the public interest should be guided by a few enduring principles. The ones most relevant here are: all consumers should have access to affordable service; entre-preneurs and small businesses should have a reasonable opportunity to own and provide communications services; and vigorous competition can promote both of those policy goals. When Congress amended the Communications Act in the 1990s to give the Commission authority to conduct spectrum auctions, it mandated that we design them to "promot[e] economic opportunity and competition," ensur[e] that new and innovative technologies are readily accessible to the American people," "avoid[] excessive concentration of licenses . . . and disseminat[e] licenses among a wide variety of applicants, including small businesses." We are not seeing widespread abuse that would warrant complete elimination of the program. Furthermore, as my prior response indicated, last year, the Commission adopted a number of reforms to ensure that only bona fide small businesses benefit from our DE proRESPONSE TO WRITTEN QUESTIONS SUBMITTED BY HON. RICHARD BLUMENTHAL TO HON. MIGNON L. CLYBURN

Question 1. As you know, to address increasing demand for wireless broadband access, Congress directed the FCC to conduct an incentive auction, to encourage broadcast licensees to voluntarily relinquish their spectrum rights in exchange for a share of the proceeds in auctioning this spectrum to new licensees. In many parts of the country, contiguous spectrum will be freed up by "repacking" the channels to which remaining television broadcasters are currently assigned. Do you believe there is enough money in the TV Broadcaster Relocation Fund to cover repacking-related expenses incurred by broadcasters?

Answer. I am aware of studies that conclude that the Relocation Fund will be sufficient, and others that say it will not. As the scheduled start of the Incentive Auction is mere weeks away, we should have a more definitive answer soon on whether

or not the Fund will be sufficient.

Question 2. If the 39 month repack time-frame and the \$1.75 billion relocation fund are insufficient, does the FCC have the flexibility in the statute to ensure consumers and communities won't be negatively affected by signals going off the air?

Answer. The Relocation Fund is based upon the statutory language, and the 39 month repack period derives from the amount of time that Congress gave the Commission to disburse the Relocation Fund. Once we know more about the number of stations that will need to be repacked—and that will be soon—I look forward to working with my colleagues, the industry and Congress to ensure the transition is as smooth as possible. I am confident that we will collectively work to minimize disruption to consumers.

Question 3. If so, how can the FCC ensure that broadcasters have sufficient time to move without being forced off the air, if factors outside their control delay their

ability to reconfigure their facilities?

Answer. I look forward to collaborating with my colleagues, the industry and Congress to ensure a transition that is as smooth as possible. Once we know more about the number of stations that will need to be repacked, we will have a better idea about the scope of the task in front of us. The Chairman has announced that the Incentive Auction Task Force will remain in place to oversee the transition, working to ensure that we minimize disruption to consumers.

Questions 4. Do you agree that no non-participating broadcaster should be forced off the air, or forced to cover the costs of transitioning their signal, to accommodate the repack?

Answer. I agree that no non-participating broadcaster should be forced off the air, and that the Relocation Fund should cover all valid transition costs. I will be steadfast in my commitment to ensure a smooth transition for the viewing public.

Response to Written Questions Submitted by Hon. Cory Booker to Hon. Mignon L. Clyburn

Question 1. Your leadership was essential in achieving reform of the pricing rates for phone calls made from within State and Federal prison systems. I applaud the FCC's actions to ensure that incarcerated persons can stay connected to their families and ultimately rehabilitate into society.

It appears that similar abuses are occurring in new communications technologies such as video conference calling. I am concerned about a trend whereby in-person visits to incarcerated family members may be replaced by video conference calls in some prisons. Furthermore, these video conference calls are often subject to high pricing rates, potentially transforming these precious family interactions into a source of profit for prisons. What jurisdiction does the FCC have with regard to video visitation calls?

Answer. The FCC sought comment on our jurisdiction to address video visitation in the Further Notice of Proposed Rulemaking adopted last October. Section 276 of the Act, which gives the FCC authority over inmate calling services, is technology neutral and the FCC's reclassification of broadband Internet access services as a Title II service also applies to inmate calling services. While I am confident that the FCC has authority over video visitation calls, providers have disputed that the FCC has jurisdiction. If Congress were to act, it could remove any lingering doubt regarding our jurisdiction.

Question 2. What steps should the FCC take to ensure that families are able to stay connected with incarcerated individuals?

Answer. I believe that the FCC, as well as states, should take all actions within our power to enable families to stay connected with incarcerated individuals, and

this means ensuring that inmate calling rates are affordable. The FCC's Order adopting rate caps has been challenged in court and the providers were successful in their quest for a stay of the proposed rate caps. Even so, there is good news: caps on those tremendously high ancillary fees will go into effect for prisons on March 17, 2016, and the previous interim rate caps continue to apply to all inmate calling services calls. I look forward to defending the action in court, I trust that the stay is temperature and perment relief is writing prices.

calling services calls. I look forward to detending the action in court, I trust that the stay is temporary and permanent relief is within view.

In addition, if the FCC's rate caps are the ceiling and the states enact further reforms and refine rates and reduce fees for jails and prisons within their borders, then it is clear that affordably staying connected with friends and family while incarcerated will finally be possible. This most ideal scenario would be a win-win for society and could help make a real difference in criminal justice reform, since numerous studies clearly show that there is a direct correlation between regular contact with family and friends during incarceration and lower recidivism rates. We should all do everything in our power to promote such connectivity through affords. should all do everything in our power to promote such connectivity through afford-

 \bigcirc

This page intentionally left blank.